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

Survey of
JN Tape Std °F
Surveyed by
Notes Date
Indexed

F. B. Pg.

FOR LATER SURVEY

SEE

F.B. 3455

Microfilmed Feb. 86

Notes Ck'd by	Survey of	F.B. 2649 Pg.
Map No.	JN Tape Std °F	
Office Work	Surveyed by	
Checked	Notes Date	
Date	Indexed	

Page	Job	Description
		MARINA DEL REY 0739.03
5-28	B.M.	Bench Mark location descriptions & elevations.
29-81	Level	Precise 3-wire level run.
83-84	Index	For control points.
85-196	Vert. Cont.	Chart showing elev. & dates on vertical control points-V.C. #1 through V.C. #115.
197-242	B.M.	Boundary levels for subsidence study.
247-257	C.L.	Survey for sewer R/W on the C.L. prod. of 39th Ave., from Canal Ct. to the Marina Del Rey Bdry.

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

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

Do not extend this side of this line.

76P3098 CK #310 5-66

PLEASE RETURN TO
LOS ANGELES 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.

E.B.

Pg.

Notes Ck'd by	Survey of MARINA SUBSIDENCE STY.
Map No.	JN 0739.03 Tape Std °F
Office Work	Surveyed by L.V. SMITH
Checked	Notes L.V.S. Date MAY-60
Date	Indexed A. C. Johnson 6-6-60

F. B. 2649 Pg. 5

MARINA SUBSIDENCE STUDY

J.N. 0739.03

THREE WIRE LEVELS AROUND PERIMETER OF MARINA DEL REY

MAY 1960

References

F.B. 1393

Party

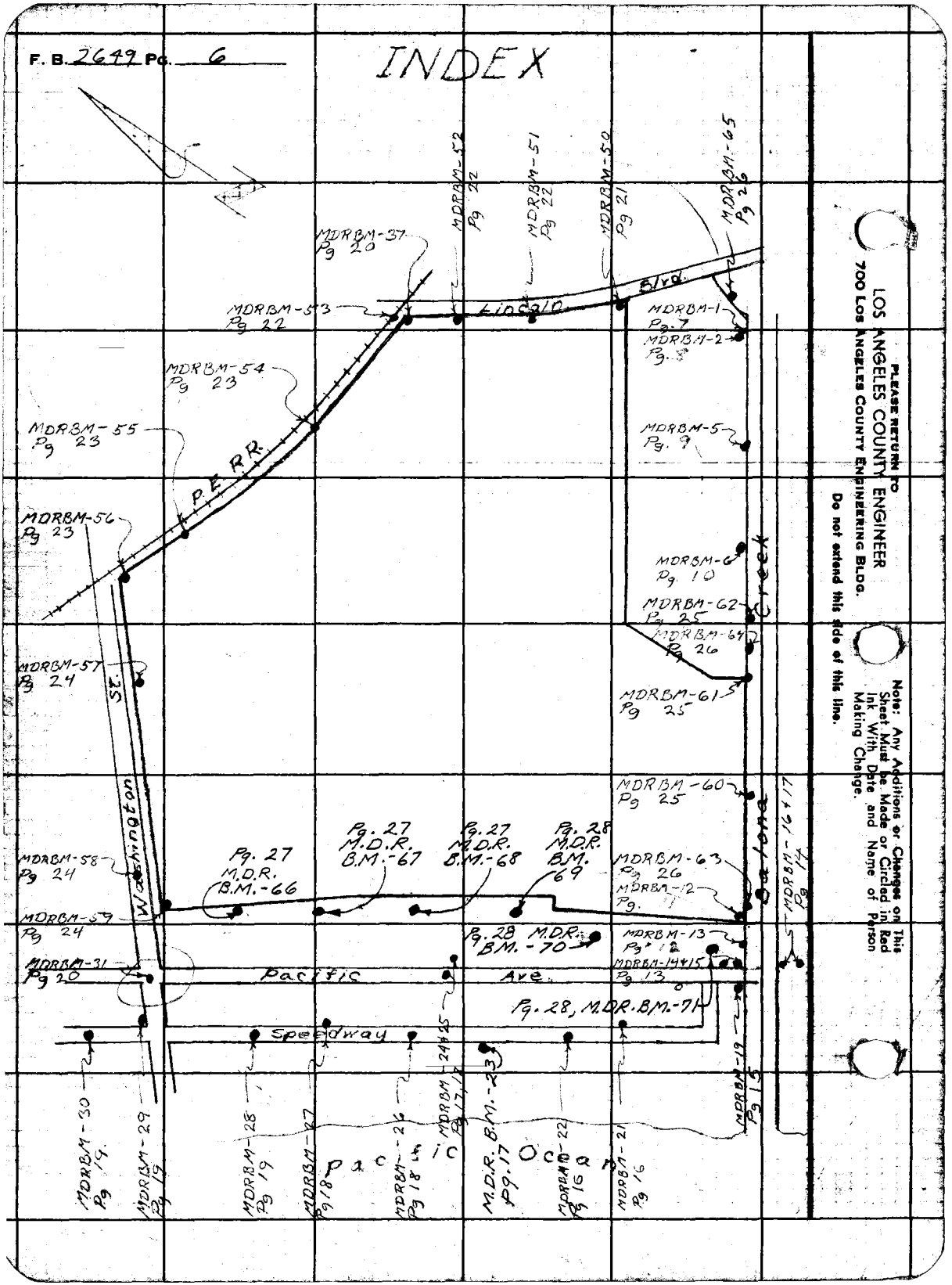
L.V. Smith
C.V. Crowe
V.L. Huckaby
J.F. Tretteen

Party:
English
Landa
Foulger
Dupuis
Clifford

Notes: Any Additions 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 line of this line.
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.
76F3095 SAE #247 11-

F. B. 2649 Pg. 6

INDEX



LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

PLEASE RETURN TO

Do not extend 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.

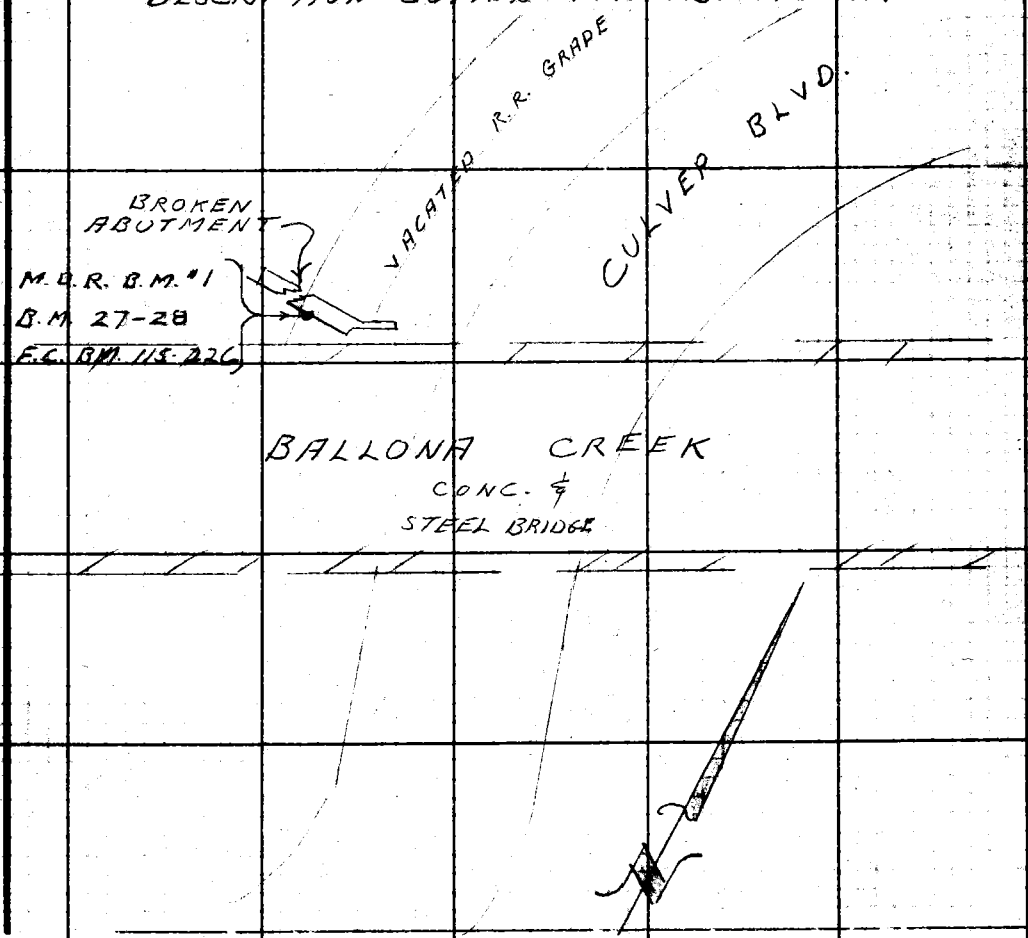
Notes Ck'd by		Survey of MARINA SUBSIDENCE STUDY	F. B. 2649 Pg. 7
Map No.		JN 07302 Tape Std °F	
Office Work		Surveyed by L. V. SMITH	
Checked		Notes L. V. S. Date MAY 60	
Date		Indexed R. C. Johnson	

M.D.R.B.M. #1
B.M. 27-28
F.C. B.M. 115-226

BALLONA CREEK AT P.E. RY. AT CULVER BLVD. AT THE N. ABUT OF P.E. RY. BRIDGE OVER BALLONA CREEK, ON TOP OF; AND AT THE WEST END OF THE CONCRETE BRIDGE SEAT, 9.9 FT. BELOW THE TOP OF THE RAILS. A STD. F.C. DISC SULPHERED IN PLACE, STAMPED "B.M. 115-226"

L.A.Co. 1953 ADJ. ELEV. = 17.120

NOTE
DESCRIPTION COPIED FM. F.B. 1393-24



Note: Any Additions 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 data beyond this line.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

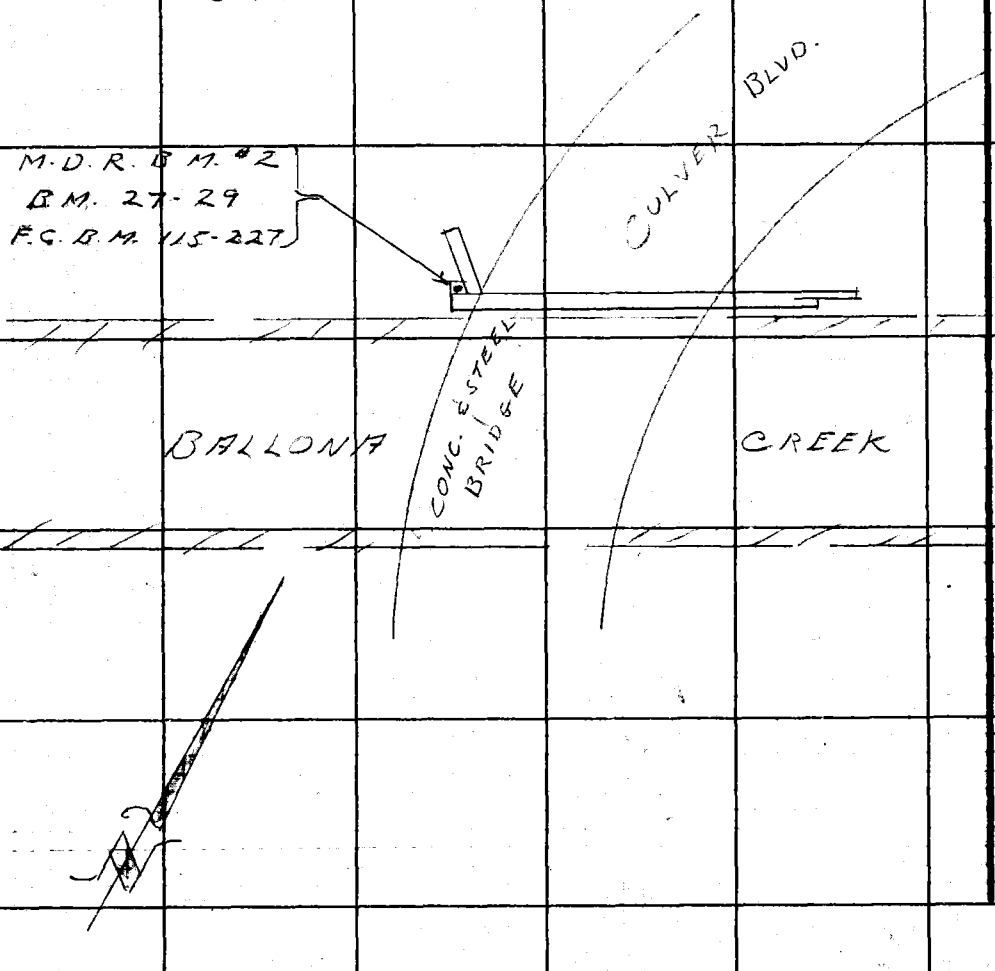
70F3005 SAE (Rev) 11-58

F. B. 2649 Pg. 8

M.D.R.B.M. #2
B.M. 27-29
F.C. B.M. 115-227

BALLONA CREEK AT CULVER BLVD.
ON THE NORTHERLY SIDE OF BALLONA CREEK
ON THE NORTHERLY CONCRETE ABUTMENT OF THE
CONCRETE AND STEEL PLATE GIRDER BRIDGE.
IN THE TOP NORTHWEST CORNER OF THE BRIDGE
SEAT, 1.8 FT. BELOW THE BOTTOM OF THE STEEL
GIRDER. A STD. F.C. DISC. SULPHERED IN PLACE
L.A. Co 1953 ADJ. ELEV. = 18.193

NOTE
DESCRIPTION COPIED FM. F.B. 1393-24



PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.
Do not extend 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 MARINA SUBSIDENCE	F. B. 2649 PG. 9
Map No.		JN 0239.03 Tape Std °F	
Office Work		Surveyed by L.V. SMITH	
Checked		Notes L.V.S. Date MAY-60	
Date		Indexed J. C. Johnson	

M.D.R.B.M. #5
B.M. 27-26
F.C.B.M. 115-225-A

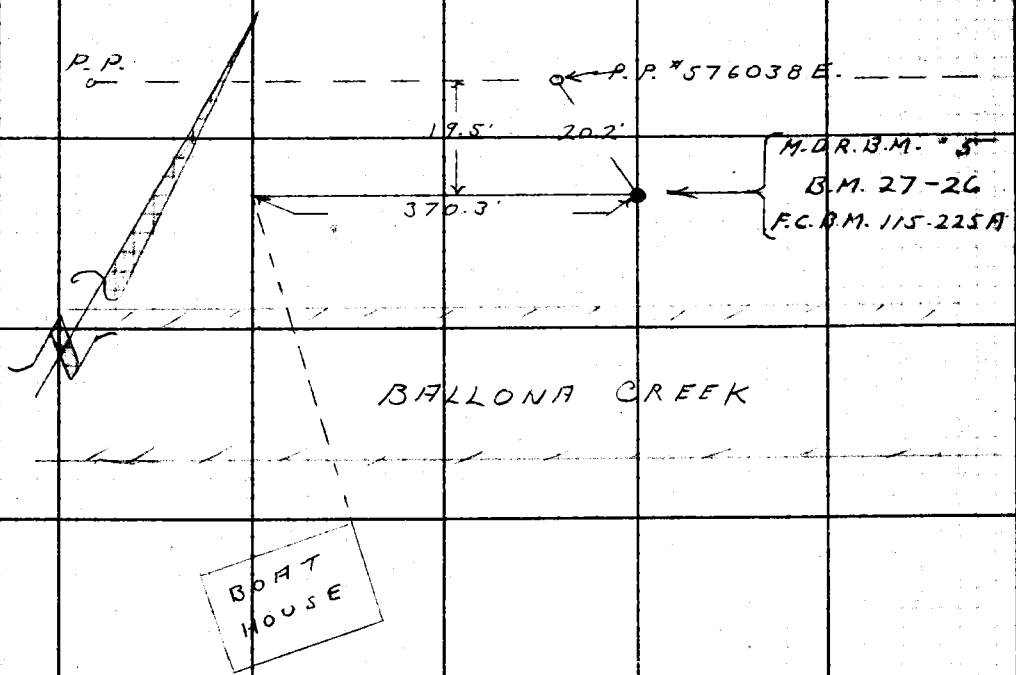
BALLONA CREEK, ON THE N'LY SIDE OF AND 1500 FT. DOWNSTREAM FROM CULVER BLVD. ON N'LY SIDE F.C.R.W. LINE AND AT STA 75+75.18, 150 FT. UP STREAM FROM U.C.L.A. BOAT HOUSE, WHICH IS ON S'LY. SIDE OF BALLONA CREEK, A STD. F.C. MON. 1.5 FT. BELOW THE SURFACE, STAMPED, "B.M. 115-225-A N.W. R.W. 1938"

REF. F.C. 1552-2-J-13-51 S.D.C.B. 21-74; S.D.C.B 21-86; S.D.C.B. 22-17.

L.A. Co. 1953 ADJ. ELEV. = 12.194

NOTE

DESCRIPTION COPIED FROM F.B. 1393-23



Note: Any Additions 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.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

76F3098 SAE #247 11-58

F. B. 2649 Pg. 10

M.D.R.B.M. #6
B.M. 27-25
F.C. B.M. 115-48

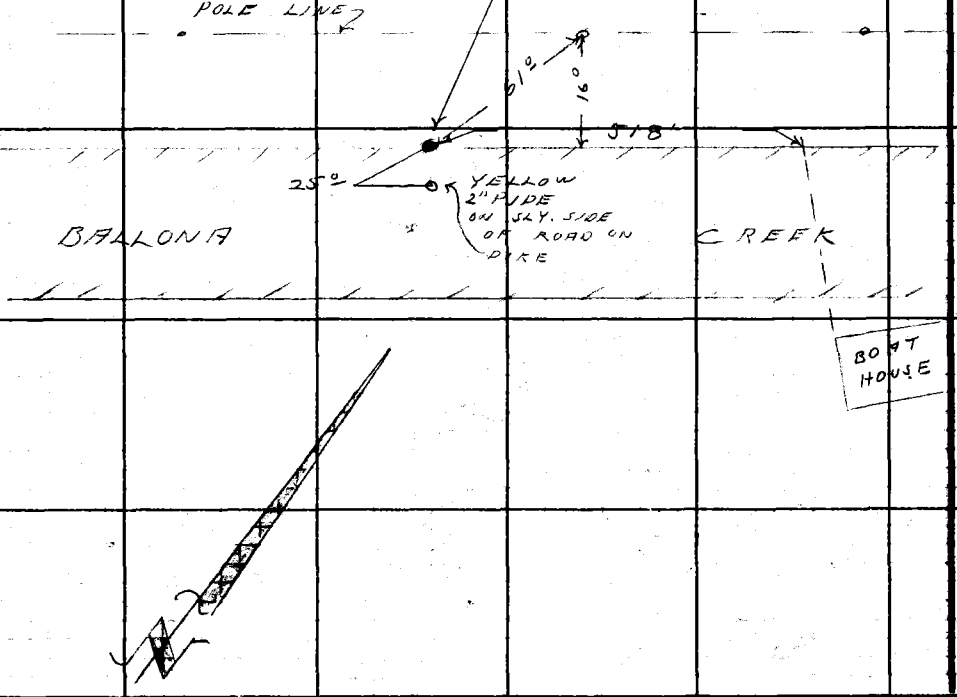
NOTE

DESCRIPTION IS CHANGED FM F.B. 1393-22 AS LEVEE IS DIFFERENT & 2" I.P. IS GONE

ON THE N'LY SIDE OF BALLONA CREEK 1600'± UPSTREAM FROM PIPE LINE BRIDGE AT FALMOUTH AVE. APPROX 2200' DOWNSTREAM FROM CULVER BLVD. ON F.C. N'LY R/W. 518'± DOWNSTREAM FM WLY END OF U.C.L.A. BOAT HOUSE WHICH IS ON SLY. SIDE OF BALLONA CREEK. AT TOE OF NLY. SLOPE OF DIKE. ON 12" A STD. F.C. MON. STAMPED "B.M 115-48 1948"

L.A. CO. 1953 ADJ. ELEV. 11.462

M.D.R.B.N.6
B.M. 27-25
F.C. B.M 115-48



LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

PLEASE RETURN TO

Do not extend 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 MARINA SUBSIDENCE	F. B. 2649 PG. 11
Map No.	JN 0739.03 Tape Std °F	
Office Work	Surveyed by L. V. SMITH	
Checked	Notes L. V. S. Date MAY 60	
Date	Indexed C. Johnson	

M.D.R B.M. # 12
B.M. 27-19
F.C. B.M. 115-222 A

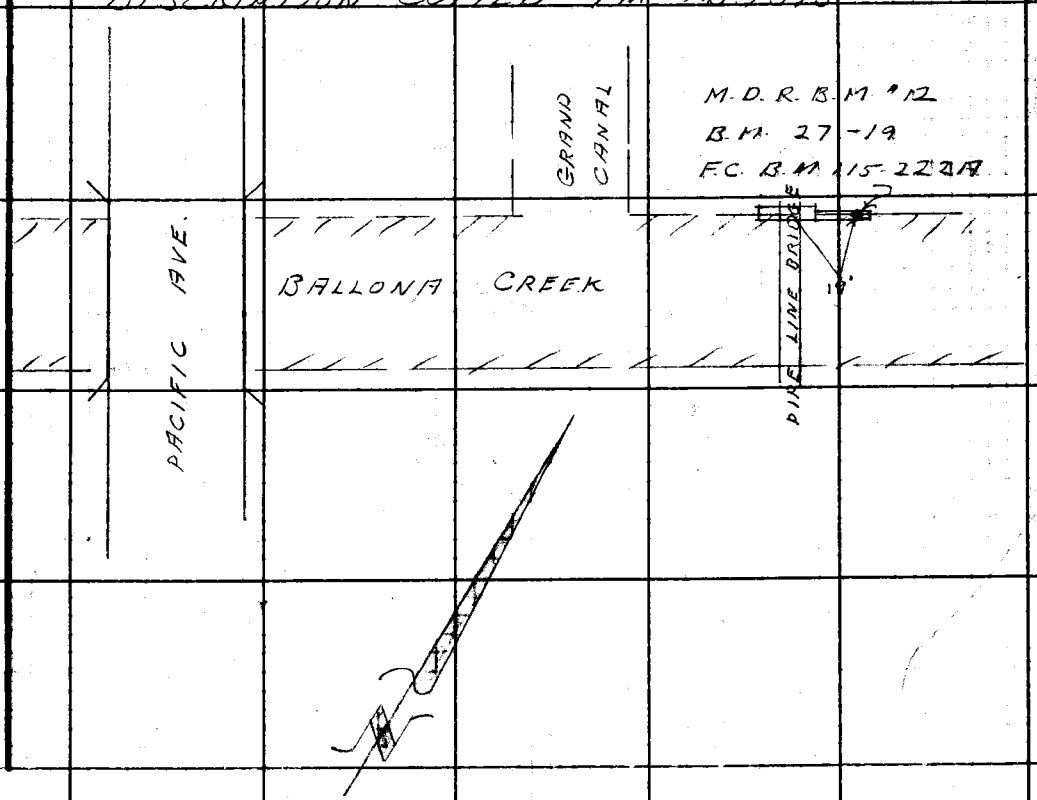
BALLONA CREEK ON THE N'LY. SIDE OF AND 800± FT. UPSTREAM FROM PACIFIC AVE. 57 FT. SLY. FROM THE N'LY. F.C. R/W. AT STA. 24+57 ON THE UPSTREAM SIDE OF A PIPE LINE BRIDGE. 5 FT. S'LY. FROM TOE OF SLOPE OF THE N'LY. LEVEE. IN TOP OF AND 1 FT. W'LY. FROM THE E'LY. END OF AN OLD CONC. FOOTING 1.2 FT. WIDE BY 14 FT. LONG.

A STD. F.C. BRASS CAP STAMPED "B.M. 115-222-A"

L.A.Co. 1953 ADJ. ELEV. = 1.088'

NOTE

DESCRIPTION COPIED FM FB 1393 -



Note: Any Additions 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.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

76F3098 SAE #247 11-58

F. B. 2649 Pg. 17

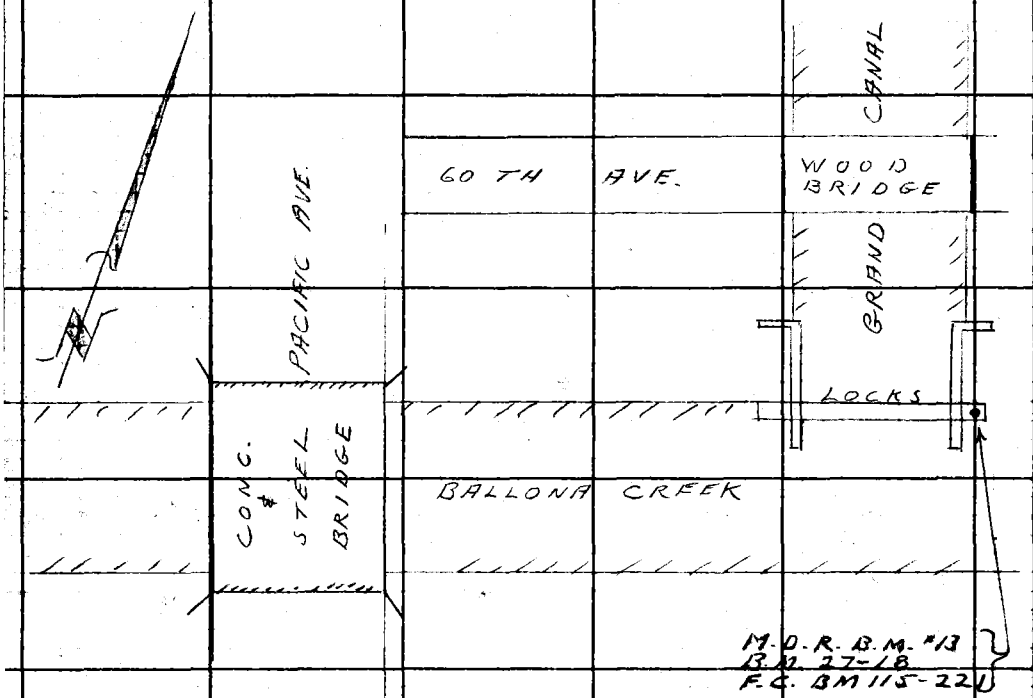
M. O. R. B. M. #13
B.M. 27-18
F.C. B.M. 115-221

BALLONA CREEK NEAR SPEEDWAY. ON THE NORTH LEVEE, APPROX 300 FT. EAST OF THE SPEEDWAY. ON THE TOP OF THE CONCRETE HEADWALL OF THE OUTLET STRUCTURE OF THE GRAND CANAL. 1.7 FT. FROM THE EAST END OF THE STRUCTURE. A STD. F.C. DISC. SULPHERED IN PLACE. STAMPED "115-221

L.A.Co 1953 ADJ. ELEV. = 10.682

NOTE

DESCRIPTION COPIED FROM F.B. 1393-20



LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

PLEASE RETURN TO

Do not extend 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 MARINA SUBSIDENCE STUDY
Map No.	JN 0737.03 Tape Std °F
Office Work	Surveyed by L.V. SMITH
Checked	Notes L.V.S Date MAY '60
Date	Indexed C. Johnson

F.B. 2649 PG. 13

M.D.R.B.M. #14
B.M. 27-16-A
F.C. REF. B.M. 115-39

NLY. SIDE OF BALLONA CREEK, UPSTREAM SIDE OF PACIFIC AVE. BRIDGE 49.72' FT. N.W. OF B.M. 115-39. ON F.C. N'LY. R/W. 32.5' UPSTREAM FROM ℄ OF PAVEMENT ON PACIFIC AVE. 5' UPSTREAM FROM A 2" I.P. MARKER, MK'D "5 FT - COMP X-SEC. MON." A F.C. MON. 0.4' DEEP MK'D. "REF. B.M. 115-39 1948"

L.A.Co. 1953 ADJ. ELEV. = 12.428

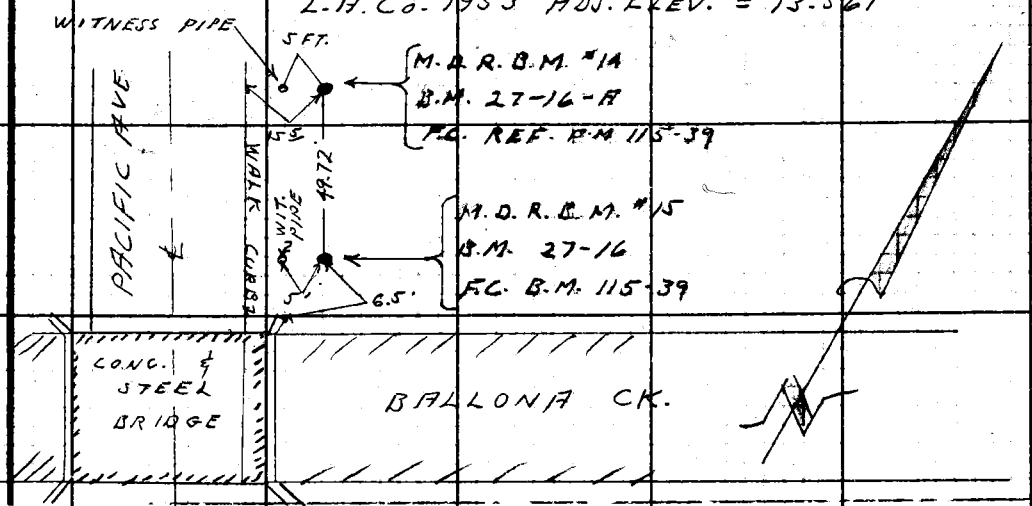
M.D.R. B.M. #15
B.M. 27-16
F.C. B.M. 115-39

NOTE

DESCRIPTIONS COPIED FM. F.B. 1393-20-21

NLY. SIDE OF BALLONA CREEK. UPSTREAM SIDE OF PACIFIC AVE. BRIDGE. 49.72' NW. OF F.C. R/W. & REF. B.M. 115-39. 32.5' UPSTREAM FROM ℄ OF PAVEMENT ON PACIFIC AVE. 5' UPSTREAM FROM A 2" I.A. MARKER 3 FT. HIGH. A F.C. MON. 0.5' DEEP MARKED. "B.M. 115-39 1948"

L.A. Co. 1953 ADJ. ELEV. = 13.561



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

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.
Do not extend this side of this line.

76F3098 SAE #247 11-59

F. B. 2649 Pg. 14

M.D.R. B.M. #16
B.M. 27-15
F.C. B.M. 115-38

BALLONA CREEK, SLY. SIDE, UPSTREAM SIDE OF PACIFIC AVE. BRIDGE, 32.5' UPSTREAM FROM ℄ OF PAVEMENT ON PACIFIC AVE., 5' UPSTREAM FROM A 2" I.P. 3' HIGH AND 6' ± FROM E. OF CORNER OF CONCRETE BRIDGE. A F.C. MON. 0.6' DEEP MKD. "B.M. 115-38 1948 (NOTE: THIS IS NOT F.C. DESCRIPTION)

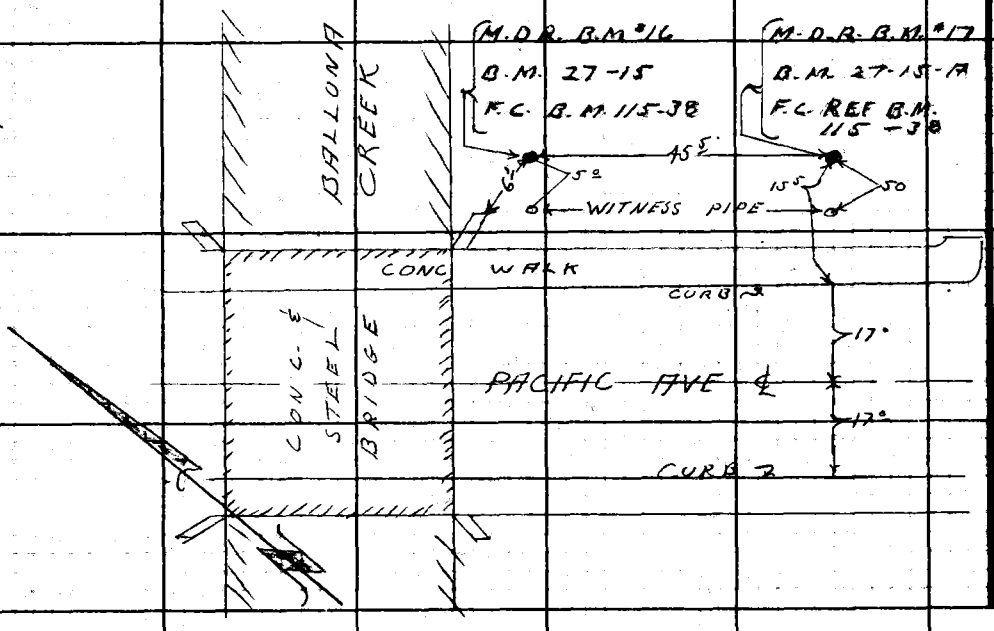
L.A. Co. 1953 ADJ. ELEV. = 13.004

M.D.R. B.M. #17
B.M. 27-15-A
F.C. REF B.M. 115-38

NOTE
DESCRIPTIONS COPIED
FM. F.B. 1393 - 18

BALLONA CREEK, S'LY SIDE, UPSTREAM SIDE OF PACIFIC AVE. BRIDGE, 45.69' S.E. OF B.M. 115-38 ON THE F.C. SLY. R/W 32.5 UPSTREAM FROM ℄ OF PVMT. ON PACIFIC AVE., 5' UPSTREAM FROM A 2" I.P., 3' HIGH MKD. "S" COMP X-SEC. MON." A F.C. MON 0.6 DEEP MK'D." REF. B.M. 115-38 1948"

L.A. Co. 1953 ADJ. ELEV. = 12.381



LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.
PLEASE RETURN TO

Do not extend 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 MARINA SUBSIDENCE
Map No.	JN 07 39 03 Tape Std °F
Office Work	Surveyed by L. V. SMITH
Checked	Notes L. V. S. Date MAY 60
Date	Indexed C. Johnson

F. B. 2649 PG. 15

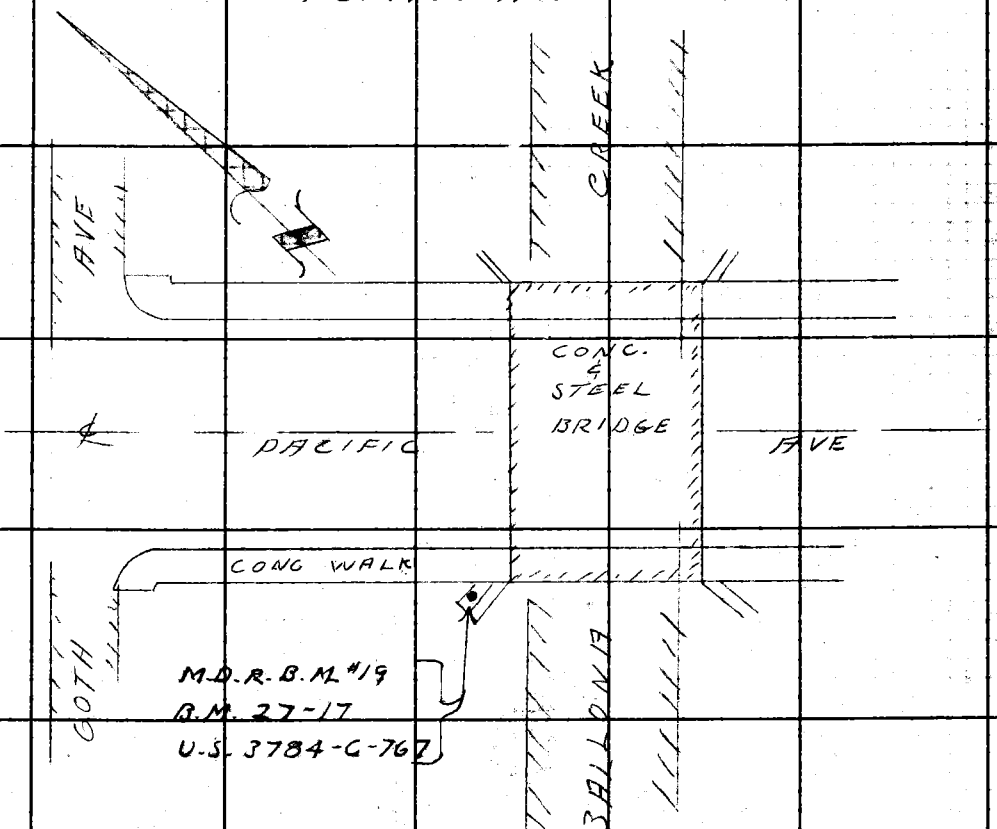
NOTE

DESCRIPTION COPIED FROM F.B. 1393-19-20

M.D.R.B.M. #19
B.M. 27-17
U.S. 3784-C-767

IN LOS ANGELES, L.A. CO., ABOUT 2.2 MI. S.W. OF THE P.O. AT VENICE, AT THE PACIFIC AVE. BRIDGE OVER BALLONA CREEK, IN THE TOP OF A WING WALL, 6.9 FT. ~~S'W~~ S'ly OF THE S.W. CORR OF THE AVE., 5.2 FT. S.E. OF THE N.W. END OF THE WING WALL, AND ABOUT LEVEL WITH THE SIDEWALK. A STD. DISC, STAMPED "Q 767 1945"

L.A. Co. 1953 ADJ. ELEV. = 16.928'



Notes: Any Additions 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.

PLEASE RETURN TO LOS ANGELES COUNTY ENGINEER 700 Los Angeles County Engineering Bldg.

78F3095 S&E #247 11-58

F. B. 2649 PG. 16

M. D. R. B. M. 21

A Cut Spk. in Cement foundation of Derrick 8.0 ft. East of Spdwy. & 15 ft. So. of 52nd Pl. City L. A. 106 90 - 60

M. D. R. B. M. 22 (B. M. 48-2)

(Beach Control N-13)

In the Venice Area, at C. L. inter. of Spdwy. & 51st Ave. A City disk mkd. N-13. Set in Conc. ~~Post~~ Post, under Iron Cover mkd., "C. L. A. Mon Dept. W. & P. F. B. 1369 - 8".

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.
Do not extend 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 Marina Sub.
Map No.	JN 0739.03 Tape Std °F
Office Work	Surveyed by English
Checked	Notes Landa Date 6-60
Date	Indexed K. C. Johnson

F. B. 2649 PG. 17

M.D.R. B.M. 23

Flood Contr. Ref. B.M. 115-212

S.W. Cor. of Oil Well. A Cut Spk. in S.E. Cor. of cement foundation of oil well, 39.6 ft. W. of C.L. Speedway, 35 ft. N. of C.L. Prod. 46th Ave.

M.D.R. B.M. 24 (B.M. 48-4)

(W.S. 3782 P-767)

In the Venice Area. A U.S.C. & G.S. disk mkd. P-767 1965, Set in S. Curb of Conc. bridge, 26.7' E. of C.L. of Pacific AVE. & 8 ft. S. of C.L. 43rd Ave. Prod. E'ly, 3.5 ft E. of W. end of Bridge. F.B. 1369-10

Note: Any Additions 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.

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

76F3098 SAE #242 11-58

F. B. 2649 Pg. 18

M.D.R. B.M. 25
A Stand. Surv. Mon. @ C.L. inter. of Pacific Ave. & 13th Ave. City L.A. 1090-6

M.D.R. B.M. 26 (B.M. 18-5)
(Beach Control 11-14)
In Venice Area. A City disk. mkd., N-14, set in a Conc. post, covered by an iron cover mkd., C.L.A. Mon. Dept. W. & P., on the C.L. of 42nd Ave., 0.7 ft. E. of C.L. of Spdwy.
E.F.E. 5-31-60
M.D.R. B.M. #26
Note: fd. 2" I.P. conc. plug & large pgl. 9 ft. this Pt. in H. H. (City of L.A. Dept. W. & P.)

M.D.R. B.M. 27
A Cut sek. in the foundation of the S.W. Cor. of an oil well, 18 ft. E. of C.L. Spdwy. & 44.4 ft. S. of C.L. 37th St.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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 MARINA SUBSIDENCE
Map No.	JN 07396 3 Tape Std °F
Office Work	Surveyed by L.V. SMITH
Checked	Notes L.V.S. Land Date MAY 60
Date	Indexed C. Johnson

F.B. 2649 Pg. 19

M.O.R.B.M. 28 (C.B.M. 48-6)

(Beach Contr. N-15)

In Venice Area. A City disc. mkd. N-15, set in a conc. post under an Iron Cover, mkd. "C.L.A. Mon. Dept W. & P.", on the C.L. of 34th Ave. 5.4 ft. E. of the Center of Par. on Spd wy.

F.B. 1369-12

M.O.R.B.M. 29

Cut Spk. @ N.W. Cor. C.B. 3.5 ft. N. of N. curb Washi. St. & 19 ft. E. of Spd wy.

City L.A. 10490-59

M.O.R.B.M. 30 (C.B.M. 48-8)

(Beach Control N-17)

In Venice Area. A U.S.C. & G.S. disc. mkd., M-767, 1925, set in the S.W. Cor. of a narrow ledge in the foundation of an apt. Hse. 13 ft. E. of C.L. Spd wy. & 11.6 ft. N. of C.L. 27th Pl.

F.B. 1369-15

Note: Any Additions 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.

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

78F309S SAE #247 11-58

F.B. 2649 Pg. 20

(L.A. City BM 16 00~~220~~ 210)

M.D.R.B.M. 31 (B.M. 48-7)

City L.A. F.B. 10690-59)

In Venice Area, A Std. Sur. mon. @ the C.L. Inter. of Pacific Ave. & Wash. St.

F.B. 1369-13

1956 L.A. City El. = 11.300

M.D.R.B.M. 37

~~See Ir~~

WIRE SPIKE IN CULVERT HEADWALL 49 Ft. W. OF THE CENTERLINE OF LINCOLN BLVD., 22 Ft. S. OF THE CENTERLINE OF P.E. Ry. TRACK (1 Ft. S. OF THE N. END), 0.5 Mi. S. OF WASHINGTON BLVD.

F.B. 10698-107

1955 L.A.C. Adj. El. 13.423

1953 L.A.C. Adj. El. 13.473

M.D.R.B.M. 38

AN L.A. CITY STANDARD TRAVERSE MONUMENT MARKED "VENICE H-3-A" IN LINCOLN BLVD., 2800' NWLY. OF CULVER BLVD.

1957 UNADJ. ELEV = 8.825'

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

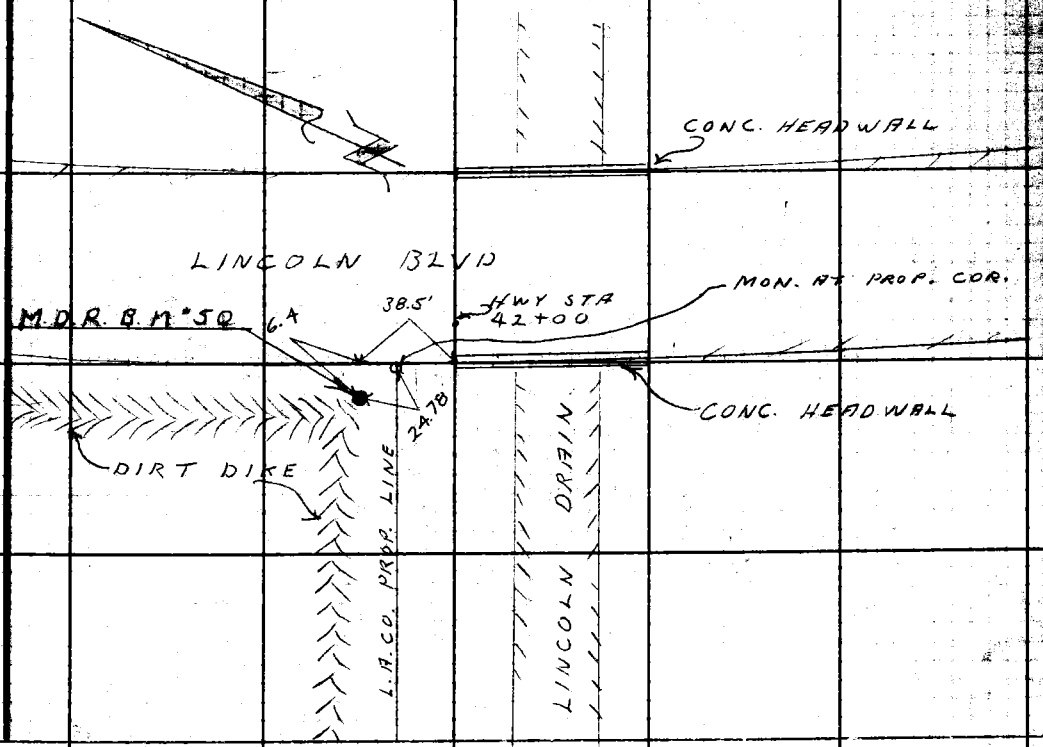
Do not extend this side of this line.

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 MARINA SUBSIDENCE	F. B. 2649 PG. 21
Map No.	JN 0739.03 Tape Std °F	
Office Work	Surveyed by K.V. SMITH	
Checked	Notes K.V.S. Date MAY 60	
Date	Indexed A. C. Johnson	

M.D.R. B.M. #50

LINCOLN BLVD 1240± FT NLY. FROM CULVER BLVD., W. SIDE OF LINCOLN BLVD., 38.5± FT. NLY. FM. N. END AND 6.4± FT. WLY OF CONCRETE HEADWALL OF CULVERT UNDER LINCOLN BLVD. AT STATE HWY. STA. 42+00. 24.78 FT. NW'ly OF CO. PROP CORNER MONUMENT. 3' S. ELY OF TOE OF DIRT DIKE. A STD. L.A. CO. ENGR. B.M. MON. STAMPED "M.D.R. B.M. 50" UP 0.2'



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

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

Do not extend this side of this line.

76F309S S&E #247 11-58

F. B. 2649 Pg. 22

M.D.R.B.M. #51

LINCOLN BLVD 2450± FT. NLY FROM CULVER BLVD. W. SIDE OF LINCOLN BLVD. 25.5± FT S. NLY. OF P.A. #110723 M. 38.28 FT. WLY. OF L.A. CO. ENGR TAG IN PVMT. OF LINCOLN BLVD. (TAG IS REFERENCE POINT FOR ℄ OF MOLE #6 PROD) 1'± SLY OF ℄ OF MOLE #6 PROD. AT TOE OF DIRT DIKE. A STD. CO. ENGINEER BENCH MARK MON. STAMPED "M.D.R.B.M. 51" UP 0.2'

M.D.R.B.M. #52

LINCOLN BLVD 3440± FT. NLY FROM CULVER BLVD. W. SIDE OF LINCOLN BLVD. 35.34 FT. WLY. OF L.A. CO. ENGR TAG IN PVMT. OF LINCOLN BLVD. (TAG IS REFERENCE POINT ON ℄ OF MOLE #5 PROD.) ℄ 12'± NLY. OF ℄ OF MOLE 5 PROD A STD. CO. ENGINEER BENCH MARK MON. STAMPED "M.D.R.B.M. 52" UP 0.1'

M.D.R.B.M. #53

LINCOLN BLVD. ℄ R.R. R/W 0.6 MI SLY FROM WASHINGTON BLVD WLY. SIDE OF LINCOLN BLVD. 3.49' N.WLY OF CUT SPK. IN CULVERT HEADWALL AT STATE HWY. STA. 15+16 ℄ 21'± SLY. OF ℄ OF R.R. R/W. A STD. CO. ENGINEER BENCH MARK MON. STAMPED "M.D.R.B.M. #53" UP 0.3'

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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 MARINA SUBSIDENCE	F. B. 2649 Pg. 23
Map No.	JN 0739.03 Tape Std °F	
Office Work	Surveyed by L.V. SMITH	
Checked	Notes L.V.S. Date MAY-60	
Date	Indexed A. C. Johnson	

M.D.R.B.M. 54

P.E.R.R.R/W 1850'± FT WLY. FROM LINCOLN BLVD. 10.15 FT SLY. FM. B.C. OF P.E.R/W. ℄ & 129.27 FT. ELY. OF CO. ENG. MON. MKD. M.D.R. 5 ON ℄ OF MAIN CHANNEL PROD TO NORTH ON SLY SLOPE OF R.R. BED. A STD. CO. ENGINEER BENCH MARK MON. UP 0.2' MARKED "M.D.R. B.M. 54

M.D.R.B.M. 55

P.E.R.R.R/W 875'± FT ELY. FROM WASHINGTON ST. 130'± WLY OF INT. DICKSON ST & OXFORD AVE. & 18'± SLY OF SPLIT OF RAILS OF R.R. TRACK. 10 FT± ELY OF E. END OF WOODEN TRESTLE OVER DRAIN FM. OXFORD AVE. A STD. CO. ENGINEER BENCH MARK UP MARKED "M.D.R.B.M. 55"

M.D.R.B.M. 56

WASHINGTON ST & OXFORD AVE. S.W. COR. 3'± S. & W. OF CORNER OF CHAIN LINK FENCE AT CORNER OF MARINA PROPERTY AT WASHINGTON ST. & P.E.R.R.R/W. A STD. CO. ENGINEER BENCH MARK UP 0.3' MARKED "M.D.R.B.M. 56"

Note: Any Additions or Changes on This Sheet Must be Made or Circled in Red Ink With Date and Name of Person Making Change.
PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 LOS ANGELES COUNTY ENGINEERING BLDG.
Do not extend this side of this line.
76F3098 S&E #247 11-58

F. B. 2649 Pg. 24

M.D.R.B.M. 57

WASHINGTON ST. AND WILSON AVE. 90'± ELY. OF ℄ INT. WASHINGTON ST ℄ WILSON AVE, 48'± SLY OF ℄ WASHINGTON ST. 3'± S.E. OF COR OF 6 FT CHAIN LINK FENCE AROUND OXFORD DRAINAGE BASIN. UP 0.3' A STD. CO. ENGINEER BENCH MARK MON. STAMPED "M.D.R. B.M. 57"

M.D.R.B.M. 58

WASHINGTON ST AND GRAYSON AVE. AT ℄ INT. IN A WELL WITH IRON COVER MARKED "CITY OF L.A. ENGINEERING MON." ON 10" Ø HEX ROD IN CONC.

M.D.R.B.M. 59
Wash. St. & Dell Ave. S.W.
Prop. Cor., C.E. Brass Cp. Mon.
dn. 6 in.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of MARINA SUBSIDENCE
JN 07 39 Tape Std °F
Surveyed by L.V. SMITH
Notes L.V.S. Date MAY '60
Indexed C. Johnson

F. B. 7649 Pg. 25

M.D.R.B.M. 60

BALLONA CREEK 2050'± UPSTREAM FROM PACIFIC AVE. 37.5'± SLY. AND 4'± WLY. OF M.D.R.#3 WHICH IS ON ℄ OF MAIN CHANNEL & SLY BDRY. OF MARINA DEL REY. ON SLY. SLOPE OF DIKE ON NLY. SIDE OF BALLONA CREEK, 3 FT BELOW TOP OF ROAD ALONG DIKE. A STD. CO. ENGINEER BENCH MARK MON. FLUSH, MARKED "M.D.R.B.M. 60

M.D.R.B.M. 61

BALLONA CREEK 3350'± UPSTREAM FROM PACIFIC AVE. 31.3± FT. SLY. OF MARINA DEL REY PROPERTY LINE COR. ON SLY SLOPE OF DIKE ON NLY. SIDE OF BALLONA CREEK. 5 FT BELOW ROAD ALONG DIKE. A STD. CO. ENGINEER BENCH MARK MON UP 0.1', STAMPED "M.D.R.B.M. 61"

M.D.R.B.M. 62

BALLONA CREEK NLY. SIDE, 150'± WLY. OF ROAD TO HUGHES TESTING INSTALLATION. 5 FT ELY. OF A LINE BETWEEN TWO 2" I.P.S 3.5' HIGH & PAINTED YELLOW, ONE ON THE SLY. DIKE AND ONE ON THE NLY DIKE OF BALLONA CREEK, AND 8.2 FT S.ELY OF THE NLY. PIPE. ON SLY. SLOPE OF NLY. DIKE, 5 FT BELOW ROAD ALONG DIKE. A STD. CO. ENGINEER BENCH MARK, FLUSH, STAMPED "M.D.R.B.M. 62

Note: Any Additions 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 data of this line.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

75F3088 SEE #247 11-58

F.B. 2649 PG. 26

M.D.R.B.M. 63

BALLONA CREEK 825± FT UPSTREAM FM. PACIFIC AVE. NLY SIDE, 2' FT WEST OF E. SIDE & 3.5 FT N. OF S. SIDE OF 11 FT. X 20 FT CONC. ANCHOR BLOCK OF OLD PIPE LINE BRIDGE ACROSS BALLONA CREEK A STD. L.A. CO. SURVEY CONTROL MON. CEMENTED FLUSH IN TOP OF BLOCK. STAMPED "VENICE G-5 C 1960"

M.D.R.B.M. 64

BALLONA CREEK 3750± FT. UPSTREAM FROM PACIFIC AVE., 239± FT UPSTREAM FROM OIL LINES CROSSING UNDER BALLONA CREEK FT. ELY OF MON. AT COR MARINA DEL REY & F.C. R/W. ON 12" BELOW SURFACE OF DIRT RD. ALONG TOP OF NLY. DIKE OF BALLONA CREEK. A STD. L.A. CO. SURVEY CONTROL MON. IN CONC. METAL WELL & IRON COVER OVER WELL. MON. STAMPED " VENICE G-4 1960"

RM #2

M.D.R.B.M. 65

BALLONA CREEK & CULVER BLVD. NLY END OF BRIDGE S.WLY SIDE OF CULVER BLVD. 4.2'± ELY FROM NLY END OF CONC. GUARD RAIL OF BRIDGE WING WALL, AND 3.4'± W. OF WLY. CURB OF CULVER BLVD. ON 12" IN CONC. & METAL WELL WITH IRON COVER. A STD. L.A. CO. SURVEY CONTROL MON. STAMPED " VENICE I-4-C 1960"

LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.
PLEASE RETURN TO
Do not extend this title 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
Map No.
Office Work
Checked
Date

Survey of Marine Sub.
JN 473903 Tape Std °F
Surveyed by English
Notes Linda C. Johnson Date 6-60
Indexed

F. B. 2649 Pg. 27

M.D.R B.M 66
Plant test Area, S.E. Cor.
5ft. N'ly. along fnc. frm. Entrance
gate. C.E. B.M. Mon., up 2 in.

M.D.R. B.M. 67
150 ft. W'ly. frm. W. Bndry.
Marine & 9 ft. N'ly. frm. ℄
Prod. Mole #2, Bt. Spk. in
N.E. Cor. Conc. Footing

M.D.R. B.M 68
On C.L. Prod. Mole #1 & 250'±
W'ly. frm. W'ly Bdry of Marine
C.E Br. Cp. Mon.- flush
60 ft. S'ly frm. large green oil
Storage Tank Destroyed 5-30-60
By Pacific Dredging
Contractor. E.R.E.

Note: Any Addition 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 item of this line.

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

76F3098 SAE #247 11-58

F. B. 2649 Pg. 28

M. D. R. B. M. 69

30ft ± N. of ℄ Prod. of 49th Ave., & 150ft ± W. from W'ly Bdry. Marina S. W. Cor. of O, I Well derrick (Darks # 12) Bf. Spk. in Top of S.W. Cor. of Conc. Footing

M. D. R. B. M. 70

250ft ± E. of Marita Pl. & 400ft ± N. of 56th Ave. Well has no number & no derrick, has pumping mach., Bf. Spk. in Top of S.E. Cor. of S.E. Conc. derrick footing

M. D. R. B. M. 71

56th Ave So. Side & Grand Canal, also No. Side of Future Marina entrance Channel Bf. Spk. in N.W. side of Conc. Footing of N.W. fm. Pst. of 6ft. Wyan Wire Fnc., Ground now Tide Gate.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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.

76P526 S & E #379 1-5

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party Lloyd V. Smith Weather Inst. No. 18161
Notes by L.V.S. Time Rod No. 27 & 28

Name Marina Subsidence Study
Job No. 0732.03
From To
Date May 1960
Indexed A. C. Johnson 6-60

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	7.466		.208			7.059		.211		M.D.R. B.M. #19
	7.258		.208			6.848		.211		U.S.C. & G.S. B.M. Q 767
	7.050					6.637				Pacific Ave & Bridge over
1	21.774	7.258	.416			20.544	6.848	.422		Ballona Creek
	4.065		.097			9.045		.102		For description see pg 15
	3.968		.098			8.943		.101		Diff. elev. +11.226
	3.870					8.842				From M.D.R. B.M. #19 −15.791
2.	11.903	3.968	.195	.611		26.830	8.943	.203	.625	To M.D.R. ~~B.M. #16~~ BM #17 −4.565
		11.226					15.791		.611	M.D.R. ~~B.M. #16~~ BM #17
									1.236	L.A. Co. F.C. Dist. B.M. Rec. 115-38
										Ballona Ck. & Pacific Ave
										For Description see Pg 14
	7.911		.086			7.282		.085		
	7.825		.087			7.197		.084		Diff. elev. +7.825
	7.738					7.113				−7.197
1.)	23.474	7.825	.173			21.592	7.197	.169	.169	+0.628
									.173	BM #16
									.342	M.D.R. ~~B.M. #17~~ should be BM #16
										L.A. Co. F.C. Dist. BM. 115-38
										Ballona Ck. & Pacific Ave.
										For Description see Pg 14

F.B. 2744 P.G. 29

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party LLOYD V. SMITH Weather ____ Inst. No 181 61
Notes by L.V.S. Time ____ Rod No. 27 & 28

Name MARINA SUBSIDENCE STUDY
Job No. 0779.03
From ____ To ____
Date 6-24-60
Indexed C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	11.048		.177			6.084		.175		BM #16 M.D.R. B.M. ~~#17~~
	10.871		.175			5.909		.176		L.A.Co. F.C. DIST. B.M. 115-38
	10.696					5.733				BALLONA CK. & PACIFIC AVE.
1.	32.615	10.872	.352			17.726	5.909	.351		FOR DESCRIPTION SEE PG. 14
	3.923		.132			9.459		.140		
	3.791		.132			9.319		.140		DIFF. ELEV. BM #16 + 14.663
	3.659					9.179				FROM M.D.R. ~~B.M. #17~~ - 15.228
2.	11.373	3.791	.264	.616		27.957	9.319	.280	.631	TO M.D.R. B.M. #14 - 0.565
		14.663					15.228		616 / 1.247	M.D.R. B.M. #14
										L.A. Co. F.C. DIST. REF. B.M. 115-39
										BALLONA CK. & PACIFIC AVE.
										FOR DESCRIPTION SEE PG 13
	4.797		.103			3.372		.104		
	4.694		.101			3.268		.106		DIFF. ELEV. + 9.529
	4.593					3.162				FROM M.D.R. B.M. #14 - 8.393
1	14.084	4.695	.204			9.802	3.267	.210		TO M.D.R. B.M. #15 + 1.136
	4.905		.071			5.197		.071		M.D.R. B.M. #15
	4.834		.070			5.126		.072		L.A.Co. F.C. DIST. B.M. 115-39
	4.764					5.054				BALLONA CK. & PACIFIC AVE.
2	14.503	4.834	.141	.345		15.377	5.126	.143	.353	FOR DESCRIPTION SEE PG 13
		9.529					8.393		345 / .698	

F.B. 2649 P.G. 30

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party LLOYD V. SMITH Weather Inst. No. 18161
Notes by L.V.S. Time Rod No. 27 & 28

Name MARINA SUBSIDENCE STUDY
Job No. 07339-03
From To
Date MAY 1960
Indexed E. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
										M.D.R.B.M. #15 L.A.Co. F.C. DIST. B.M. 115-39 BALLONA CK & PACIFIC AVE. FOR DESCRIPTION SEE F.B. 13
	5.249 5.062 4.876		187 186			8.110 7.940 7.771		170 169		DIFF. ELEV. +5.062 FROM M.D.R.B.M. #15 -7.940 TO M.D.R.B.M. #13 -2.878
1)	15.187	5.062	373			23.821	7.940	339	339 373 712	
										M.D.R. BM. #13 L.A. Co. F.C. DIST. B.M. 115-221 BALLONA CK. UPSTREAM FM. PACIFIC AVE.
	8.409 8.242 8.078		167 164			4.864 4.686 4.508		178 178		FOR DESCRIPTION SEE F.B. 12
1	24.729	8.243	331			14.058	4.686	356		F.B. 2647 P.G. 31
	5.384 5.222 5.058		162 164			5.699 5.537 5.376		162 161		
2	15.664	5.221	326	.657		16.612	5.537	323	.679	
		13.464					10.223			

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party LLOYD V. SMITH Weather Inst. No. 18161
Notes by L.V.S. Time Rod No. 27 & 28

Name MARINA SUBSIDENCE STUDY
Job No. 0739.03
From To
Date MAY 1960
Indexed C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	4.162	13.464	.109	.657		5.383	10.223	.116	.679	
	4.053		.109			5.267		.116		DIFF. ELEV. +17.517
	3.944					5.151				FROM M.D.R B.M. #13 -15.490
3	12.159	4.053	.218	.875		15.801	5.267	.232	.911	TO M.D.R. B.M. #63 2.027
		17.517					15.490		.875	M.D.R. B.M. #63
									1.786	BALLONA CK. 1± UPSTREAM
										FROM PACIFIC AVE.
										FOR DESCRIPTION SEE PG 26
	0.900		.134			9.691		.140		
	0.766		.136			9.551		.139		DIFF ELEV. +6.946
	0.630					9.412				FROM M.D.R.B.M. 63 -18.603
1	2.296	0.765	.270			28.654	9.551	.279		TO M.D.R.B.M. 12 -11.657
	6.315		.134			9.168		.116		M.D.R. B.M. #12
	6.181		.133			9.052		.116		L.A. CO. F.C. DIST. B.M. 115-222A
	6.048					8.936				BALLONA CK. NLY SIDE 800'±
	18.544	6.181	.267	.537		27.156	9.052	.232	.511	UPSTREAM FM. PACIFIC AVE.
		6.946					18.603		.537	FOR DESCRIPTION SEE PG 11
									1.048	

F.B. 2649 P.G. 32

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party L.V. SMITH Weather Inst. No. 18161
Notes by L.V.S. Time Rod No. 27 & 28

Name MARINA SUBSIDENCE STUDY
Job No. 0739.03
From To
Date MAY 1960
Indexed K. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	10.902		115			1.403		.098		M.D.R.B.M. #12
	10.787		117			1.305		.097		L.A.Co. F.C. DIST. B.M. 115-222A
	10.670					1.208				BALLONA CK. NLY. SIDE 800'±
1	32.359	10.786	.232			3.916	1.305	.195		UPSTREAM FM. PACIFIC AVE.
	6.446		183			5.143		.184		FOR CONTINUATION SEE PG 11
	6.263		183			4.959		.186		
	6.080					4.773				
2	18.789	6.263	.366	.598		14.875	4.958	.370	.565	
	4.983		197			4.339		222		
	4.786		200			4.117		222		
	4.586					3.895				
3	14.355	4.785	.397	.995		12.351	4.117	444	1.009	
	4.371		198			4.161		199		
	4.173		198			3.962		199		
	3.975					3.763				
4	12.519	4.173	.396	1.391		11.886	3.962	398	1.407	
	4.705		211			4.728		210		
	4.494		209			4.518		210		
	4.285					4.308				
5	13.484	4.495	420	1.811		13.554	4.518	420	1.827	
		30.502					18.860			

F.B. 7649 P.G. 33

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party LLOYD V. SMITH Weather Inst. No 18161
Notes by L.V.S. Time Rod No. 27 & 28

Name MARINA SUBSIDENCE STUDY
Job No. 0739.03
From To
Date 5-60
Indexed A. C. Johnson

F.B. 2649 P.G. 34

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	4.299	30.502	.082	1.811		7.619	18.360	.079	1.827	
	4.217		.083			7.540		.079		DIFF. ELEV. +34.719
	4.134					7.461				FROM M.D.R.B.M. 12 -26.400
6	12.650	4.217	.165	1.976		22.620	7.540	.158	1.985	TO M.D.R.B.M. 60 + 8.319
		34.719					26.400		1.976	M.D.R.B.M. # 60
									3.961	BALLONA CK. & MAIN CHANNEL
										FOR ELEVATION SEE PG. 25
	8.308		.218			4.320		.212		
	8.090		.217			4.108		.213		
	7.873					3.895				
1	24.271	8.090	.435			12.323	4.108	.425		
	5.409		.196			4.998		.193		
	5.213		.195			4.805		.193		
	5.018					4.612				
2	15.640	5.213	.391	.826		14.415	4.805	.386	.811	
	4.972		.207			4.989		.210		
	4.765		.205			4.779		.212		
	4.560					4.567				
3	14.297	4.766	.412	1.238		14.335	4.778	.422	1.233	
		18.069					13.691			

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party L.V. SMITH Weather Inst. No. 18161
Notes by L.V. SMITH Time Rod No. 27 & 28

Name MARINA SUBSIDENCE STUDY
Job No. 0739.03
From To
Date 5-60
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	BACKSIGHT Mean	BACKSIGHT Thread Intervals	BACKSIGHT Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	FORESIGHT Mean	FORESIGHT Thread Intervals	FORESIGHT Sum of Intervals	DESCRIPTION AND REMARKS
	5.264	18.069		1.238		4.652	13.691		1.238	
	5.069		.195			4.446		.206		
	4.876		.193			4.241		.205		
4	15.209	5.070	.388	1.626		13.339	4.446	.411	1.644	
	4.722		.172			9.490		.177		DIFF ELEV.
	4.550		.171			9.313		.177		FROM M.D.R. B.M. #60 +27.689
	4.379					9.136				TO M.D.R. B.M. #61 -27.450
5	13.651	4.550	.343	1.969		27.939	9.313	.354	1.998	+0.239
		27.689					27.450		1.969	M.D.R. B.M. #61
									3.967	BALLONA CK. NLY. SIDE
										FOR DESCRIPTION SEE PG 26
	10.003		.158			5.312		.163		
	9.845		.159			5.149		.160		DIFF ELEV. +15.390
	9.686					4.989				FROM M.D.R. B.M. #61 -11.098
1	29.534	9.845	.317			15.450	5.150	.323		TO M.D.R. B.M. #64 +4.292
	5.693		.149			6.082		.134		M.D.R. B.M. #64
	5.544		.146			5.948		.135		BALLONA CK. NLY. SIDE
	5.398					5.813				FOR DESCRIPTION SEE PG 26
2	16.635	5.545	.295	.612		17.843	5.948	.269	.592	
		15.390					11.098		.612	
									1.204	

PB 2649 PG. 35

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party LLOYD V. SMITH Weather ____ Inst. No. 181.6.1
Notes by L.V.S Time ____ Rod No. 27 & 28

Name MARINA SUBSIDENCE STUDY
Job No. 0739.03
From ____ To ____
Date MAY 1960
Indexed ____

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
										M.O.R. B.M. # 64 MARINA B.M., N.W. SIDE FOR DESCRIPTION SEE PG 26
	5.558 5.360 5.163		.198 .197			9.760 9.598 9.435		1.62 1.63		DIFF ELEV. +5.360 FROM M.O.R. B.M. # 64 −9.598 TO M.O.R. B.M. # 62 −4.238
	16.081	5.360	3.95			28.793	9.598	3.25	3.25 .395 .720	
										M.O.R. B.M. # 62 BALDWIN CK., N.W. SIDE FOR DESCRIPTION SEE PG 25
	10.720 10.544 10.371		.176 .173			4.484 4.308 4.134		.176 .174		
1	31.635	10.545	.349			12.926	4.309	.350		
F.B. 2642 P.G. 36	4.988 4.821 4.651		.167 .170			4.838 4.671 4.507		.167 .164		
2	14.460	4.820	.337	.686		14.016	4.672	.331	.681	
	15.365					8.981				

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party LLOYD V. SMITH Weather ____ Inst. No. 18161
Notes by L.V.S. Time ____ Rod No. 27 & 28

Name MARINA SUBSIDENCE STUDY
Job No. 07.32.03
From ____ To ____
Date MAY 1960
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	5.080	15.365	.167	.686		4.562	8.981	.195	.681	
	4.913		.163			4.367		.192		
	4.750					4.175				
3	14.743	4.914	.330	1.016		13.104	4.368	.387	1.068	
	4.380		.219			9.773		.238		
	4.161		.222			9.535		.235		DIFF. ELEV. + 24.439
	3.939					9.300				FROM M.D.R.B.M.# 62 − 22.885
4	12.480	4.160	.441	1.457		28.608	9.536	.473	1.541	TO M.D.R.B.M.# 6 + 1.554
		24.4391					22.885		1.457	
									2.998	M.D.R. B.M. #6
										L.A.Co. F.C. DIST. BM. 115-48
										BALDWIN CK., N'LY SIDE
										FOR DESCRIPTION SEE PG 10
	10.250		.148			4.301		.137		
	10.102		.147			4.164		.137		
	9.955					4.027				
1.	30.307	10.102	.295			12.492	4.164	.274		F.B. 2642 P.G. 37
	4.599		.150			4.700		.157		
	4.449		.150			4.543		.155		
	4.299					4.388				
2.	13.347	4.449	.300	.595		13.631	4.544	.312	.586	
		14.551					8.708			

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party Lloyd V. Smith Weather Inst. No 1816/
Notes by L.V.S. Time Rod No. 27 & 28

Name MARINA SUBSIDENCE STUDY
Job No. 0739.03
From To
Date MAY 1968
Indexed

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	5.254	14551	.146	.595		4.616	8.708	.151	.586	
	5.108		.150			4.465		.149		
	4.958					4.316				
3	15.320	5.107	.296	.891		13.397	4.466	.300	.886	
	4.962		.147			4.405		.153		
	4.815		.148			4.252		.151		
	4.667					4.101				
4	14.444	4.815	.295	1.186		12.758	4.253	.304	1.190	
	4.143		.131			10.434		.145		
	4.012		.129			10.289		.145		
	3.883					10.144				
5	12.038	4.013	.260	1.446		30.867	10.289	.290	1.480	
		28486					27.716		1.446	DIFF ELEV. + 28.486
									2.926	FROM M.U.R.B.M.#6 − 27.716
										TO M.D.R.B.M.#5 + 0.770
										M.D.R.B.M.#5
										LA.CO.F.C.DIST. B.M. 115-225-A
										BALLONA CK., NEAR MLE
										FOR DESCRIPTION SEE PG 9

F.B. 2649 P.G. 38

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party L.V. SMITH Weather Inst. No. 18161
Notes by L.V.S. Time Rod No. 27 & 28

Name MARINA SUBSIDENCE STUDY
Job No. 0739.03
From To
Date MAY 1960
Indexed J. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	10.778		.192			4.209		206		M.D.R.B.M. #5
	10.586		.193			4.003		205		L.A.Co.F.C. DIST. B.M. 115 - 225A
	10.393					3.798				BALLONA CK. 1500' DOWNSTREAM
1	31.757	10.586	.385	.385		12.010	4.003	.411	.411	FROM CULVER BLVD.
	4.382		.203			4.021		.192		FOR DESCRIPTION SEE PG 1
	4.179		.203			3.829		.191		
	3.976					3.638				
2	12.537	4.179	.406	.791		11.488	3.829	.383	.794	
	4.503		203			4.457		198		
	4.300		204			4.259		196		
	4.096					4.063				
3	12.899	4.300	.407	1.198		12.779	4.260	.394	1.188	
	4.640		190			4.436		.185		
	4.450		188			4.251		.185		DIFF. M.D.R. #5 +27.897
	4.262					4.066				TO M.D.R. #1 -22.809
4	13.352	4.451	.378	1.576		12.753	4.251	.370	1.558	+ 5.088
	4.529		148			6.617		151		M.D.R.B.M. #1
	4.381		149			6.466		152		L.A.Co.F.C. DIST. B.M. 115-226
	4.232					6.314				BALLONA CK. & R.R. BRIDGE
5	13142	4.381	297	1.873		19.397	6.466	303	1.864	NEAR CULVER BLVD.
		27.897					22.809		1873 / 3.734	FOR DESCRIPTION SEE PG 7

F.B. 2649 P.G. 72

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party L. V. [redacted] Weather Inst. No. 1816
Notes by L. V. S. Time Rod No. 27 & 28

Name MARINA SUBSIDENCE STUDY
Job No. 0739.03
From To
Date 5-10-60
Indexed K. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
										M.D.R. B.M. #1 L.A. Co. F.C. DIST. B.M. 115-226 BALLONA CK. & R.R. BRIDGE NEAR CULVER BLVD.
	10.508 10.406 10.303		.102 .103			9.422 9.333 9.247		.089 .086		FOR DESCRIPTION SEE PG 7 + 10.406 DIFF. M.D.R. #1 − 9.334 & M.D.R. #2 + 1.072
1.	31.217	10.406	.205	.205		28.002	9.334	.175	.175 .205 .380	
										M.D.R. B.M. #2 L.A. Co. F.C. DIST. BM. 115-227 BALLONA CK. & CULVER BLVD. FOR DESCRIPTION SEE PG 8
	11.613 11.505 11.398		.108 .107			1.668 1.570 1.472		.098 .098		+ 11.505 DIFF. M.D.R. #2 − 1.570 & M.D.R. #65 + 9.935
1.	34.516	11.505	.215	.215		4.710	1.570	.196	.196 .215 .411	
										M.D.R. B.M. #65 BALLONA CK. & CULVER BLVD. FOR DESCRIPTION SEE PG 26

F.B. 2649 P.G. 40

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party L. V. SMITH Weather Inst. No. 18161
Notes by L.V.S. Time Rod No. 27 & 28

Name MARINA SUBSIDENCE STUDY
Job No. 0739.03
From To
Date 5-11-60
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	1.773		.132			11.197		110		M.D.R. B.M #65
	1.641		.130			11.087		110		BALLONA CK. & CULVER BLVD.
	1.511					10.977				
1	4.925	1.642	.262			33.261	11.087	220		FOR DESCRIPTION SEE PG 2a
	0.412		.044			7.386		.045		
	0.368		.043			7.341		044		
	0.325					7.297				
2	1.105	0.368	.087	.349		22.024	7.341	.089	.309	
	3.860		.181			5.313		.201		
	3.679		.180			5.112		202		
	3.499					4.910				
3	11.038	3.679	.361	.710		15.335	5.112	.403	.712	
	4.471		.154			4.945		153		
	4.317		.153			4.792		152		
	4.164					4.640				
4	12.952	4.317	.307	1.017		14.377	4.792	.305	1.017	
	4.224		.153			4.863		152		
	4.071		.153			4.711		149		
	3.918					4.562				
5	12.213	4.071	.306	1.323		14.136	4.712	.301	1.318	
		14.077					33.044			

F.B. 2649 PG. 41

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party L.V. SMITH Weather Inst. No. 18161
Notes by L.V.S. Time Rod No. 27 & 28

Name MARINA SUBSIDENCE STUDY
Job No. 078203
From To
Date 5-11-60
Indexed C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	4.865	14.077	149	1.323		5.115	33.044	146	1.318	
	4.716		147			4.969		145		
	4.569					4.824				
6	14.150	4.717	296	1.619		14.908	4.969	291	1.609	
	4.919		151			5.043		148		
	4.768		150			4.895		145		
	4.618					4.750				
7	14.305	4.768	301	1.920		14.688	4.896	293	1.902	
	5.315		152			5.151		164		+ 34.012
	5.163		154			4.987		164		DIFF. M.D.R #65 - 56.027
	5.009					4.823				& M.D.R #50 - 22.015
8	15.487	5.162	306	2.226		[illegible]	[illegible]	328	2.230	
	5.420		132			8.271		140		M.D.R. B.M. #50
	5.288		133			8.131		140		LINCOLN BLVD. 1240'± NLY
	5.155					7.991				FROM CULVER BLVD.
9	15.863	5.288	265	2.491		24.393	8.131	280	2.510	FOR DESCRIPTION SEE PG. 21
		34.012					50.52		2.491	
									5.001	

F.B. 2649 P.G. 42

76P526 S & E #379 1-5

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party L.V. SMITH Weather Inst. No.
Notes by L.V.S. Time Rod No.

Name MARINA SUBSIDENCE STUDY
Job No. 0739.03
From To
Date MAY 1960
Indexed K. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	7.922		148			5.520		153		M.D.R. B.M. #50
	7.774		147			5.367		153		LINCOLN BLVD. 1240' NLY
	7.627					5.214				FROM CULVER BLVD
1.	23.323	7.774	295			16.101	5.367	306		FOR DESCRIPTION SEE PG 5
	4.747		156			5.502		150		
	4.591		153			5.352		150		
	4.438					5.202				
2.	13.776	4.592	309	.604		16.056	5.352	300	.606	
	4.669		.154			5.249		.157		
	4.515		153			5.092		.154		
	4.362					4.938				
3	13.546	4.515	307	.911		15.279	5.093	311	.917	
	4.364		153			4.597		155		
	4.211		151			4.442		153		
	4.060					4.289				
4	12.635	4.212	304	1.215		13.328	4.443	308	1.225	
	5.713		153			5.249		150		
	5.560		153			5.099		151		
	5.407					4.948				
5	16.680	5.560	306	1.521		15.296	5.099	301	1.526	
		26.653					25.354			

F.B. 7644 P.G. 43

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party Lloyd V. Smith Weather Inst. No. 181.61
Notes by L.V.S. Time Rod No. 27 & 28

Name MARINA SUBSIDENCE
Job No. 0739.03
From To
Date MAY 1960
Indexed K. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	5.542	26.653	.139	1.521		8.251	25.354	.150	1.526	
	5.403		.139			8.101		.150		+ 32.056
	5.264					7.951				− 33.455
6	16.209	5.403	.278	1.799		24.303	8.101	.300	1.826	− 1.399
		32.056					33.455		1.799	
									3.625	M.D.R.B.M. #51
										LINCOLN BLVD. & MOLE #6
										PROD.
										FOR DESCRIPTION SEE PG 22
	8.858		.191			5.058		.185		
	8.667		.188			4.873		.183		
	8.479					4.690				
1	26.004	8.668	.379			14.621	4.874	.368		+ 18.891
										− 14.725
										+ 4.166
	5.407		.195			4.585		.214		
	5.212		.193			4.371		.212		
	5.019					4.159				
2	15.638	5.213	.388	.767		13.115	4.372	.426	.794	
	5.097		.088			5.567		.088		M.D.R.B.M. #38
	5.009		.086			5.479		.087		CITY TRAV. MON. VENICE AREA
	4.923					5.392				LINCOLN BLVD.
3	15.029	5.010	.174	.941		16.438	5.479	.175	.969	FOR DESCRIPTION SEE PG 20
		18.891					14.725		941	
									1.910	

F.B. 2642 P.G. 44

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party L.V. SMITH Weather Inst. No. 18161
Notes by L.V. SMITH Time Rod No. 27 & 28

Name MARINA SUBSIDENCE STUDY
Job No. 0739.03
From To
Date MAY 1966
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	6.118		.135			4.977		134		M.D.R. B.M. #38
	5.983		.132			4.843		135		CITY TRAV. MON. VENICE H-3-A
	5.851					4.708				LINCOLN BLVD. 2800'N/LY CULVER B.
1	17.952	5.984	267			14.528	4.843	.269		FOR DESCRIPTION SEE PG 20
	5.666		128			6.633		126		
	5.538		129			6.507		126		DIFF M.D.R.#38 + 11.522
	5.409					6.381				& M.D.R. #52 − 11.350
2.	16.613	5.538	257	.524		19.521	6.507	252	.521	+ 0.172
		11.522					11.350		.524	
									1.045	M.D.R. B.M. # 52
										LINCOLN BLVD & & MOLE # 5
										FOR DESCRIPTION SEE PG 22
	7.901		176			4.308		.177		
	7.725		175			4.131		.176		+ 13.642
	7.550					3.955				DIFF M.D.R. #52 − 9.863
1	23.176	7.725	351			12.394	4.131	.353		& M.D.R. #53 + 3.779
	6.092		.174			5.917		186		M.D.R. B.M. #53
	5.918		.176			5.731		183		LINCOLN BLVD & P.E. R/W.
	5.742					5.548		9		
2.	17.752	5.917	.350	.701		17.196	5.732	.368	.724	FOR DESCRIPTION SEE PG 23
		13.642					9.863		701	
									1.423	

F.B. 2649 P.G. 45

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party L. Loyd V. Smith Weather ..... Inst. No. 18161
Notes by L.V.S. Time ..... Rod No. 27 & 28

Name MARINA SUBSIDENCE
Job No. 0739.03
From ..... To .....
Date MAY 1960
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	BACKSIGHT Mean	BACKSIGHT Thread Intervals	BACKSIGHT Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	FORESIGHT Mean	FORESIGHT Thread Intervals	FORESIGHT Sum of Intervals	DESCRIPTION AND REMARKS
										M.D.R. B.M. #53 LINCOLN BLVD & P.E. R/W.
	4.321		.095			3.622		.100		+ 4.226
	4.226		.096			3.522		.099		− 3.522
	4.130					3.423				+ .704
1	12.677	4.226	.191			10.567	3.522	.199		
								.191		M.D.R. B.M. #37
								.390		LINCOLN BLVD & P.E. R/W.
	5.152		.198			4.118		195		
	4.954		.196			3.923		195		
	4.758					3.728				
1	14.864	4.955	.394			11.769	3.923	.390		
	5.082		.173			5.109		179		
	4.909		.174			4.930		178		
	4.735					4.752				
2	14.726	4.909	.347	.741		14.791	4.930	.357	.747	
		9.864					8.853			

F.B. 2649 P.G. 46

76P526 S & E #379 1-54

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

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

5

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party L.V. SMITH Weather Inst. No. 18161
Notes by L.V. SMITH Time Rod No. 27 & 28

Name MARINA SUBSIDENCE STUDY
Job No. 07339.03
From To
Date 5-60
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	4.929	9.864	.148	0.741		5.008	8.853	.144	0.~~357~~ 747	
	4.781		149			4.864		.143		
	4.632					4.721				
3	14.342	4.781	.297	1.038		14.593	4.864	.287	.644	
	5.125		.147			5.070		147		
	4.978		148			4.923		145		
	4.830					4.778				
4	14.933	4.978	.295	1.333		14.771	4.924	.292	936	
	4.912		.149			5.170		.148		
	4.763		.150			5.022		147		
	4.613					4.875				
5	14.288	4.763	.299	1.632		15.067	5.022	.295	1.231	
	4.559		.152			5.349		.147		
	4.407		149			5.202		.148		
	4.258					5.054				
6	13.224	4.408	301	1.933		15.605	5.202	.295	1.526	
	4.681		.150			5.731		155		
	4.531		.150			5.576		155		
	4.381					5.421				
7	13.593	4.531	300	2.233		16.728	5.576	310	~~1.836~~	
		33.325					34.441		2.226	

F.B. 2649 P.G. 47

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party L.V. SMITH Weather Inst. No. 16161
Notes by L.V. SMITH Time Rod No. 27528

Name MARINA SUBSIDENCE STUDY
Job No. 0739.93
From To
Date 5-13-60
Indexed K. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	4.880	33.325	.150	2.233		5.440	34.441	160	2.226	
	4.730		.151			5.280		159		
	4.579					5.121				
8	14.189	4.730	.301	2.534		15.841	5.280	.319	2.155	
	5.017		.060			6.697		.069		
	4.957		.061			6.628		068		DIFF ELEV. +43.012
	4.896					6.560			2.682	FROM M.D.R. B.M.° −46.349
9	14.870	4.957	.121	2.655		19.885	6.628	.137	2.292	TO M.D.R. B.M.° 54 −3.337
		43.012					46.349		2.655	
										M.D.R. B.M. °54
									5.337	P.E.R.R/W. & N. END MAIN CHANNEL
	5.975		.183			5.318		.195		
	5.792		181			5.123		193		
	5.611					4.930				
1	17.378	5.793	364			15.371	5.124	.388		
	4.634		195			5.510		190		
	4.439		197			5.320		190		
	4.242					5.130				
2	13.315	4.438	392	.756		15.960	5.320	380	.768	
		10.431					10.444			
		2								

F.B. 2647 P.G. 18

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LI

Chief of Party LLOYD V. SMITH Weather Inst. No. 18161
Notes by L.V.S. Time Rod No. 27 & 28

Name MARINA SUBSIDENCE STUDY
Job No. 0739.03
From To
Date
Indexed K. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	5.011	10.431	194	.756		5.719	10.444	189	.768	
	4.817		195			5.530		190		
	4.622					5.340				
3	14.450	4.817	.389	1.145		16.589	5.530	379	1.147	
	4.353		194			5.735		195		
	4.659		196			5.540		194		
	4.463					5.346				
4	13.975	4.658	390	1.535		16.621	5.540	389	1.536	
	4.792		193			5.345		186		
	4.599		196			5.159		188		DIFF ELEV. +29.486
	4.403					4.971				FROM M.O.R.B.M. #54 -32.935
5	13.794	4.598	.389	1.924		15.475	5.158	.374	1.910	TO M.O.R.B.M. #55 -3.449
	5.284		.102			6.365		103		M.O.R.B.M. #55
	5.182		101			6.262		101		PER R/W ENCROACHMENT
	5.081					6.161				
	15.547	5.182	203	2.127		18.788	6.263	204	2.114	FOR DESCRIPTION SEE PG 23
		29.486					32.935		2.127	
									4.241	

F.B. 2649 PG. 42

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party LLOYD V. SMITH Weather Inst. No. 1&161
Notes by L.V.S. Time Rod No. 27 & 28

Name MARINA SUBSIDENCE STUDY
Job No. 07339.03
From To
Date MAY 1960
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	6.050		195			4.939		195		M.D.R. B.M. #55
	5.855		194			4.744		194		P.E.R. R/W @ OLYMPIC ST.
	5.661					4.550				
1	17.566	5.855	389			14.233	4.744	389	389	FOR DESCRIPTION SEE PG 23
	5.014		148			5.349		148		
	4.866		148			5.201		151		
	4.718					5.050				
2.	14.598	4.866	296	685		15.600	5.200	299	688	
	5.334		147			5.391		150		
	5.187		148			5.241		151		DIFF. ELEV. +27.612
	5.039					5.090				FROM M.D.R. B.M. #55 −26.493
3.	15.560	5.187	295	980		15.722	5.241	301	989	TO M.D.R. B.M. #56 +1.119
	5.311		163			5.070		165		
	5.148		160			4.905		166		
	4.988					4.739				
4.	15.447	5.149	323	1303		14.714	4.905	331	1320	
	6.735		180			6.577		174		M.D.R. B.M. #56
	6.555		179			6.403		174		WASHINGTON ST. & OXFORD AVE.
	6.376					6.229				
5	19.666	6.555	359	1662		19.209	6.403	348	1668	FOR DESCRIPTION SEE PG 23

F.B. 2649 P.G. 50

27.612 ✓ 26.493 ✓ 1662
3.330

76P526 S & E #379 1-54

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

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

7

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party L.V. SMITH Weather Inst. No. 1.8161
Notes by L.V.S. Time Rod No. 27.E.28

Name MARINA SUBSIDENCE STUDY
Job No. 07339.03
From To
Date
Indexed C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	4.251		159			4.751		166		M.D.R.B.M. # 56
	4.092		159			4.585		166		WASHINGTON ST. & OXFORD AVE.
	3933					4.419				
1	12.276	4.092	318			13.755	4.585	332		FOR DESCRIPTION SEE PG 113
	4.763		148			5.566		147		
	4.615		147			5.419		148		DIFF. ELEV. + 19.122
	4.468					5.271				FROM M.D.R.B.M. #56 - 19.913
2.	13.846	4.615	.295	.613		16256	5.419	295	627	TO M.D.R.B.M. #57 -0.791
	5.602		.152			5.146		.153		
	5.450		.149			4.993		.152		
	5.301					4.841				
3	16.353	5.451	.301	.914		14.980	4.993	.305	.932	
	[redacted]		.165			5.080		164		M.D.R.B.M. #57
	4.964		.164			4.916		164		WASHINGTON ST. & WILSON AVE.
	4.800					4.752				
4.	14.893	4.964	.329	1243		14.748	4.916	328	1260	FOR DESCRIPTION SEE PG
		19.122					19.913		1243	
									17	
									2,503	

F.B. 2649 P.G. 57

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party LLOYD V. SMITH Weather ..... Inst. No. 1861
Notes by L.V.S Time ..... Rod No. 27 & 28

Name MARINA SUBSIDENCE STUDY
Job No. 0739-03
From ..... To .....
Date 5-16-60
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	4.040		.151			4.238		.150		M.D.R. B.M. # 57
	3.889		.150			4.088		.150		WASHINGTON ST. & WILSON AVE.
	3.739					3.938				
1	11.668	3.889	.301			12.264	4.088	.300		FOR DESCRIPTION SEE [illegible]
	7.030		.192			6.360		.198		
	6.838		.194			6.162		.197		
	6.644					5.965				
2.	20.512	6.837	.386	.687		18.487	6.162	.395	.695	
	5.160		.149			4.837		.149		
	5.011		.147			4.688		.150		
	4.864					4.538				
3.	15.035	5.012	.296	.983		14.063	4.688	.299	.994	
	5.882		.151			4.325		.148		
	5.731		.149			4.177		.150		
	5.582					4.027				
4	17.195	5.732	.300	1.283		12.529	4.176	.298	1.292	
	5.063		.153			5.584		.151		
	4.910		.154			5.433		.151		
	4.756					5.282				
5	14.729	4.910	.307	1.590		16.299	5.433	.302	1.594	
		26.380					24.547		~~1.590~~ ~~.01~~	

F.B. 2649 P.G. 52

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party LLOYD V. SMITH Weather Inst. No. 18161
Notes by L.V.S. Time Rod No. 27 & 28

Name MARINA SUBSIDENCE STUDY
Job No. 0739.03
From To
Date
Indexed C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	4.738	26.380	.155	1.590		6.156	24547	.154	1.594	
	4.583		.152			6.002		.154		
	4.431					5.848				
6	13.752	4.584	.307	1.897		18.006	6.002	308	1902	
	3.898		150			5.520		154		
	3.748		150			5.366		154		
	3.598					5.212				
7	11.244	3.748	.300	2.197		16.098	5.366	308	2.210	
	4.540		151			5.505		154		
	4.389		149			5.351		152		
	4.240					5.199				
8	13.169	4.390	300	2.497		16055	5.352	306	2.516	
	6.430		146			5.416		151		T.P.
	6.284		145			5.265		149		WASHINGTON ST. & BEACH AVE
	6.139					5.116				CUT SPK. IN CURB N.E. COR.
9.	18853	6.284	291	2.788		15797	5.266	300	2.816	5' ± E. OF E. CURB RETURN
	5.001		192			5.088		198		F.B. 2649, P.G. 53
	4.809		194			4.890		197		
	4.615					4.693				
10.	14.425	4.808	386	3.174		14.671	4.890	395	3.211	
		50.194					51.423		~~3194~~ 057	

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party LLOYD V. SMITH Weather Inst. No. 18161
Notes by L.V.S Time Rod No. 27 & 28

Name MARINA SUBSIDENCE STUDY
Job No. 0739.03
From To
Date MAY 1960
Indexed J. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	5.063	50.194	.196	3.174		5.380	51.423	.201	3.211	
	4.867		.197			5.179		.202		
	4.670					4.977				
11	14.600	4.867	.393	3.567		15.536	5.179	.403	3.614	
	4.606		.107			5.648		.082		
	4.499		.106			5.566		.082		DIFF. ELEV. + 59.560
	4.393					5.484				FROM M.D.R. B.M. "57 - 62.168
12	13.498	4.499	.213	3.780		16.698	5.566	.164	3.778	TO M.D.R. B.M. "58 - 2.608
		59.560		3.778			62.168			M.D.R. B.M. "58
				.002						WASHINGTON ST. & BRAYSON AVE
				7.558						
										FOR ELEVATION SEE P.G. 24
	6.267		.198			5.258		.202		
	6.069		.199			5.056		.201		
	5.870					4.855				
1.	18.206	6.069	.397			15.169	5.056	.403		
	4.892		.202			5.470		.194		
	4.690		.203			5.276		.194		
	4.487					5.082				
2.	14.069	4.690	.405	.802		15.828	5.276	.388	.791	
		10.759					10.332			

F.B. 2649 P.G. 54

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party LLOYD V. SMITH Weather ..... Inst. No. 18161
Notes by L.V.S. Time ..... Rod No. 27 & 28

Name MARINA SUBSIDENCE STUDY
Job No. 0739.03
From ..... To .....
Date MAY 1960
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	BACKSIGHT Mean	BACKSIGHT Thread Intervals	BACKSIGHT Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	FORESIGHT Mean	FORESIGHT Thread Intervals	FORESIGHT Sum of Intervals	DESCRIPTION AND REMARKS
	4.485	10.759	.195	.802		5.301	10.332	.202	.791	
	4.290		.192			5.099		.201		
	4.098					4.898				
3.	12.873	4.291	.387	1.189		15.298	5.099	.403	1.194	
	5.649		.194			5.062		.188		
	5.455		.193			4.874		.186		
	5.262					4.688				
4	16.366	5.455	.387	1.576		14.624	4.875	.374	1.568	
	7.474		.199			2.830		.181		
	7.275		.195			2.649		.180		DIFF. ELEV. +34.756
	7.080					2.469				FROM M.D.R.B.M. #58 -27.730
5	21.829	7.276	.394	1.970		7.948	2.649	.361	1.929	TO M.D.R.B.M. #31 + 7.026
	7.092		.117			4.888		.113		M.D.R.B.M. #31
	6.975		.117			4.775		.114		WASHINGTON ST. & PACIFIC AVE.
	6.858					4.661				
6.	20.925	6.975	.234	2.204		14.324	4.775	.227	2.156	FOR DETAILS ON SEE PG 20
		34.756		2156			27.730			
				~~0.48~~						
				4.360						

F.B. 2649 P.G. 55

76P526 S & E #379 1-54

PLEASE RETURN TO

LOS ANGELES COUNTY SURVEYOR

726 LOS ANGELES COUNTY
ENGINEERING BLDG.

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party.....Weather.....Inst. No.....
Notes by.....Time.....Rod No.....

Name.....
Job No.....
From.....To.....
Date.....
Indexed.....

Number of Station	BACKSIGHT				B. S. Rod and Temp.	FORESIGHT				DESCRIPTION AND REMARKS
	Thread Readings	Mean	Thread Intervals	Sum of Intervals		Thread Readings	Mean	Thread Intervals	Sum of Intervals	

BLANK

F.B. 2649 P.G. 56

76F526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Clear Inst. No. 142552
Notes by Landa Time Afternoon Rod No. 21 & 22

Name Marina Sub. Studies
Job No. 0739.03
From B.M. M.D.R. #59 To B.M. M.D.R. #66
Date 5-12-68 C. Johnson
Indexed

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
1	5.067 4.395 3.723 13.185	4.395	672 672 1344	1344	22 78°	2.818 2.162 1.508 6.488	2.163	656 654 1310	1310	B.M. M.D.R. #59 Wash. St. & Dell Ave. S.W. Prop. Cor. C.E. brass Cp. mon. dn. 6"
2	6.112 5.468 4.823 16.403	5.468	644 645 1289	2633		5.357 4.675 3.993 14.025	4.675	682 682 1364	2674	For Desc. see pg. 24
3	6.038 5.434 4.829 16.301	5.434	604 605 1209	3862		5.783 5.127 4.472 15.382	5.127	656 655 1311	3985	For Desc. See pg. 27
4	5.533 4.830 4.123 14.486	4.829	703 707 1410	5252		5.242 4.654 4.067 13.963	4.654	588 587 1175	5160	B.M. M.D.R. #66 Plant test Area, S.E. Cor. 5' N'ly. along fence from Entrance Gate C.E. B.M. Mon. up 2"
			5160 092 18.412							Back Sight + 20.126 = Total B.S. Foresight − 16.619 = " F.S. Diff = + 3.507 — #59 To: #66
		20.126					16.619			

F.B. 2642 P.G. 57

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Clear Inst. No. 122552
Notes by English Time After-noon Rod No. 21 & 22

Name Marina Sub. Studies
Job No. 0739-03
From M.D.R. #66 To M.D.R. #67
Date 5-12-60
Indexed K. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B.S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	3568		223		#22	6516		216		B.M. M.D.R. #66
	3345		223			6300		217		See Pg. 57 for desc.
	3122		446			6083		433		
1	10.035	3.345		446		18.899	6.300		433	
	5135		885			4819		865		
	4250		885			3954		864		
	3365		1770			3090		1729		
2	12.750	4.250		2216		11863	3.954		2162	
	3696		620			4680		591		
	3076		619			4089		589		
	2457		1239			3500		1180		
3	9.229	3.076		3455		12269	4090		3342	
	5840		625			5038		682		B.M. M.D.R. #67
	5215		626			4356		684		150' W'ly. from W. Bdry. Marina
	4589		1251			3672		1366		89' N'ly. from ℄ Prod. Mole #2
4	15.644	5.215		4706		13.066	4.355		4708	Rt. Spk. in N.E. Cor. Conc. footing
									4706	for Seperator tank, 55'5'ly.
									02	from Well "Burks #3"
									9,414	+ 15.886 = Total B.S.
										- 18.699 = " F.S.
		15.886					18.699			Diff. = - 2.813

F.B. 2649 PG. 58

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Clear Inst. No. 142552
Notes by English Time Afternoon Rod No. 21 & 22

Name Mar. Sub. Study
Job No. 0739.03
From M.D.R. # 67 To M.D.R. # 68
Date 5-12-60
Indexed C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	4238		150		22	5040		142		B.M. M.D.R. # 67
	4088		149			4898		140		For Desc. See pg. 27
1	3939		299	299	78°	4758		282	282	
	12265	4088				14696	4899			
	7211		628			3320		524		
	3583		629			2796		526		
2	29.54		1257	1556		2270		1050	1332	
	10.748	3583				8.386	2.795			
	5920		736			2344		781		
	5184		732			1563		782		
3	4452		1468	3024		0781		1563	2895	
	15556	5185				4.688	1563			
	7898		651			4247		680		
	7247		650			3567		679		
4	6597		1301	4325		2888		1359	4254	
	21742	7.247				10702	3567			
	7009		564			4989		568		
	6445		564			4421		567		
5	5881		1128	5453		3854		1135	5389	
	19335	6445				13264	4421			
		26.548					17.245			

F.B. 2642 P.G. 59

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Clear Inst. No 42552
Notes by Ed. Time Afternoon Rod No. 21522

Name Marina Sub. Study
Job No. 0739.03
From M.D.R. #67 To M.D.R. #68
Date 5-12-60
Indexed R. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	6020	26548	365	5453		6246	17045	406	5389	B.M. M.D.R. # 68
	5655		365			5840		408		On ℄ Prod Mole #1 ℄ 250'±
6	5290		730			5432		814		W'ly. from W'ly. Bdry. of Marina
	16.965	5655		6183		17.518	5839		6203	C.E. Br. Cp. mon. - flush
		32203					23.084		6183	(60' S'ly. from large green oil storage tank)
									020	
									12.386	
										+32.203 = Total B.S.
										-23.084 = " F.S.
										+9.119 " Diff.

F.B. 2649 P.G. 60

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Clear Inst. No. 142552
Notes by Landa Time Afternoon Rod No. 21&22

Name Mar. Sub. Study
Job No. 0739.03
From M.D.R.#68 To M.D.R.#69
Date 5-12-60
Indexed J. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
1	6643 6023 5201		620 619 1239		82	5546 4968 4391		578 577 1155		B.M. M.D.R. #68 For Desc. See pg. 27
	18070	6.023		1239		16905	6.948		1155	
2	4567 3998 3426		569 572 1141			5555 5008 4460		547 548 1095		
	11991	3997		2380		15023	5008		2250	
3	5338 4776 4212		562 562 1126		68	6233 5646 5061		587 585 1172		5-17-60 Hazy - 9:00 A.M.
	14326	4.775		3506		16940	5647		3422	
4	5177 4457 3738		720 719 1439			5972 5318 4667		654 651 1305		F.B. 2649 P.G. 61
	13372	4.457		4965		15957	5.319		4727	
5	5168 4577 3985		591 592 1183			4998 4338 3677		660 661 1321		5
	13730	4.577		6128		13013	4.338		6048	
		23.829					25.280			

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 142552
Notes by Landz Time 9:00 - 9:20 Rod No. 21E 22

Name Mar. Sub. Stud.
Job No. ~~Errata~~ 07.39.03
From M.D.R. 68 To M.D.R. 69
Date 5-17-60
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	BACKSIGHT Mean	BACKSIGHT Thread Intervals	BACKSIGHT Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	FORESIGHT Mean	FORESIGHT Thread Intervals	FORESIGHT Sum of Intervals	DESCRIPTION AND REMARKS
	5689	23.829	611	6128		6091	25.280	638	6048	
	4878		609			5253		640		
	4269		1220			4813		1278		
6	14836	4.879		7348		16357	5.452		7326	
	4458		627			9937		633		
	3831		629			9306		630		
	3202		1256			8674		1263		
7	11491	3.830		8604		27915	9.305		8589	
	2688		381			2983		321		B.M. M.D.R. #69
	2307		382			2662		321		For Desc. See pg. 28
	1925		763			2341		642		
8	6920	2.307		9367		7986	2.662		9231	
		34.845		9231			42.699			
				~~136~~						
				18.598						From: M.D.R. #68 To: M.D.R. #69
										- 42.699
										+ 34.845
										- 7.854 = Diff. in elev.

F.B. 2649 P.G. 62

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 122552
Notes by [illegible] Time 9:20 – 12:00 Rod No. 21 & 22

Name Mar. Sub. Study
Job No. ~~6910.74~~ 0739.03
From M.O.E.-69 To M.O.E. 70
Date 5-17-60
Indexed C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	4633		503		22	2741		491		B.M. M.O.R. # 69
	4130		503		68°	2256		490		See pg. 28
	3627		1006			1766		981		
1	12390	4.130		1006		6769	2.256		981	
	9668		588			7317		612		
	9080		588			6705		612		
	8492		1176			6093		1224		
2	27240	9.080		2182		20115	6.705		2205	
	4818		645			6517		651		
	4173		645			5866		652		
	3528		1290			5214		1303		
3	12519	4.173		3472		17597	5.866		3508	
	4357		574			4299		602		
	3783		574			3697		601		
	3209		1148			3096		1203		
4	11349	3.783		4620		11092	3.697		4711	
	6072		618			4896		611		
	5454		617			4285		612		
	4837		1235			3673		1223		
5	16363	5.454		5855		12854	4.285		5934	
		26.620					22.809			

F.B. 2649 P.G. 63

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 142552
Notes by Lande Time 9:20 - 10:00 Rod No. 21422

Name Mar. Sub Study
Job No. ~~6910.74~~ 0739.03
From M.D.R. 69 To M.D.R. - 70
Date 5-17-60
Indexed ~~A.~~ C. Johnson

Number of Station	BACKSIGHT Thread Readings	BACKSIGHT Mean	BACKSIGHT Thread Intervals	BACKSIGHT Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	FORESIGHT Mean	FORESIGHT Thread Intervals	FORESIGHT Sum of Intervals	DESCRIPTION AND REMARKS
	5955	26.620	593	5855		4809	22.809	549	5934	
	5362		593			4260		549		
	4769		1186			3711		1098		
6	16086	5.362		7041		12780	4.260		7032	
	6466		431			2421		446		
	6035		431			1975		445		
	5604		862			1530		891		
7	18105	6.035		7903		5926	1.975		7923	
	8860		358			1438		363		B.M.M.D.R. # 70
	8502		360			1075		363		For Desc. See pg. 28
	8142		718			0712		726		
8	25504	8.501		8621		3225	1.075		8649	
									8621	
									~~028~~	Summation of Run
									17.270	Backsights = + 46.518
										Foresights = - 30.119
										Diff. in El. = + 16.399
		46.518					30.119			

F.B. 2649 P.G. 64

76P526 S & E #379 1-54

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

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

V D.F.

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 142552
Notes by Landa Time 10:00 - 10:20 Rod No. 21 & 22

Name Mar. Sub.
Job No. ~~8910-74~~ 0739.03
From M.D.R. - 70 To M.D.R. # 71
Date 5-17-60
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	1215		364		22	7740		310		B.M. M.D.R. # 70
	0851		366		70°	7430		310		For Desc. See pg. 28
	0485		730			7120		620		
1	2551	0.850		730		22290	7430		620	
	2614		334			6755		359		
	2280		334			6396		360		
	1946		668			6036		719		
2	6840	2.280		1398		19.187	6.396		1339	
	5202		599			2357		656		
	4603		599			1701		658		
	4004		1198			1043		1314		
3	13809	4.603		2596		5101	1.700		2653	
	2880		829			5974		876		B.M. M.D.R # 71
	2051		832			5098		874		For Desc. See pg. 28
	1219		1661			4224		1750		
4	6150	2.050		4257		15296	5.099		4403	Summation of Run
									4257	Backsights = +9.783
									~~0146~~	Foresights = -20.625
									8.660	Diff in El = -10.842
		9.783					20.625			

F.B. 2649 pg. 65

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather — Inst. No. 142552
Notes by — Time — Rod No. 21922

Name Marina Sub. Studies
Job No. 6139.03
From — To —
Date —
Indexed

Number of Station	BACKSIGHT				B. S. Rod and Temp.	FORESIGHT				DESCRIPTION AND REMARKS
	Thread Readings	Mean	Thread Intervals	Sum of Intervals		Thread Readings	Mean	Thread Intervals	Sum of Intervals	
			BLANK							

F.B. 2649 P.G. 66

76P526 S & E #379 1-54

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

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

V.D.F.

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 142552
Notes by Lande Time 10:20 - 10:50 Rod No. 21 & 22

Name Mar. Sub. Study
Job No. ~~8910.74~~ 0739.03
From M.D.R. #71 To B.m. #19
Date 5-17-60
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	BACKSIGHT Mean	BACKSIGHT Thread Intervals	BACKSIGHT Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	FORESIGHT Mean	FORESIGHT Thread Intervals	FORESIGHT Sum of Intervals	DESCRIPTION AND REMARKS
	6171		529		22	4942		589		B.m. M.D.R. # 71
	5642		529		70°	4353		591		For Desc. See pg. 28
	5113		1058			3762		1180		
1	16926	5.642		1058		13057	4.352		1180	
	4824		676			8127		514		
	4148		677			7613		517		
	3471		1353			7096		1031		
2	12443	4.148		2411		22836	7.612		2211	Bad Run
	5812		602			4653		623		
	5210		604			4030		627		
	4606		1206			3403		1250		
3	15628	5.209		3617		12086	4.029		3461	
	6923		628			6102		593		
	6295		627			5509		591		
	5668		1255			4918		1184		
4	18886	6.295		4872		16529	5.510		4645	
	5383		630			4682		638		
	4753		630			4044		639		
	4123		1260			3405		1277		
5	14259	4.753		6132		12131	4.044		5922	
		26.047					25.547			

F.B. 2649 P.G. 67

76P526 S & E #379 1-54

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

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

✓D.F.

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No 162552
Notes by Lande Time 10:20 – 10:50 Rod No. 21622

Name Marina Sub. Study
Job No. 0739.03
From M.O.E. 71 To B.M. #19
Date 5-17-60
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	5497	26.047	420	6132		1125	25.547	400	5922	B.M. #19
	5077		421			0.725		399		For Description see pg. 15
	4656		841			0326		799		
4	15230	5.077		6973		2.176	0.725		6721	
				6721						Summation of Elev
				~~0262~~						Backsight = + 31.124
				13.694						Foresights = − 26.272
										Diff in El = + 4.852
		31.124					26.272			

F.B. 2649 P.G. 68

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Clear Inst. No. 142552
Notes by Ed. English Time Afternoon Rod No. 21822

Name Mar. Sub. Study
Job No. 0739.03
From M.D.R. #19 To M.D.R. #21
Date 5-31-60
Indexed J. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
1	1112		334		21	5923		354		B.M. #19
	0778		333			5569		351		For Desc. See pg. 15
	0445		667		70°	5218				
	2335	0.778 ✓		667 ✓		16710	5570	705	705 ✓	
2	5848		703			6680		618		
	5145		703			6062		617		
	4442		1406			5445		1235		
	15435	5145		2073		18187	6062		1940	
3	6850		665			6374		764		
	6185		665			5610		765		
	5520		1330			4845		1529		
	18555	6185		3403		16829	5610		3469	
4	5586		629			4889		642		
	4957		629			4247		643		
	4328		1258			3604		1285		
	14871	4957		4661		12740	4247		4754	
5	6512		584			5786		593		
	5928		580			5193		593		
	5348		1164			4600		1186		
	17788	5929		5825 ✓		15579	5193		5940 ✓	
		22994 ✓					26.682 ✓			

F.B. 2649 PG. 69

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Clear Inst. No 42552
Notes by Ed. Time Afternoon Rod No 21622

Name Marina Sub Study
Job No. 073903
From M.D.R. 19 To M.D.R. 21
Date 5-12-68 C. Johnson
Indexed

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	5562	22.992	783	5825		5678	26.682	765	5940	
	4779		784			4913		761		
6	3995		1567			4152		1526		
	14336	4779		7392		14743	4914		7466	
	3540		642			5862		634		
	4898		644			5228		638		
7	4254		1286			4590		1272		
	14692	4897		8678		15680	5227		8738	
	4940		698			4695		748		B.M. M.D.R. #21 See pg. 16 for descr.
	4242		697			3947		747		
8	3545		1395			3200		1495		
	12727	4242		10073		11842	3947		10208	
									10073	
									0135	SUMMATION OF RUN
									20281	BACK SIGHT = + 36.912
										FORE SIGHT = - 40.770
										DIFF EL = - 3.858
		36.912					40.770			

F.B. 2549 P.G. 70

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 142552
Notes by English Time 7 00m Rod No 21822

Name MARINA SUB STUD
Job No. 073903
From BM MDR #21 To MDR BM #22
Date 5-31-60
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	4177		693			5636		625		B.M. M.D.R. # 21
	3484		691			5011		622		52nd Pl. & 15' & 8' E.
	2793		1384			4389		1247		of Speedway, ct. spk. in
1	10454	3485		1384		15036	5012		1247	Conc. foundation of Derrick
	5382		306			6245		286		City of L.A. 10690-60
	5076		305			5959		288		1957 adj. elev. = 13.079
	4771		611			5671		574		
2	15229	5076		1995		17875	5958		1821	B.M. M.D.R. # 22
				1821						& Inter Speedway & 51st
				174						Ave., City disc, mkd. N-13
				3816						Set in Conc. pst. under Iron
										Cover mkd. C.L.A. 1mon
										Dept. W.&P. F.B. 1369-8, 1957 Unadj elev = 10.673
										See pg. 16
										Summations of Run
										Backsights = + 8561
										Foresights = - 10970
										Diff in EL = - 2409
		8561					10.970			

F.B. 2649 PG. 7

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 142552
Notes by English Time noon Rod No. 21 & 22

Name MARINA Sub Stud
Job No. 073903
From BM. M.D.R. #22 To M.D.R. BM #23
Date 5-31-60
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	BACKSIGHT Mean	BACKSIGHT Thread Intervals	BACKSIGHT Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	FORESIGHT Mean	FORESIGHT Thread Intervals	FORESIGHT Sum of Intervals	DESCRIPTION AND REMARKS
1	6299 5682 5065 17046	5682	617 617 1234	1234		5949 5334 4719 16002	5334	615 615 1230	1230	B.M. M.D.R. #22 See Descrip on Pg. 16
2	5980 5401 4822 16203	5401	579 579 1158	3392		5303 4692 4082 14077	4692	611 610 1221	2451 ~~5922~~	
3	6338 5720 5103 17161	5720	618 617 1235	3627 ~~4627~~		6048 5413 4782 16243	5414	635 631 1266	3717 ~~7188~~	Summations of Run
4	6537 5886 5237 17660	5887	651 649 1300	4927 ~~5927~~		5767 5116 4466 15349	5116	651 650 1301	5018 ~~8489~~	Backsights = + 27.335 Foresights = − 24.451 Diff in Elev = + 2.884
5	5182 4645 4109 13936	4645	537 536 1073	6000 ~~7000~~		4484 3894 3306 11684	3895	590 588 1178	6196 ~~9667~~	M.D.R. B.M. #23 See pg. 17 6196 6000 12196
		27335					24451		~~6196~~ ~~6000~~ ~~1196~~	

F.B. 2649 P.G. 72

76P526 S & E #379 1-54

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

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

V.D.E.

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party E.E. Weather Clear Inst. No. 142552
Notes by English Time Afternoon Rod No. 21322

Name MARINA SUB. STUDIES
Job No. 0739.03
From M.D.R. #23 To M.D.R. #24
Date 5-31-60
Indexed K. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
1	4220 3940 3662 11822	3941 ✓	280 278 558	558 ✓		5240 9980 4719 19939	4980 ✓	260 261 521	521 ✓	M.D.R. B.M. #23 See pg. 17
2	6344 5689 5032 17065	5688	655 657 1312	1870		5108 9440 3774 18322	4440	668 666 1334	1855	
3	5041 4445 3852 13338	4446	596 593 1189	3059		5293 4700 4107 14100	4700	593 595 1188	3043	
4	5997 5386 4778 16161	5387	611 608 1219	4278 ✓		9924 9010 3095 12029	4010	914 915 1829	4872 ✓	B.M. M.D.R. #24 See pg. 17
									4278 ~~594~~ 7.150	SUMMATION OF RUN B.S. + 19.462 ✓ F.S. - 18.130 ✓ DIFF. EL. + 1.332 ✓
		19.462 ✓					18.130 ✓			

F.B. 2649 P.G. 73

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 42552
Notes by Landa Time Morning Rod No. 21 & 22

Name Marina Sub. Stud.
Job No.
From M.D.R. #26 To M.D.R. #27
Date 6-6-60
L. C. Johnson
Indexed

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	5617		584		#21	5572		630		M.D.R. B.M. #26
	5033		585		70°	4942		628		See pg. 18
	4448		1169			4314		1258		
1	15098	5033		1169		14828	4.943		1258	
	5242		619			6222		597		
	4623		618			5625		598		
	4005		1237			5027		1195		
2	13870	4.623		2406		16874	5.625		2053	
	6223		607			6145		645		
	5616		609			5518		641		
	5007		1216			4827		1286		
3	16846	5.615		3622		16558	5.519		3139	
	6864		691			1724		713		M.D.R. B.M. # 27
	6173		694			10111		715		See Pg. 18
	5479		1385			0296		1428		
4	18516	6.172		5007		3031	1.010		5167	Summation of Run
									5007	Backsights = + 21.443
									160	Foresights = - 17.097
									10.174	Diff in El = + 4.346
		21.443					17.097			

F.B. 2649 P.G. 76

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 42552
Notes by Conde Time Morn. Rod No. 21 & 22

Name Marina Sub. Studies
Job No. 1939.03
From M.D.E. #27 To M.D.E. #28
Date 6-1-60
Indexed K. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	1584		591		#21	5877		651		M.D.R.B.M. #27
	0993		590			5226		651		See Pg. 18
	0403		1181			4575		1302		
1	2980	0.993		1181 ✓		15678	5.226		1302	
	5632		631			5633		625		
	4971		632			5008		625		
	4939		1263			4383		1250		
2	14912	4.971		2444		15024	5008		2552	
	5378		560			5169		657		
	4818		559			4512		656		
	4259		1119			3856		1313		
3	16455	4.818		3563		13537	4.512		3865	
	5477		299			6277		333		M.D.R. B.M. #28
	5178		299			5944		332		See Pg. 19
	4879		598			5612		665		
4	15534	5.178		4161 ✓		17833	5.944		4530 ✓	Summation of Run
									4161	Backsights = +15.960
								369		Foresights = -20.690
								8.691		Diff. in El. = -4.730
		15.960 ✓					20.690 ✓			

F.B. 2448 P.G. 77

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 122552
Notes by Linda Time Morning Rod No. 21822

Name Marina Sub. Studies
Job No. 0739.03
From M.D.R. # 28 To M.D.R. # 29
Date 6-1-60
Indexed K. C. Johnson

Number of Station	BACKSIGHT Thread Readings	BACKSIGHT Mean	BACKSIGHT Thread Intervals	BACKSIGHT Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	FORESIGHT Mean	FORESIGHT Thread Intervals	FORESIGHT Sum of Intervals	DESCRIPTION AND REMARKS
	6991		559		"	6889		670		M. D. R. B.M. # 28
	6432		559			6219		666		See Pg. 19
	5873		1118			5553		1336		
1	19296	6.432		1118 ✓		18661	6.220		1336 ✓	
	6333		626			6652		614		⊼ Foulger
	5707		623			6038		612		
	5084		1249			5426		1226		
2	17124	5.708		2367		18116	6.039		2562	
	6257		652			6584		602		M. D. R. B.M. # 29
	5605		652			5982		604		
	4953		1304			5378		1206		See Pg. 19
3	16815	5.605		3671 ✓		17944	5.981		3768 ✓	
									3671	
									097	
									7.439	Summation of Run
										Backsights = + 17.745 ✓
										Foresights = - 18.240 ✓
										Diff. in El. = - 0.495 ✓
		17.745 ✓					18.240 ✓			

F.B. 2619 P.G. 18

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No 142552
Notes by Landa Time afternoon Rod No. 21 & 22

Name Marina Sub. Studios
Job No. 0739.03
From M.D.R. #29 To M.D.R. #30
Date 6-1-60
Indexed [redacted] C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	6638		531		#22	6718		560		M. D. R. # 29
	6107		534			6158		560		See Pg. 19
	5573		1065			5598		1120		
1	18318	6.106		1065		18476	6.158		1120	
	5852		509			5924		582		
	5343		507			5342		583		
	4836		1016			4759		1165		
2	16031	5.344		2081		16025	5.342		2285	
	6228		569			4859		605		
	5659		566			4254		608		
	5093		1135			3646		1213		
3	16980	5.660		3216		12759	4.253		3498	
	6073		423			5083		276		M. D. R. #30
	5650		427			4807		276		See Pg. 19
	5223		850			4531		552		
4	16946	5.649		4066		14421	4.807		4050	summation of Run
				4050						Backsight = 22.759
				~~016~~						Foresight = 20.560
				8116						Diff. in Elev = +2.199
		22.759					20.560			

F.B. 2649 P.G. 79

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 142552
Notes by Landa Time Afternoon Rod No. 21422

Name Marina Sci. Studies
Job No. 6239.03
From M.D.R. #30 To M.D.R. #31
Date 6-1-62
Indexed K. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B.S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	4073		244		22	5161		263		M.D.R. # 30
	3829		245			4898		261		See Pg. 19
	3584		489			4637		524		
1	11486	3.829		489		14696	4.899		524	
	6072		528			5463		550		
	5544		528			4613		551		
	5016		1056			4062		1101		
2	16632	5.544		1545		14138	4.713		1625	
	5802		590			5300		609		
	5212		596			4691		613		
	4618		1186			4078		1222		
3	15632	5.211		2729		14069	4.690		2847	Summation of Run
	5447		688			6176		800		Backsight = 23.806
	4759		686			5376		801		Foresight = 26.045
	4073		1374			4575		1601		Diff in Elev = - 2.239
4	16279	4.760		4103		16127	5.376		4448	
	5267		804			7262		795		M.D.R. B.M. # 31
	4463		806			6467		794		See Pg. 20
	3657		1610			5673		1589		
5	13387	4.462		5713		19402	4.467		6037	
		23.806				~~26.045~~ 26.044		5713	6037	
								324	5713	
									11.750	

F.B. 2649 P.G. 80

76P526 S & E #379 1-

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 42552
Notes by Foulger Time 8:45- Rod No. 21 & 22

Name Marina Sub. Studies
Job No. 0739.03
From M.D.R. #31 To M.D.E. #59
Date 6-2-60
Indexed J. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	4327		469		#21	7548		492		M.D.R. B.M. #31
	3858		466		65°	7056		491		See Pg. 20
	3392		1935			6565		983		
1	11577	3.859		935		21169	7.056		983	
	3022		614			6210		566		
	2408		614			6344		565		
	1794		1228			[illegible]		1131	2114	
2	7224	2408		2163		19033	6344			
	2210		616			5174		609		
	4603		613			1556		607		
	3990		1229	3392		[illegible]		1216	3330	
3	13812	4604				13697	4566			
	5581		289			5625		313		N. D. R. B. M. # 59
	5295		287			5312		312		See Pg. 22
	5008		576	3968		5000		625	3955	for Elev.
4	15887	5.296		3955		15937	5.312			
				013						Summation of Rwa
				7.923						Backsight = + 16.167
										Foresight = - 23.278
										Diff. in El = - 7.111
		16.167					23.278			

F.B. 76-49 Pg. 81

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather — Inst. No. —
Notes by — Time — Rod No. —

Name Marina Sub. Study
Job No. 0739.03
From — To —
Date 6-2-60
Indexed

Number of Station	BACKSIGHT Thread Readings	BACKSIGHT Mean	BACKSIGHT Thread Intervals	BACKSIGHT Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	FORESIGHT Mean	FORESIGHT Thread Intervals	FORESIGHT Sum of Intervals	DESCRIPTION AND REMARKS

Blank

F.B. 24.09 P.G. 82

Profile No. | Notes Red. | Plotted | 0739.03 Job No. | Division No. 10 | F. B. 2609 Pg. 83
Date | Date | Survey of Marina Subsidence Study
X-Sec. No. | Notes Chkd. | Checked | Survey by English Notes Landa Date 6-60
Date | Date | Map No. | Indexed | Date

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

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

Do not extend notes this side of this line.

MARINA SUBSIDENCE STUDY

J.N. 0739.03

RECORDED ELEVATIONS: VERTICAL CONTROL POINTS

June 1960

Party:
English
Landa
Foutger
Dupuis
Clifford

W. S. Cowherd
J. Terranova
R. Strader
R. St. John

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

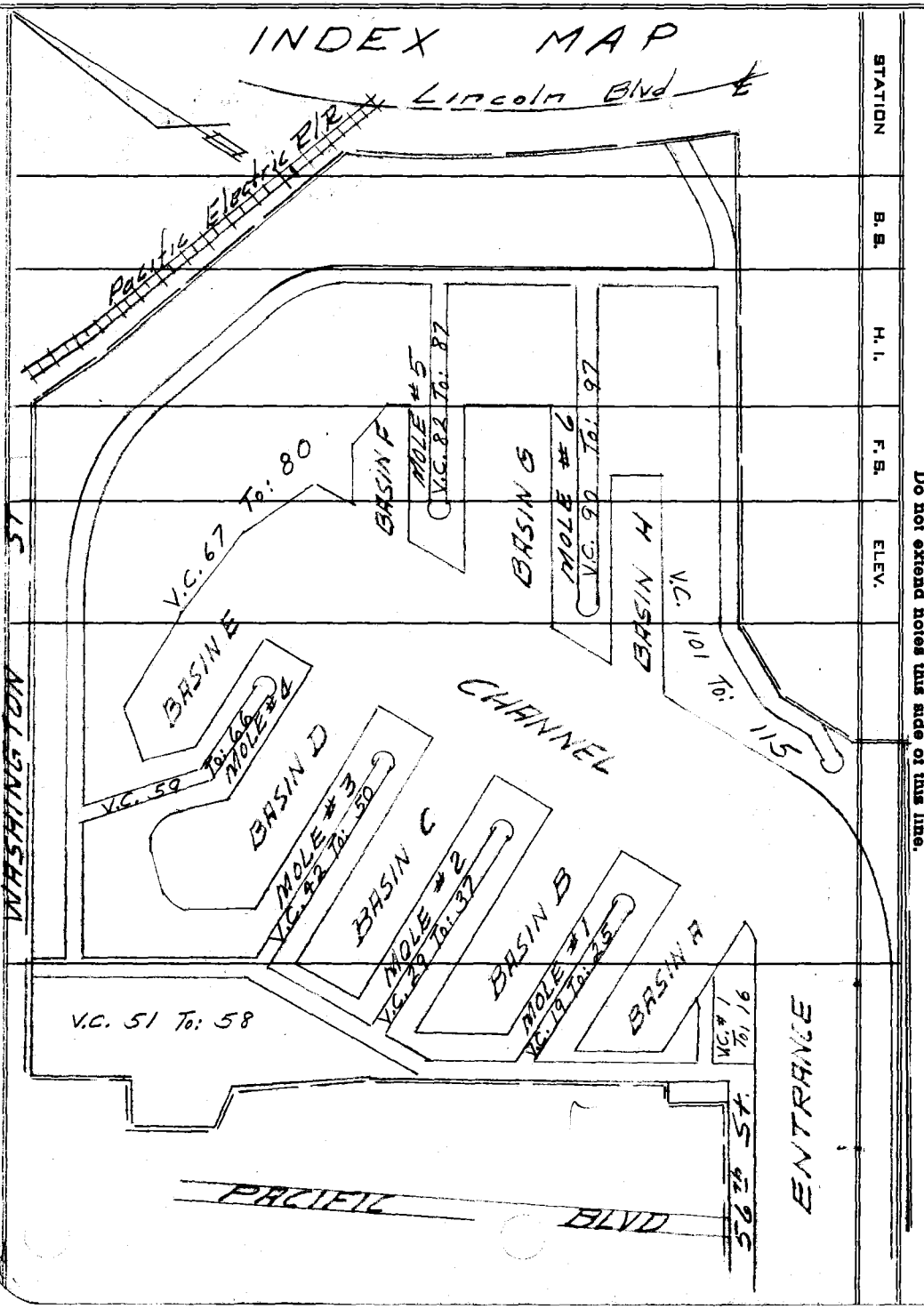
761-298 S & E #307 9-54

F. B. 2649 Pg. 84 | Job No. 8739.03 | Division No. 10 | Notes Red. | Plotted | Profile

Survey of MARINA Subsidence Study | Date | Date | No.

Survey by English | Notes Landa | Notes Chkd. | Checked | X-Sec.

Indexed U. S. OTS | Date | Date | Date | No.



76L398 S & E #307 9-54

PLEASE RETURN TO

LOS ANGELES COUNTY SURVEYOR

726 LOS ANGELES COUNTY ENGINEERING BLDG.

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

Do not extend notes this side of this line.

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

Survey of Manna Sub. Study
JN 0739.03 Tape Std °F
Surveyed by English
Notes EH Date 6-60
Indexed H. E. OTT DEC 5 60

F. B. 2649 PG. 85

V.C. #1 set 6-9-60

Date:	Elev.:	Ground Elev
6-23-60	20.72	
3-8-61	20.36	14.6

DATUM DATE 6-9-60
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

Note: Any Additions 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 title of this line.

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

76F3095 S&E #247 11-58

F. B 2649 PG. 86

V.C. #2

Set 6-9-60

Date: 6-23-60

Elev: 31.02

DATUM

MEAN LO[illegible]TER

SUB. 27[illegible] TO

MEAN S[illegible]

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

Do not extend 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 Marina Sub. Study	F. B. 2649 Pg. 87
Map No.		JN 0739.03 Tape	Std °F
Office Work		Surveyed by English	
Checked		Notes Ed,	Date 6-60
Date		Indexed H. E. OTT	

V. C. # 3

Sat 6-9-60

Date:	Elev.:
6-23-60	30.57
3-8-61	30.13

GROUND

14.3

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

Note: Any Additions 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.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

76F309S S&E #247 11-58

F. B. 2649 PG. 88

V.C. #4 Set 6-9-60

Date: 6-23-60 Elev.: 23.85

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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 Marina Sub. Study F. B. 2649 PG. 89
Map No.	JN 0759.03 Tape Std °F
Office Work	Surveyed by English
Checked	Notes Ed Date 6-60
Date	Indexed H. E. OTT

V.C. #5 Set 6-9-60

Date: 6-23-60

Elev.: 31.50

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

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

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 LOS ANGELES COUNTY ENGINEERING BLDG.
Do not extend this side of this line.

76F3095 S&E #247 11-59

F. B 2649 PG. 90

V.C. # 6 Set 6-9-60

Date: 6-23-60

Elev.: 29.5±

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

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

Do not extend 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.

1

Notes Ck'd by		Survey of Marina Sub. Study	F. B. 2649 Pg. 91
Map No.		JN 072903 Tape	Std °F
Office Work		Surveyed by English	
Checked		Notes Ed. Date 6-60	
Date		Indexed H. E. on	

V.C. # 7

Sct 6-9-60

Data:	Elev.:	GROUND	DATUM
6-23-60	2.8		MEAN LOWER LOW WATER
3-8-61	28.6	13.2	SUB. 2.78 FT. TO CONVERT TO MEAN SEA LEVEL DATUM

Note: Any Additions 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.

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

76F3098 S&E #247 11-58

F. B. 2649 PG. 92

V. C. # 8

Set 6-9-60

Date:	Elev.:	GROUND
6-21-60	22.72	
3-8-61	22.47	12.3

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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 Marina Sub. Study
Map No.	JN 0739.03 Tape Std °F
Office Work	Surveyed by English Ed.
Checked	Notes Date 6-60
Date	Indexed H. E. Ott

F. B. 2649 Pg. 93

V.C. # 9

Set 6-9-60

Date: 6-21-60

Elev.: 29.29

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

Note: Any Additions 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.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

76F309S S&E #247 11-58

F. B 2649 PG. 94

V.C. # 10 Set 6-9-60

Date: 6-21-60

Elev.: 29.75

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

Do not extend 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 Marina Sub. Study F. B. 2649 PG. 95
Map No.	JN 0739.03 Tape Std °F
Office Work	Surveyed by English
Checked	Notes Ed. Date 6-60
Date	Indexed

H. E. OTT

V. C. #11 Set 6-9-60

Date:	Elev.:
6-24-60	19.23

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

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

Do not extend this side of this line.

76F309S S&E #247 11-58

F. B 2649 PG. 96

V.C. # 12 Set 6-9-60

Date: 6-24-60 Elev.: 19.97

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO
MEAN SEA LEVEL DATUM

LOS ANGELES COUNTY ENGINEER
700 LOS ANGELES COUNTY ENGINEERING BLDG.

PLEASE RETURN TO

Do not extend 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 Marina Sub. Study
Map No.	JN 0739.03 Tape Std. °F
Office Work	Surveyed by English
Checked	Notes Ed. Date 6-60
Date	Indexed H. E. ON

F. B. 2649 PG. 97

V. C. # 13

Set 6-9-60

Date: 6-24-60

Elev.: 20.10

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

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

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend this side of this line.

76F3095 S&E #247 11-58

F. B. 2649 PG. 98

V. C. # 14 Set 6-9-60

Date: 6-21-60

Elev.: 19.42

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of Marina Sub Study
JN 0789 03 Tape Std °F
Surveyed by English
Notes Ed. Date 6-60
Indexed H. E. OTT

F. B. 2649 Pg. 99

V. C. # 15

Set 6-9-60

Date: 6-24-60

Elev.: 19.53

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT
MEAN SEA LEVEL DATUM

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

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.
Do not extend this side of this line.

78F3095 S&E #247 11-58

F. B. 2649 PG. 100

V.C. # 16 set 6-9-60

Date: 6-22-60

Elev.: 19.68

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of Marina Sub. Study F.B. 2649 PG. 101
JN 073903 Tape Std °F
Surveyed by English
Notes EC Date 6-60
Indexed H E 013

V. C. # 17 Set 6-9-60

Date:	Elev.:	Ground	
6-22-60	23.56		
9-19-60	23.58	14.28	
11-28-60	23.56	14.21	
1-17-61	23.53	12.5	
3-8-61	18.55	14.2	TOP BROKEN OFF

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT T
MEAN SEA LEVEL DATUM

Note: Any Additions 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.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

76F309S SAE #247 11-58

F. B 2649 PG. 102

V. C. #18 Set 6-9-60

Date:	Elev.:	Ground
9-19-60	18.55	13.01
11-28-60	18.51	13.05

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.
PLEASE RETURN TO

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of Marina Sub. Study
JN 073603 Tape Std °F
Surveyed by English
Notes EA. Date 6-60
Indexed H. E. Ott

F. B. 2649 Pg. 103

V. C. # 19 Set 6-9-60

Date:	Elev.:	Ground
6-24-60	15.62	
9-19-60	15.58	11.38
11-28-60	15.61	11.46
1-17-61	15.36	10.9
3-8-61	15.29	16.1

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT
MEAN SEA LEVEL DATUM

Note: Any Additions 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.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

78F3095 SAE #247 11-58

F. B 2649 PG. 104

V. C. # 20 Set 6-8-60

Date:	Elev.:	Ground
6-22-60	18.96	
6-19-60	18.90	14.15
11-28-60	19.00	14.50
1-17-61	18.79	12.3
3-8-61	18.79	11.3

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

PLEASE RETURN TO

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of Marina Sub Study
JN 0739.03 Tape Std °F
Surveyed by English
Notes Ed. Date 6-60
Indexed

F. B. 2649 Pg. 105

V. C. # 21 Set 6-8-60

Date:	Elev.:	Ground
6-24-60	16.30	
9-19-60	16.24	12.94
11-28-60	16.25	12.95
1-17-61	16.15	12.1
3-8-61	16.07	12.9

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT
MEAN SEA LEVEL DATUM

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

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.
Do not extend this side of this line.

76F3095 SAE #247 11-58

F. B. 2649 PG. 106

V. C. # 22 Set 6-8-60

Date:	Elev:	Ground
6-22-60	16.04	
9-19-60	16.06	11.66 ✓
11-28-60	16.09 ✓	11.82 ✓
1-17-61	15.95	11.2
3-8-61	15.95	11.6

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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 Charge.

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

Survey of Marina Sub. Study F. B 2649 PG. 107
JN 0239.03 Tape Std °F
Surveyed by English
Notes Ed. Date 6-60
Indexed M. E. Ott

V. C. # 23 Set 6-8-60

Date:	Elev.:	Ground
6-22-60	12.86	
9-19-60	14.86	10.31
10-6-60	Extended	Pipe
10-6-60	18.86	10.31
11-28-60	18.86	10.41
1-17-61	19.10	9.7
3-8-61	18.75	10.3

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT
MEAN SEA LEVEL DATUM

Note: Any Additions 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.

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

76F3095 SAE #247 11-58

F. B 2649 Pg. 108

V.C. #24 Set 6-8-60

Date:	Elev.:	Ground
6-24-60	17.28	
9-19-60	17.29	12.39
11-28-60	17.29	12.51
1-17-61	17.18	12.2
3-8-61	17.20	12.8

DATUM
MEAN LOWER LOW WATER
SUB, 2.70 FT. TO [illegible] RT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of Marina Sub. Study
JN 0739.03 Tape Std 6F
Surveyed by English
Notes Ed. Date 6-60
Indexed H. E. Ott

F. B. 2649 Pg. 109

V. C. #25

Set 6-8-60

Date:	Elev.:	Ground
6-24-60	17.52	
9-19-60	17.51	14.51
11-28-60	17.49	14.50
1-17-61	17.38	14.4
3-8-61	17.58	14.8

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT
MEAN SEA LEVEL DATUM

Note: Any Additions 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.

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

76F309 SAE #247 11-58

F. B 2649 PG. 110

V. C. # 26 Set 6-8-60

Date:	Elev.:	Ground	
6-21-60	15.71		DATUM
9-19-60	15.68 ✓	11.83 ✓	MEAN LOWER LOW WATER
11-28-60	15.60 ✓	11.76 ✓	SUB, 2.78 FT. TO CONVERT TO MEAN S.A. LOWER DATUM
3-9-61	17.13	12.3	REPLACED

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of Marina Sub Study F. B. 2649 Pg. 111
JN 0739.03 Tape Std °F
Surveyed by English
Notes Ed. Date 6-60
Indexed H. E. Ott

V. C. # 27 Set 6-8-60

Date :	Elev. :	Ground
6-24-60	15.68	
9-19-60	15.66 ✓	12.76 ✓
11-28-60	15.83 ✓	13.03 (Reset)
1-17-61	15.72	12.7
3-9-61	15.73	13.0

DATUM
MEAN LOWER LOW WATER
SUB 2.78 FT. TO CONVERT
MEAN SEA LEVEL DATUM

Note: Any Additions 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.

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

76F3093 SAF #247 11-58

F. B. 2649 PG. 112

V. C. # 28

Set 6-8-60

Date:	Elev.: Ground
6-24-60	17.17
9-19-60	17.14 ✓ 13.64 ✓
11-28-60	17.14 ✓ 13.74 ✓

DATUM

MEAN L[illegible] WATER

SUB, 2.7[illegible]

MEAN [illegible]

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of Mar. Sub Study
JN 0739.03 Tape Std °F
Surveyed by English
Notes Ed. Date 6-60
Indexed H. E. OTT

F. B. 2649 Pg. 113

V. C. # 29 Set 7-14-60

Date:	Elev.:	Ground
7-14-60	16.13	
9-19-60	16.11 ✓	11.01 ✓
11-29-60	16.13 ✓	11.00 ✓
1-17-61	16.06	11.1
3-9-61	16.02	11.0

DATUM
MEAN LOWER LOW WATER
SUB. 2.78 FT. TO CONVERT
MEAN SEA LEVEL DATUM

Note: Any Additions 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.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

76E3095 SAE #247 11-58

F. B. 2649 Pg. 114

V. C. # 30 Set 7-14-60

Date:	Elev. :	Ground
7-14-60	16.72	
9-19-60	16.66	11.66
11-29-60	16.65	11.61
1-17-61	16.58	11.6
3-9-61	16.52	11.0

DATUM
MEAN LOWER LOW WATER
SUB, 2.7[illegible] RT TO
MEAN [illegible] DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of Marina Sub Study
JN 0739.03 Tape Std °F
Surveyed by English
Notes Ed. Date 6-60
Indexed M. E. OTT

F. B. 2649 PG. 115

V. C. #31

Set 7-14-60

Date:	Elev.:	Ground
7-14-60	19.19	
9-19-60	19.12	14.27
11-29-60	19.10	14.17
1-17-61	19.03	14.0
3-9-61	18.92	14.0

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

Note: Any Additions 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.

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

76FS09S 9&E #247 11-58

F. B. 2649 PG. 116

V. C. # 32 set 7-14-60

Date:	Elev.:	Ground
7-14-60	20.20	
9-19-60	20.11	15.01
11-29-60	20.04	14.84
1-17-61	20.02	13.5
3-9-61	19.92	14.9

DATUM
MEAN LOWER LOW WATER
SUB, 2.73 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of Marina Sub. Study
JN 0739.03 Tape Std °F
Surveyed by English
Notes Ed. Date 6-60
Indexed H. E. ON

F. B. 2649 PG. 117

V.C. # 33 set 6-6-60

Date:	Elev.:	Ground	DATUM MEAN LOWER LOW WATER SUB, 2.78 FT. TO CONVERT TO MEAN SEA LEVEL DATUM
6-27-60	19.48		
9-19-60	19.38	14.68	
11-29-60	19.26	14.56	Replaced pipe
1-17-61	19.21	14.5	
3-9-61	19.18	14.6	

Note: Any Additions 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.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

76F3093 SAE #247 11-58

F. B. 2649 Pg. 118

V. C. # 34
Set 6-6-60

Date:	Elev.:	Ground
C-27-60	19.15	
9-19-60	19.02 ✓	14.22 ✓
11-29-60	18.98 ✓	14.83 ✓
1-17-61	18.89	14.3
3-9-61	18.85	14.7

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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 Marina Sub. Study
Map No.	JN 0739.03 Tape Std °F
Office Work	Surveyed by English. Ed.
Checked	Notes Date 6-60
Date	Indexed B. E. Ott

F. B. 2649 PG. 119

V.C. #35 Set 6-6-60

Date:	Elev.:	Ground
6-27-60	19.72	
9-19-60	19.64	15.64
11-29-60	19.61	15.91
1-19-61	19.55	14.8
3-9-61	19.51	16.0

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 this side of this line.

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

76F3098 S&E #247 11-59

F. B 2649 PG 120

V. C. #36
Set 6-6-60

Date:	Elev.:	Ground
6-21-60	21.06	
9-19-60	Knocked out by Pacific Dredging	
10-4-60	Reset	
11-28-60	20.05	18.10
1-17-61	19.99	16.0
3-9-61	19.99	16.1

DATUM
MEAN LOWER LOW WATER
SUB. 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of Marina Sub. Study
JN 073903 Tape Std °F
Surveyed by English
Notes Ed. Date 6-60
Indexed H. E. OTT

F. B. 2649 PG. 121

V.C. # 37 Set 6-6-60

Date:	Elev.:	Ground
6-24-60	20.76	
9-19-60	20.68	15.88
11-28-60	20.66	16.32
1-17-61	20.55	16.2

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

Note: Any Additions 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.

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

76F3098 S&E #247 11-58

F. B. 2649 Pg 122

Set 7-14-60

V. C. # 38

Date:	Elev.: Ground	
7-14-60	15.89	
9-20-60	15.80	10.45
11-28.60	15.72	10.51
1-18-61	15.63	10.6

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of Marina Sub. Study
JN 07393 Tape Std °F
Surveyed by English
Notes E.A. Date 6-60
Indexed H. E. OTT

F. B. 2649 PG. 123

V. C. ~~#~~ 39

Set 5-19-60

Date:	Elev.:	Ground
6-27-60	12.20	
9-20-60	14.32	11.17
11-29-60	14.36	11.05
1-18-61	14.31	10.9
3-10-61	14.25	10.9

DATUM
MEAN LOWER LOW WATER
SUB. 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

Note: Any Additions 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.

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

76E3028 SAF #247 11-58

F. B. 2649 Pg. 124

V.C. # 40
Set 5-19-60

Date :	Elev. :	Ground
6-27-60	14.59	
9-20-60	14.56	12.56
11-29-60	14.56	12.53
1-18-61	14.55	12.5
3-10-61	14.51	11.6

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of Marina Sub. Study
JN 0739.03 Tape Std °F
Surveyed by English
Notes Ed. Date 6-60
Indexed H. E. Ofn

F. B. 2649 Pg. 125

V. C. # 41

Set 5-18-60

Date: Not SET

Elev.: Ground

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

Note: Any Additions 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.

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

76F3095 S&E #247 11-58

F. B. 2649 Pg. 126

V.C. # 42
Set 5-18-60

Date:	Elev.:	
9-21-60	12.24	10.74 ✓
10-6-60	Extended	Pipe
10-6-60	16.17 ✓	10.74 ✓
11-30-60	16.27 ✓	10.80 ✓
1-18-61	16.22	10.7
3-10-61	16.20	10.8

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of Marina Sub. Study
JN 0739.03 Tape Std °F
Surveyed by English
Notes Ed. Date 6-60
Indexed H. E. OTT

F. B. 2649 PG. 127

V. C. # 43

Set 5-18-60

Date:	Elev.:	Grand
6-27-60	13.22	
9-21-60	13.04	11.62
10-6-60	Extended	P.P.C
10-6-60	17.04	11.62
11-30-60	17.10	11.55
1-18-61	17.04	11.5
3-10-61	17.03	11.5

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

Note: Any Additions 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.

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

76F309S S&E #247 11-59

F. B. 2649 Pg. 128

V.C. # 44
Set 5-18-60

Date:	Elev.:	Ground
6-27-60	17.69	
9-21-60	17.60 ✓	12.10 ✓
11-30-60	17.64 ✓	12.50 ✓
1-18-61	17.58	12.5
3-9-61	17.61	12.6

DATUM
MEAN LOWER LOW WATER
SUB, 2.76 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of Marina Sub Study
JN 0739.03 Tape Std °F
Surveyed by English
Notes Ed. Date 6-60
Indexed H. E. OTT

F. B. 2649 Pg. 129

V. C. # 45

Date:	Set Elev.:	Ground
6-27-60	16.80	
9-21-60	16.67	13.39
11-30-60	16.72	13.37
1-18-61	16.70	13.3
3-9-61	16.66	13.3

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

Note: Any Additions 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.

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

76F3095 S&E #247 11-59

F. B. 2649 Pg. 130

V. C. #46
Set 5-18-60

Date:	Elev.:	Ground
6-27-60	16.62	
9-21-60	16.46 ✓	14.81 ✓
11-30-60	16.48 ✓	14.82 ✓
1-18-61	16.47	14.7
3-10-61	16.45	14.8

DATUM
MEAN LOWER LOW WATER
SUB, 2.73 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of Marina Sub. Study
JN 0239.03 Tape Std °F
Surveyed by English
Notes Ed. Date 6-60
Indexed M. E. OTT

F. B. 2649 PG. 131

V. C. # 47

Set 5-18-60

DATUM
MEAN LOWER LOW WATER
SUB, 2.73 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

Date :	Elev. : Ground
6-27-60	18.04
9-21-60	17.79 ✓ 15.64 ✓
11-30-60	17.80 ✓ 15.70 ✓
1-18-61	17.75 14.2
3-10-61	17.72 15.6

Note: Any Additions 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.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

78F3095 S&E #247 11-58

F. B. 2649 Pg 132

V. C. # 48
Set 5-18-60

Date:	Elev.:	Ground.
6-27-60	15.39	
9-19-60	Knocked out by Pacific Pipeline	
9-24-60	Reset	
11-30-60	20.30	15.89
1-18-61	20.27	15.3
3-10-61	20.29	16.0

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of Marina Sub. Study F. B. 2649 PG. 133
JN 0739.03 Tape Std °F
Surveyed by English
Notes Ed. Date 6-60
Indexed H. E. Ott

V. C. # 49

Set 5-18-60

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

Date :	Elev. :	
8-27-60	16.43	
9-20-60	Knocked out by Pacific Dredge.	
9-22-60	Reset	
11-29-60	21.74	17.73
1-18-61	21.61	16.9

Note: Any Additions 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.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

76F309S SAS #247 11-58

F. B. 2649 PG. 134

V. C. #50
Set 5-18-60

Date :	Elev. :	Ground.
6-27-60	20.09	
9-20-60	Knocked out by Pacific Dredging	
9-22-60	Reset	
11-29-60	22.33	17.67
1-18-61	22.27	17.6
3-10-61	22.25	17.7

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend this tide 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	
Map No.	
Office Work	
Checked	
Date	

Survey of	Marina Sub. Study
JN 073.03	Tape Std °F
Surveyed by	English
Notes	Ed Date 6-60
Indexed	H. E. OTT

F. B. 2649 PG. 135

V. C. # 51

Set 5-19-60

Date: 6-30-60 Elev.: Ground 23.45

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

9-20-60 Knocked out by Pacific Dredge
10-4-60 Reset

Note: Any Additions 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.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

78F3098 SAF #247 11-58

F. B 2649 Pg. 136

V. C. # 52
Set 5-19-60

Date:	Elev.:	Ground
9-21-60	21.62 ✓	18.07 ✓
10-5-60	Extended Pipe	
10-5-60	34.68 ✓	18.07 ✓

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 F.. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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 Marina Sub. Study	F. B. 2649 Pg. 137
Map No.	JN 0739.03 Tape Std °F	
Office Work	Surveyed by English	
Checked	Notes Ed. Date 5-60	
Date	Indexed H. E. Ott	

V. C. #54

Date: 5-19-60

Set Elev.:

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVER
MEAN SEA LEVEL DATUM

Note: Any Additions 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.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

78F3098 S&E #247 11-58

F. B. 2649 Pg. 138

V.C. # 56
Set 5-19-60

Date:	Elev.:	Ground
9-21-60	22.53	16.20
10-6-60	Extended Pipe	
10-6-60	3.33	16.20

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend this side of this line.

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

Notes Ck'd by	Survey of Marina Sub. Study	F. B. 2649 Pg. 139
Map No.	JN 0739.03 Tape Std °F	
Office Work	Surveyed by English	
Checked	Notes Ed. Date 6-60	
Date	Indexed H. E. OTI	

V. C. # 59

Date:	Set Elev.:	5-20-60 Ground
7-1-60	15.51	
12-16-60	15.45	5.8
1-19-61	15.49	6.5

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

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

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

Do not extend this side of this line.

76F309S S&E #247 11-58

F. B 2649 Pg 140

V. C. #60
Set 5-20-60.

Date:	Elev.:	GROUND
7-1-60	14.88	
12-16-60	14.87	5.5
1-19-61	14.88	5.5

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN [illegible] DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of Marina Sub. Study
JN 0739.03 Tape Std °F
Surveyed by English
Notes Ed. Date 6-60
Indexed H. E. Ott

F. B. 2649 PG. 141

V. C. #61

Date:	Elev.:	Set 5-20-60 GROUND
7-1-60	12.88	
12-16-60	14.92	4.3
1-19-61	14.96	4.6

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM.

Note: Any Additions 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.

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

76F3095 SAE #247 11-58

F. B. 2649 Pg. 142

V. C. #62
Set 5-20-60

Date:	Elev.:	GROUND
6-30-60	19.14	
12-16-60	19.15	13.6
1-19-61	19.20	13.7

DATUM
MEAN LOW WATER
SUB, 2.70 [illegible] TC
MEAN [illegible] DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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 Marina Sub. Study	F. B. 2649 PG. 143
Map No.	JN 0739.03 Tape Std °F	
Office Work	Surveyed by English	
Checked	Notes Ed. Date 6-60	
Date	Indexed H. E. OTT	

V. C. #63

Date:	Elev.:	Set 5-20-60 GROUND
6-30-60	17.96	
12-16-60	17.94	8.3
1-19-61	17.97	8.1

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT T
MEAN SEA LEVEL DATUM

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

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

Do not extend this side of this line.

76F309S S&E #247 11-58

F. B. 2649 Pg. 144

V. C. #64
Set 5-20-60

Date:	Elev.:	GROUND
5-30-60	15.02	
12-16-60	14.98	9.4
1-19-61	15.02	9.4

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of Marina Sub. Study
JN 0739.03 Tape Std °F
Surveyed by English
Notes Ed. Date 6-60
Indexed H. E. OTT

F. B. 2649 Pg. 145

V. C. # 65

Set 5-19-60

Date:	Elev.:	Ground
9-21-60	13.27 ✓	13.12
10-6-60	Extended Pipe	
10-6-60	20.28	13.12
12-16-60	20.27	12.8
1-19-61	COVERED	

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

Note: Any Additions 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.

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

76F3088 SBE #247 11-58

F. B. 2649 PG. 146

V.C. # 66
Set 5-19-60

Date:	Elev.:	GROUND
C-30-60	15.69	
12-16-60	21.75	12.8
1-19-61	21.70	12.7

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. [illegible] RT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of Marina Sub. Study
JN 0739.03 Tape Std °F
Surveyed by English
Notes Ed. Date 6-60
Indexed H. E. Ott

F. B. 2649 Pg. 147

V. C. # 67

Set 6-2-60

Date:	Elev.:	GROUND
10-18-60	Knocked out by Pacific Dredge set new mon.	
12-27-60	15.63	11.4
1-19-61	15.62	11.5

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT
MEAN SEA LEVEL DATUM

Note: Any Additions 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.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

76F3098 SAF #247 11-58

F. B. 2649 PG. 148

V. C. # 68
Set 6-2-60

Date:	Elev.:	GROUND	
7-1-60	17.68		
10-18-60	Knocked out by Pacific Dredging Reset new mon.		
12-21-60	19.16	13.0	RESET 12-20-60 J.P.M.
1-19-61	17.16	13.0	

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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 Marina Sub. Study	F. B. 2649 PG. 149
Map No.	JN 0739.03 Tape Std °F	
Office Work	Surveyed by English	
Checked	Notes Ed. Date 6-60	
Date	Indexed B. E. Ott	

V. C. #69

Date:	Set Elev.:	6-2-60 GROUND
7-1-60	19.71	
10-18-60	Knocked out by Dredge. Reset	Pacific mean Mon.
12-21-60	19.19	14.1
1-19-61	19.19	14.1

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

Note: Any Additions 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.

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

76F3098 S&E #247 11-58

F. B. 2649 Pg. 150

V. C. # 70
Set 6-2-60

Date:	Elev.:	GROUND
7-1-60	20.51	
10-18-60	Knocked out by Pacific Grade. Reset new mon.	
12-21-60	19.00	14.7
1-19-61	19.01	14.6

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 [illegible] RT TO
MEA[illegible]UM

LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

PLEASE RETURN TO

Do not extend this file 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
Map No.
Office Work
Checked
Date

Survey of Marina Sub Study
JN 073203 Tape Std °F
Surveyed by English
Notes Ed. Date 6-60
Indexed H. E. OTT

F. B 2699 PG. 151

V. C. # 71

Date:	Set Elev.:	6-2-60
7-1-60	15.05	
10-18-60 Knocked out by Pacific Dredge. Reset new Mon.		
RE-SET 1-19-60	15.89	4.9

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT
MEAN SEA LEVEL DATUM

Note: Any Additions 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.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

76F3098 SAE #247 11-58

F. B 2649 Pg. 152

V.C. # 72
Set 5-24-60

Date:	Elev.:	
7-1-60	16.02	
10-18-60	Reset new mon.	Knocked out by Pacific Dredge.

DATUM
MEAN LOWER LOW WATER
SUB, 2.7
MEAN [illegible] DATUM

TO

LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

PLEASE RETURN TO

Do not extend 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 Marina Sub Study	F. B 2649 Pg. 153
Map No.		JN 073803 Tape Std °F	
Office Work		Surveyed by English	
Checked		Notes Ed. Date	
Date		Indexed H. E. Ott	

V. C. # 73

Date:	Set Elev.:	5-24-60 GROUND
7-1-60	20.32	
10-18-60	Knocked out by Pacific Dredge. Reset new mon.	
12-21-60	20.50	10.5
1-19-61	20.44	10.4

DATUM
MEAN LOWER LOW WATER
SUB. 2.78 FT. TO CONVERT
MEAN SEA LEVEL DATUM

Note: Any Additions 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.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

76F309S S&E #247 11-58

F. B 2649 Pg 154

V. C. # 74
5-24-60

Date: Elev.:

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN to
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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 Mar. Sub. Study
Map No.	JN 0739.03 Tape Std °F
Office Work	Surveyed by English
Checked	Notes Ed. Date 6-60
Date	Indexed H. E. OTT

F. B. 2649 PG. 155

V. C. # 75

Set Elev.: 20.23

5-24-60

Date: 7-1-60

DATUM
MEAN LOWER LOW WATER
SUB, 2.73 FT. TO
MEAN SEA LEVEL DA

Note: Any Additions 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.

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

76F309S SAE #247 1-56

F. B. 2649 PG. 156

V. C. # 76
Set 5-24-60

Date:	Elev.:	GROUND
7-5-60	16.07	
12-21-60 (RE-SET)	14.90	7.6
1-19-61	14.84	7.5

DATUM
MEAN LOWER LOW WATER
SUB, 2.73 FT. TO MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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 Mar. Sub. Study	F. B. 2649 PG. 157
Map No.		JN 0739.03 Tape Std °F	
Office Work		Surveyed by English	
Checked		Notes Ed. Date 6-60	
Date		Indexed M. E. Ott	

V.C. # 77

Date: 7-5-60	Set Elev.: 19.01	5-24-60 GROUND	DATUM MEAN LOWER LOW WATER SUB, 2.78 FT. TO CONVERT MEAN SEA LEVEL DAT
12-21-60 (RE-SET)	14.97	4.3	
1-19-61	14.87	5.2	

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 this side of this line.

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

76F3088 SEE #247 1-56

F. B. 2649 PG. 158

V.C.# 78
Set 5-24-60

Date:	Elev.:	GROUND
7-5-60	22.34	
12-21-60 (RE-SET)	18.81	14.2

DATUM
MEAN LOWER [illegible] WATER
SUB, 2.78 [illegible] ERT T.
MEAN SEA LEVEL DATUM

LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

PLEASE RETURN TO

Do not extend 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 Mar. Sub. Study
Map No.	JN 073903 Tape Std °F
Office Work	Surveyed by English
Checked	Notes Ed. Date 6-60
Date	Indexed H. E. O.

F. B. 2649 PG. 159

V. C. # 79

Set 5-24-60

Date: 7-5-60

Elev.: 23.72

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT
MEAN SEA LEVEL DA

Note: Any Additions 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.

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

D6F309S SAE #247 1-56

F. B. 2649 Pg. 160

V.C. # 80
Set 5-24-60

Date:	Elev.:	GROUND
7-5-60	25.56	
12-21-60	25.59	15.0
1-19-61	25.61	15.1

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 [illegible]
MEAN [illegible]

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of MAR. SUB. STUDY
JN 073908 Tape Std 84 °F
Surveyed by W.S. COWHERD
Notes W.S.C. Date 6-10-60
Indexed H. E. ON

F. B. 2649 Pg. 161

V.C. # 81

SET 5-29-60

Date	Elev.	
7-5-60	21.66	GROUND
12-16-60	21.65	12.0
1-19-61	21.69	12.1

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO
MEAN SEA LEVEL DA

Note: Any Additions 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.

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

76F3098 SAE #247 1-58

F. B. 2649 Pg. 162

V. C. #82
Set 5-24-60

Date:	Elev:	GROUND
7-5-60	21.55	
12-16-60	21.57	11.1
1-19-61	21.55	18.1

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 [illegible] ERT TO
MEAN [illegible] UM

LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

PLEASE RETURN TO

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of MAR. SUB. STUDY
JN 073913 Tape Std 84 °F
Surveyed by W.S. COWHERD
Notes W.S.C Date 6-10-60
Indexed

F. B. 2649 PG. 163

V.C. # 83

DATE:	ELEV GROUND	DATUM SET 5-24-60
7-5-60	20.75	MEAN LOWER LOW WATER
12-16-60	20.76	SUB, 2.78 ft. TO CONVERT TO MEAN SEA LEVEL DA[illegible]
1-19-61	20.63	17.1

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

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 LOS ANGELES COUNTY ENGINEERING BLDG.
Do not extend this side of this line.

76F3095 SAE #247 1-56

F. B. 2649 Pg. 164

V.C.* 84

DATE	ELEV.	GROUND	SET 5-24-60
7-5-60	17.08		
12-16-60	17.09	7.5	
1-19-61	17.09	14.0	

DATUM
MEAN L[illegible]ER LOW W[illegible]R
SUB, 2.7[illegible] [illegible]T
MEA[illegible]

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of MAR. SUB. STUDY
JN 0739.03 Tape Std 84 °F
Surveyed by W.S. COWHERD
Notes W.S.C Date 6-10-60
Indexed H. E. OTT

F. B. 2649 PG. 165

V.C. # 85

DATE:	ELEV:	GROUND	SET 5-24-60
7-5-60	16.56		
12-16-60	16.55	7.0	

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

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

Do not extend inside of this line.

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

76F3095 SAE #247 1-56

F. B. 2649 PG. 166

V.C. # 86

DATE:	ELEV.	GROUND	SET: 5-24-60
7-5-60	15.28		
12-16-60	15.28	5.7	DATUM
1-19-60	15.24	11.9	MEAN L[illegible] WATER
			SUB, 2. [illegible] TO
			MEAN [illegible]

LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

PLEASE RETURN TO

Do not extend 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 MAR. SUB. STUDY
Map No.	JN 073903 Tape Std 59 °F
Office Work	Surveyed by W. S. COWHERD
Checked	Notes W.S.C Date 6-10-60
Date	Indexed H. E. Ott

F. B 2649 PG. 167

V.C. #87

DATE	ELEV.
7-5-60	15.02

SET 5-24-60

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT
MEAN S.A. LEVEL

Note: Any Additions 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.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

76F3095 S&E #247 1-56

F. B. 2649 PG. 168

V.C. # 88

DATE:	ELEV:	GROUND	SET: 5-25-60
7-5-60	19.15		
12-16-60	19.15	9.6	
1-19-61	19.11	14.6	

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 [illegible] RT TO
MEAN [illegible]

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of MAR. SUB. STUDY
JN 07.39.03 Tape Std 84 °F
Surveyed by W.S. COWHERD
Notes W.S.C Date 6-10-60
Indexed H. E. OTT

F. B. 2649 Pg. 169

V.C. # 89

DATE: 7-5-60

ELEV: 15.96

SET: 5-25-60

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DA.

Note: Any Additions 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.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

76F3098 SAE #247 1-56

F. B. 2099 Pg. 170

V.C. #90

DATE	ELEV.
7-5-60	16.62

SET. 5-25-60

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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 MAR. SUB. STUDY
Map No.	JN 0739.03 Tape Std 84 °F
Office Work	Surveyed by W.S. COWHERD
Checked	Notes W.S.C Date 6-10-60
Date	Indexed H. E. OTT

F. B 2649 PG. 171

V.C. # 91

DATE:	ELEV:	GROUND
7-5-60	16.00	
12-21-60	16.43	6.6

SET 5-25-60

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DAT

Note: Any Additions 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.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

75F3098 SAE #247 1-56

F. B. 2649 Pg. 172

V.C. #92

DATE:	ELEV:	GROUND	SET: 5-25-60
7-5-60	16.44		
12-21-60	16.40	6.7	

DATUM
MEAN LOWER LOW WATER
SSUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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 MAR. SUB. STUDY
Map No.	JN 0739.03 Tape Std 84 °F
Office Work	Surveyed by W.S. CONNERD
Checked	Notes W.S.C Date 6-10-60
Date	Indexed H. E. OTT

F. B. 2649 PG. 173

V.C. #93

DATE:	ELEV.	GROUND	SET. 5-25-60
7-5-60	12.47		DATUM
12-21-60	14.48		MEAN LOWER LOW WATER*
		4.8	SUB, 2.78 FT. TO CONVERT
			MEAN SEA LEVEL DA

Note: Any Additions 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.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

76F3088 SAE #247 1-58

F. B. 2642 Pg. 174

V.C.# 94

DATE:	ELEV.	GROUND	SET: 5-25-60
7-5-60	15.36		
12-21-60	15.46	5.5	

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 [illegible]
MEAN [illegible]

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of MAR. SUB. STUDY
JN 0739.03 Tape Std. 84 °F
Surveyed by W. S. COWHERD
Notes W.S.C Date 6-10-60
Indexed H. E. OTT

F. B. 2649 PG. 175

V.C.* 95

DATE: 7-5-60
12-21-60

ELEV: 15.68
15.47

GROUND 7.3

SET 5-25-60

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONV
MEAN SEA LEVEL

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

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.
Do not extend this side of this line.

78F3055 SAE #247 1-56

F. B. 2645 P. 176

V.C. 96

DATE:	ELEV:	GROUND	SET: 5-25-60
7-5-60	15.47		
12-21-60	15.45	7.2	

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA L[illegible]

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of MAR. SUB. STUDY
JN 0739.03 Tape Std 84 °F
Surveyed by W. S. COYKENDALL
Notes W.S.C Date 6-15-60
Indexed

F. B. 2649 PG. 177

V.C. # 97

DATE: 7-5-60
12-21-60 (RE-SET)

ELEV: 15.06
14.77

GROUND 9.4

DATUM SET: 5-25-60
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVER
MEAN SEA LEVEL DAT

Note: Any Additions 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.

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

76F3098 S&E #247 1-56

F. B. 2649 Pg. 178

V.C. # 98

DATE:	ELEV:	GROUND	SET: 5-25-60
7-6-60	16.10		
12-21-60	16.07	6.1	

DATUM
MEAN LOWER LOW WATER
SUB, 2.7[illegible]
ME[illegible]

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of MAR. SUB. STUDY
JN 07139.03 Tape Std 89 °F
Surveyed by W.S. COWHERD
Notes W.S.C Date 6-10-60
Indexed H. E. OH

F. B. 2649 Pg. 179

V.C. * 99

DATE:	ELEV:	GROUND	SET: 5-25-60
7-6-60	12.76		
12-21-60	12.72	4.1	

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONV
MEAN SEA LEVEL D

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

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

Do not extend this side of this line.

78F3088 SSE #247 1-58

F. B. 2649 Pg. 180

VC * 100

DATE:	ELEV:		
7-6-60	10.36	GROUND	SET 5-27-60
12-21-60	16.34	5.7	

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of: MAR. SUB. STUDY
JN 073903 Tape Std. 89 °F
Surveyed by W. S. COWHERD
Notes W.S.C. Date 5-26-60
Indexed H. E. OTT

F. B. 2649 PG. 181

V.C. # 101

DATE: 7-C-60 12-21-60

ELEV: GROUND 13.28 13.25

SET 5-26-60

DATUM
MEAN LOWER LOW WATER
3.2 = SUB, 2.78 FT. TO CONV.
MEAN SEA LEVEL

Note: Any Additions 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.

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

76F3095 S&E #247 11-58

F. B. 2649 Pg. 182

V.C. = 102

DATE:	ELEV:	GROUND	SET 5-26-60
7-6-60	13.77		
12-21-60	13.72	3.8	

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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 MAR. SUB. STUDY
Map No.	JN 073203 Tape Std 84 °F
Office Work	Surveyed by W. S. COWHERD
Checked	Notes W.S.C. Date 6-16-60
Date	Indexed H. E. OTT

F. B. 2649 PG. 183

V.C.* 103

DATE: 7-6-60 ELEV: 16.29 SET: 5-26-60

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVE
MEAN SEA LEVEL DA

Note: Any Additions 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.

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

76F309S S&E #247 11-58

F. B. 2649 Pg. 184

V.C. #104

DATE: 7-6-60

ELEV: 17.03

SET 5-26-60

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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
Map No.
Office Work
Checked
Date

Survey of MAR SUB STUDY
JN 0739.03 Tape Std. 84 °F
Surveyed by W. S. COWBERD
Notes W.S.C Date 6-10-60
Indexed H. E. OH

F. B. 2649 PG. 185

V.C. # 105

DATE: 7-6-60

ELEV. 16.38

SET 5-27-60

DATUM
MEAN LOWER LOW WATER
ADD 2.73 FT. TO CONVERT TO MEAN SEA LEVEL DATUM

Note: Any Additions 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.

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

76F309S S&E #247 11-58

F. B 2649 Pg. 186

VC * 106

DATE: 7-6-60

ELEV: 20.15

SET 5-27-60

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO G[illegible]
MEAN SEA LEVEL

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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 MAR. SUB. STUDY
Map No.	JN 07399 Tape Std 64 °F
Office Work	Surveyed by W.S. COWLEY
Checked	Notes W.S.C. Date 6-3-60
Date	Indexed H. E. Ott

F. B 2649 PG. 187

V.C. #107

DATE: 7-6-60

ELEV: 16.11

SET 5-27-60

DATUM
MEAN LOWER LOW WATER
SUB, 2.73 FT. TO CONV
MEAN SEA LEVEL

Note: Any Additions 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.

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

76F3095 S&E #247 11-58

F. B 2649 Pg. 188

VC* 108

DATE: 7-6-60 ELEV. 16.76

SET 6-3-60

DATUM
MEAN LOWER LOW WATER
SUB, 2.73 FT. TO CONVERT TO
MEAN SEA LEVEL

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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 MAR. SUB. STUDY
Map No.	JN 07393 Tape Std 84 °F
Office Work	Surveyed by W. S. CONKERD
Checked	Notes W.S.C. Date 6-3-60
Date	Indexed B. E. OTT

F. B 2649 PG. 189

V.C. # 109

DATE: 7-6-60

ELEV: 16.65

SET 6-3-60

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CON[illegible]
MEAN SEA LEV[illegible]

Note: Any Additions 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.

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

76F309S S&E #247 11-59

F. B 2649 Pg. 190

V.C. # 110

DATE: 7-7-60

ELEV: 15.25

SET 6-3-60

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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 MAR SUB STUDY
Map No.	JN 07393 Tape Std. 81 °F
Office Work	Surveyed by W.S. COWARD
Checked	Notes N.S.C. Date 6-3-60
Date	Indexed H. E. OTT

F. B. 2649 PG. 191

V.C. #11

DATE: 7-7-60

ELEV: 15.97

SET 6-3-60

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVE
MEAN SEA LEVEL DA

Note: Any Additions 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.

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

76F309S S&E #247 11-59

F. B. 2649 Pg. 192

Y.C. * 112

DATE: 7-7-60

ELEV: 16.28

SET 6-3-60

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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 Mar Sub Study	F. B. 2649 PG. 193
Map No.		JN 073983 Tape	Std 84 °F
Office Work		Surveyed by W. S. COWNEAD	
Checked		Notes W.S.C.	Date 6-3-60
Date		Indexed	H. E. OTT

V.C. # 113

DATE: 7-7-60

ELEV: 15.85

SET 6-3-60

DATUM
MEAN LOWER LOW WATER
SUB, 2.73 FT. TO CONV
MEAN SEA LEVEL D

Note: Any Additions 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.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

76F3093 SAE #247 11-58

F. B. 2649 PG 194

VC #114

SET 6-6-60

DATE: 7-7-60

ELEV: 12.20

DATUM
MEAN LOWER LOW WATER
SUB, 2.73 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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 Mar. Sub. Study
Map No.	JN 07393 Tape Std. 82 °F
Office Work	Surveyed by W.S COWHERD
Checked	Notes W.S.C Date 6-6-60
Date	Indexed H. E. Ott

P. B 2649 PG. 195

YC #115

SET 6-6-60

DATE: 7-7-60

ELEV: 18.39

DATUM
MEAN LOWER LOW WATER
SUB, 2.7[illegible] FT. TO CONVERT T[illegible]
[illegible]EAN SEA LEVEL D[illegible]

Note: Any Additions 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.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

76F309S S&E #247 11-58

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

Do not extend 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.

F.B. 2649 Pg. 196

Notes Ck'd by	Survey of Marina Sub. Study F. B. 2669 Pg. 197
Map No.	JN 0739.03 Tape Std. °F
Office Work	Surveyed by English
Checked	Notes Landa Date 6-60
Date	Indexed K. E. Johnson 8-20-60

MARINA SUBSIDENCE STUDY

U.N. 0739.03

MARINA BDRY.

Levels - Rerun

JUNE 1960

Party
English
Landa
Fowler
Dupuis
Cl. Ford

Cowherd
Terranova
Strader
St. John

Note: Any Additions 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.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

76F3098 S&E #247 11-59

F. B. 2649 Pg. 198

INDEX

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

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

Do not extend this date of this line.

MARINA DEL REY

LINCOLN BLVD

BALLONA CREEK

PACIFIC AVE

SPEEDWAY

PACIFIC OCEAN

M.D.R. B.M. #1 Pg. 18

M.D.R. B.M. #2 Pg. 19

M.D.R. B.M. #3 Pg. 225

M.D.R. B.M. #4 Pg. 226

M.D.R. B.M. #5 Pg. 227

M.D.R. B.M. #6-A Pg. 229

M.D.R. B.M. #7 Pg. 231

M.D.R. B.M. #8 Pg. 232

M.D.R. B.M. #9 Pg. 233

M.D.R. B.M. #10 Pg. 200

M.D.R. B.M. #11 Pg. 199

M.D.R. B.M. #12 Pg. 201

M.D.R. B.M. #13 Pg. 202

M.D.R. B.M. #14 Pg. 203

M.D.R. B.M. #15 Pg. 205

M.D.R. B.M. #16 Pg. 206

M.D.R. B.M. #17 Pg. 207

M.D.R. B.M. #18 Pg. 208

M.D.R. B.M. #19 Pg. 240

M.D.R. B.M. #20 Pg. 239

M.D.R. B.M. #21 Pg. 237

M.D.R. B.M. #22 Pg. 242

M.D.R. B.M. #23 Pg. 244

M.D.R. B.M. #24 Pg. 245

M.D.R. B.M. #25 Pg. 246

M.D.R. B.M. #26 Pg. 247

M.D.R. B.M. #27 Pg. 248

M.D.R. B.M. #28 Pg. 249

M.D.R. B.M. #29 Pg. 250

M.D.R. B.M. #30 Pg. 251

M.D.R. B.M.

FORM 379 5M 7-40

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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

DO NOT EXTEND NOTES THIS SIDE OF THIS LINE

Chief of Party W. S. COWHERD Weather CLOUDY Inst. No. 15097
Notes by W. S. C. Time AM Rod No. 27828

Name MARINA SUB. STUDY
Job No. 0739.03
From To
Date JUNE 13 60
Indexed K. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B.S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	7.581		.310		28	11.439		.230		FROM M.D.R. # 19 =
	7.271		.310		66	11.209		.232		(USC & GS BM # Q 767) SEE
	6.961					10.977				FB 2649-29 TO M.D.R. # 16 =
1.	21.813	7.271	.620			33.625	11.208	.462		(F.C. BM # 27-15) 6' EAST of COR. of
										CONC. BRIDGE. SEE pg # 14
										DIFF. ELEV. = + 7.271
										FROM M.D.R. # 19 - 11.208
										TO M.D.R. # 16 - 3.937
	4.782		.038			5.410		.036		FROM M.D.R. BM # 16 TO M.D.R.
	4.744		.039			5.374		.039		BM # 17 see pg # 14
	4.705					5.335				DIFF. ELEV. = + 4.744
1.	14.231	4.744	.077			15.119	5.373	.075		- 5.373
										- 0.629
										M.D.R. # 17 = (F.C. REF BM # 27-15A) + 45' S'LY of M.D.R. BM # 16 = (FC BM # 27-15) pg # 14
	11.961		.351			11.880		.337		FROM M.D.R. BM # 16 = (F.C.
	11.610		.352			11.543		.337		REF. BM # 27-15A) TO M.D.R. BM # 14
	11.258					11.206				= (F.C. REF BM # 27-16A) see pg # 13
1.	34.829	11.610	.703			34.629	11.543	.674		DIFF. ELEV. = + 11.610
										- 11.543
										+ 0.067

F.B. 2642 PG. 199

RERUN

FORM 379 SM 7-40

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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

DO NOT EXTEND NOTES THIS SIDE OF THIS LINE

Chief of Party W. S. COWHERD Weather CLOUDY Inst. No. 15097
Notes by W. S. C Time A.M. Rod No. 27128

Name MARINA SUB. STUDY
Job No. 0739.03
From To
Date JUNE [illegible]
Indexed

Number of Station	BACKSIGHT Thread Readings	BACKSIGHT Mean	BACKSIGHT Thread Intervals	BACKSIGHT Sum of Intervals	B.S. Rod and Temp.	FORESIGHT Thread Readings	FORESIGHT Mean	FORESIGHT Thread Intervals	FORESIGHT Sum of Intervals	DESCRIPTION AND REMARKS
	6.182		.045			5.050		.047		FROM M.D.R. #14 TO M.D.R. #15
	6.137		.045			5.003		.048		=(F.C. BM #27-16) see pg #13
	6.092					4.955				DIFF ELEV + 6.137
1.	18411	6.137	.090			15.008	5.003	.095		- 5.003
										+ 1.134
	5.251		.177			8.126		.176		FROM M.D.R. #15 =(F.C. BM #27-16)
	5.074		.178			7.950		.178		TO M.D.R. #13 =(F.C. BM #115-221
	4.896					7.772				SEE pg #12 + 5.074
1.	15.221	5.074	.255			23.848	7.949	.354		DIFF ELEV - 7.949
										- 2.875
	8.794		.184			5.106		.196		FROM M.D.R. #13 TO M.D.R #63=
	8.610		.180			4.910		.200		(LA. CO. MON. MKD. VENICE G-5C)
	8.430					4.710				see pg #26
1.	25834	8.611	.364			14.726	4.909	.396		
		8.611					4.909			

F. BK 49 PG. 200

FORM 379 5M 7-40

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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

DO NOT EXTEND NOTES THIS SIDE OF THIS LINE

Chief of Party W. S. COWHERD Weather CLOUDY Inst. No. 15097
Notes by W. S. C. Time AM Rod No 27828

Name MARINA SUBSIDENCE STUDY
Job No. 0739.03
From To
Date JUNE 68
Indexed

Number of Station	BACKSIGHT Thread Readings	BACKSIGHT Mean	BACKSIGHT Thread Intervals	BACKSIGHT Sum of Intervals	B.S. Rod and Temp.	FORESIGHT Thread Readings	FORESIGHT Mean	FORESIGHT Thread Intervals	FORESIGHT Sum of Intervals	DESCRIPTION AND REMARKS
	4.671	8.611	.256	.364		6.342	4.909	.257	.396	DIFF. ELEV.
	4.415		.255			6.085		.259		FROM MDR. BM # 13 TO +13.026
	4.160					5.826				MDR. BM # 63 - 10.993
2.	13.246	4.415	.511	.875		18.253	6.084	.516	.912	+ 2.033
		13.026					10.993			
	0.312		.062			11.963		.053		FROM M.D.R. BM # 63 TO
	0.250		.061			11.910		.053		M.D.R. BM # 12 = (F.C. BM # 115-222A) see pg # 11
	0.189					11.857				DIFF. ELEV.
1.	0.751	0.250	.123			35730	11.910	.106		FROM MDR # 63 + 0.250
										TO MDR # 12 - 11.910
										- 11.660
	11.842		.053			1.911		.063		FROM M.D.R. BM # 12 TO
	11.794		.054			1.848		.067		M.D.R. BM # 60
	11.740					1.781				
1.	35.381	11.794	.107			5.540	1.847	.130		

F.B. 2619 PG. 20

FORM 379 SM 7-40

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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

DO NOT EXTEND NOTES THIS SIDE OF THIS LINE

Chief of Party W. S. COWHERD Weather CLOUDY Inst. No. 15097
Notes by W. S. C. Time P.M. Rod No. 27&28

Name MARINA SUBSIDENCE STUDY
Job No. 073903
From To
Date JUNE 66
Indexed C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B.S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	5.421	11.794	.164	.107	74°	5.102	1.847	.171	.130	
	5.257		.167			4.931		.169		
	5.090					4.762				
2.	15.768	5.256	.331	.438		14.795	4.932	.340	.470	
	5.460		.178			4.835		.174		
	5.282		.177			4.661		.176		
	5.105					4.485				
3.	15.847	5.282	.355	.793		13.981	4.660	.350	.820	
	4.682		.180			4.599		.173		
	4.502		.181			4.426		.175		
	4.321					4.251				
4	13.505	4.502	.361	1.154		13.276	4.425	.348	1.168	
	5.075		.306			7.765		.330		
	4.769		.302			7.435		.333		
	4.467					7.102				DIFF. ELEV.
5	14.311	4.770	.608	1.762		22.302	7.434	.663	1.831	FROM MDR. BM #12 + 31.604
		31.604					23.298			TO MDR. BM #60 − 23.298
										see pg #25 + 8.306

F.B. 2649 PG. 202

FORM 379 5M 7-40

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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

DO NOT EXTEND NOTES THIS SIDE OF THIS LINE

Chief of Party W. S. COWHERD Weather CLOUDY Inst. No. 15097
Notes by W. S. C. Time P.M. Rod No. 27 & 28

Name MARINA SUB. STUDY
Job No. 0739-03
From ..... To .....
Date JUNE 60
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B.S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	8.300		.178			4.984		.181		FROM MDR BM#60
	8.122		.175		76°	4.803		.178		TO MDR BM#61
	7.947					4.625				See pg #25
1.	24.369	8.123	.353			14.412	4.804	.359		
	5.119		.175			4.602		.177		
	4.944		.175			4.425		.176		
	4.769					4.249				
2.	14.832	4.944	.350	.703		13.276	4.425	.353	.712	
	4.871		.178			4.873		.187		
	4.693		.180			4.686		.187		
	4.513					4.499				
3.	14.077	4.692	.358	1.061		14.058	4.686	.374	1.086	
	5.343		.174			5.218		.183		
	5.169		.170			5.035		.185		
	4.999					4.850				
4.	15.511	5.170	.344	1.405		15.103	5.034	.368	1.454	
	5.260		.190			4.488		.185		
	5.070		.188			4.303		.185		
	4.882					4.118				
5	15.212	5.071	.378	1.783		12.909	4.303	.370	1.824	
		28.000					23.252			

F.B. 2649 PG. 203

FORM 379 5M 7-40

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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

DO NOT EXTEND NOTES THIS SIDE OF THIS LINE

Chief of Party W. S. COWHERD Weather CLOUDY Inst. No. 15097
Notes by [redacted] J.T. Time P.M. Rod No. 21926

Name MARINA SUB. STUDY
Job No. 0739.03
From ____ To ____
Date JUNE 60
Indexed [redacted] C. Johnson

Number of Station	BACKSIGHT Thread Readings	BACKSIGHT Mean	BACKSIGHT Thread Intervals	BACKSIGHT Sum of Intervals	B.S. Rod and Temp.	FORESIGHT Thread Readings	FORESIGHT Mean	FORESIGHT Thread Intervals	FORESIGHT Sum of Intervals	DESCRIPTION AND REMARKS
	5.015	28.000	.087	1.783		9.523	23.252	.086	1.824	
	4.927		.093		76	9.437		.089		
	4.835					9.348				
6	14.777	4.926	.180	1.963		28.308	9.436	.175	1.999	DIFF. ELEV.
		32.926					32.688			FROM MDR BM #60 +32.926
										TO MDR BM #61 -32.688
										see pg # 25 +0.238
	10.208		.185			5.089		.197		FROM MDR. BM #61
	10.023		.189			4.892		.194		TO MDR. B.M. #64
	9.834					4.698				see pg 25 & 26
1	30.065	10.022	.374			14.679	4.893	.391		
	5.221		.116			6.044		.101		
	5.105		.117			5.943		.104		DIFF. ELEV.
	4.988					5.839				FROM MDR BM #61 +15.127
2	15.314	5.105	.233	.607		17.826	5.942	.205	.591	TO MDR BM #64 -10.835
		15.127					10.835			+4.292

F.B. 2649 PG. 204

FORM 379 SM 7-40

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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

DO NOT EXTEND NOTES THIS SIDE OF THIS LINE

Chief of Party W. S. COWHERD Weather CLOUDY Inst. No. 15097
Notes by W. S. COWHERD Time 9AM Rod No. 27 & 28

Name MARINA SUB. STUDY
Job No. 0739.03
From To
Date JUNE 60
Indexed C. JOHNSON

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B.S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	5.709		.179		#28	9.947		.182		FROM MDR. BM# 64
	5.530		.182			9.765		.180		TO MDR. BM# 62
	5.348				66°	9.585				see pg # 25 & 26
1	16.587	5.529	.361			29.297	9.766	.362		DIFF. ELEV.
										FROM MDR. BM# 64 +5.529
										TO MDR. BM# 62 -9.766
										-4.237
	10.602		.174			5.150		.179		FROM MDR. BM# 62
	10.428		.175			4.971		.179		TO MDR # BM# 6 = (FC BM# 115-48)
	10.253					4.792				
1.	31.283	10.427	.349			14.913	4.971	.358		
	5.403		.213			4.779		.212		
	5.190		.212			4.567		.214		
	4.978					4.353				
2.	15.571	5.190	.425	.774		13.699	4.566	.426	.784	
	5.351		.217			5.396		.226		
	5.134		.215			5.170		.225		
	4.919					4.945				
3.	15.404	5.135	.432	1.206		15.511	5.170	.451	1.235	
		20.752					14.707			

F.B. 26.49 PG. 205

FORM 379 5M 7-40

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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

DO NOT EXTEND NOTES THIS SIDE OF THIS LINE

Chief of Party W. S. COWHERD Weather CLOUDY Inst. No. 15097
Notes by W. S. COWHERD Time AM Rod No. 27 & 28

Name MARINA SUB. STUDY
Job No. 0739.03
From To
Date JUNE '60
Indexed M. C. Johnson

Number of Station	BACKSIGHT Thread Readings	BACKSIGHT Mean	BACKSIGHT Thread Intervals	BACKSIGHT Sum of Intervals	B.S. Rod and Temp.	FORESIGHT Thread Readings	FORESIGHT Mean	FORESIGHT Thread Intervals	FORESIGHT Sum of Intervals	DESCRIPTION AND REMARKS
	5.048	20.752	.140	1.206		9.537	14.707	.144	1.235	DIFF. ELEV.
	4.908		.139			9.393		.142		FROM MDR. BM #62 + 25.660
	4.769					9.251				TO MDR. BM #6 - 24.101
4.	14.725	4.908	.279	1.485		28.181	9.394	.286	1.521	see pg #10 + 1.559
		25.660					24.101			
	6.279		.226			5.204		.216		FROM MDR. BM #6
	6.053		.224			4.988		.219		TO MDR. BM #5 = (FC. BM #15-225A)
	5.829					4.769				see pg #9
1.	18.161	6.054	.450			14.961	4.987	.435		
	5.343		.218			4.335		.222		
	5.125		.216			4.113		.221		
	4.909					3.892				
2.	15.377	5.126	.434	.884		12.340	4.113	.443	.878	
	4.491		.271			5.831		.308		DIFF. ELEV.
	4.220		.275			5.523		.308		FROM MDR. BM #6 +15.399
	3.945					5.215				TO MDR. BM #5 - 14.623
3.	12.656	4.219	.546	1.430		16.569	5.523	.616	1.494	+ 0.776
		15.399					14.623			

F.B. 2249 PG. 206

FORM 379 5M 7-40

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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

DO NOT EXTEND NOTES THIS SIDE OF THIS LINE

Chief of Party W. S. COWHERD Weather CLOUDY Inst. No. 15097
Notes by W. S. C. Time A.M. Rod No. 27928

Name MARINA SUB STUDY
Job No. 07[illegible]3
From ..... To .....
Date JUNE 60
Indexed [illegible]

Number of Station	BACKSIGHT Thread Readings	BACKSIGHT Mean	BACKSIGHT Thread Intervals	BACKSIGHT Sum of Intervals	B.S. Rod and Temp.	FORESIGHT Thread Readings	FORESIGHT Mean	FORESIGHT Thread Intervals	FORESIGHT Sum of Intervals	DESCRIPTION AND REMARKS
	6.286		.207			3.879		.218		FROM MDR. BM#5
	6.079		.210			3.661		.218		TO MDR BM#1 = (FC BM#115-226)
	5.869					3.443				see pg #7
1.	18.234	6.078	.417			10.983	3.661	.436		
	4.693		.204			4.812		.213		
	4.489		.207			4.599		.216		
	4.282					4.383				
2.	13.464	4.488	.411	.828		13.794	4.598	.429	.865	
	5.240		.212			5.409		.200		
	5.028		.215			5.209		.200		
	4.813					5.009				
3	15.081	5.027	.427	1.255		15.627	5.209	.400	1.265	
	4.820		.215			4.004		.225		
	4.605		.215			3.779		.229		
	4.390					3.550				
4.	13.815	4.605	.430	1.685		11.333	3.778	.454	1.719	DIFF ELEV.
	8.381		.076			6.262		.092		FROM MDR. BM#5 + 28.503
	8.305		.076			6.170		.092		TO MDR BM#1 − 23.416
	8.229					6.078				see pg #7 + 5.087
5.	24.915	8.305	.152	1.837		18.510	6.170	.184	1.903	
		28.503					23.416			

F.B. 2649 PG. 207

FORM 379 5M 7-40

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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

DO NOT EXTEND NOTES THIS SIDE OF THIS LINE

Chief of Party W. S. COWHERD Weather CLOUDY Inst. No. 15097
Notes by W. S. C. Time AM. Rod No. 27428

Name MARINA SUB. STUDY
Job No. 0739.03
From ..... To .....
Date JUNE 60
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	BACKSIGHT Mean	BACKSIGHT Thread Intervals	BACKSIGHT Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	FORESIGHT Mean	FORESIGHT Thread Intervals	FORESIGHT Sum of Intervals	DESCRIPTION AND REMARKS
	9.557		.093			8.486		.093		FROM MDR. BM#1 TO MDR BM#2 =
	9.464		.093			8.393		.093		(F.C. BM#115-227) see pg# 8
	9.371					8.300				
1.	28.392	9.464	.186			25.179	8.393	.186		
										DIFF. ELEV.
										FROM MDR BM#1 +9.464
										TO M.D.R. BM#2 −8.393
										+1.071
	11.769		.101			1.828		.097		FROM M.D.R. BM#2 TO MDR.
	11.668		.104			1.731		.095		BM#65 = (LA. CO. VENICE I-4C)
	11.564					1.636				see pg# 26
1.	35.001	11.667	.205			5.195	1.732	.192		DIFF. ELEV. +11.667
										FROM MDR. BM#2 −1.732
										TO MDR. BM#65 +9.935
	2.466		.134			11.984		.133		FROM M.D.R. BM#65
	2.332		.132			11.851		.133		TO MDR BM#50
	2.200					11.718				see pg#21
1.	6.998	2.333	.266			35.553	11.851	.266		
		2.333					11.851			

F.B. 2649 PG. 208

FORM 379 5M 7-40

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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

DO NOT EXTEND NOTES THIS SIDE OF THIS LINE

Chief of Party W. S. COWHERD Weather CLOUDY Inst. No. 15097
Notes by W. S. C. Time P.M. Rod No. 27828

Name MARINA SUB STUDY
Job No. 07 39 03
From To
Date JUNE 60
Indexed E. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B.S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	2.078	2.333	.046	.266		8.066	11.851	.054	.266	
	2.032		.045			8.012		.053		
	1.987					7.959				
2.	6.097	2.032	.091	.357		24.037	8.012	.107	.373	
	3.231		.210			5.701		.216		
	3.021		.209			5.485		.219		
	2.812					5.266				
3.	9.064	3.021	.419	.776		16.452	5.484	.435	.808	
	4.497		.245			4.860		.221		
	4.252		.242			4.639		.221		
	4.010					4.418				
4.	12.759	4.253	.487	1.263		13.917	4.639	.442	1.250	
	4.788		.210			4.799		.209		
	4.578		.213			4.590		.206		
	4.365					4.384				
5.	13.731	4.577	.423	1.686		13.773	4.591	.415	1.665	
	4.907		.229			4.916		.215		
	4.678		.231			4.701		.213		
	4.447					4.488				
6.	14.032	4.677	.460	2.146		14.105	4.701	.428	2.093	
		20.893	✓				39.278	✓		

F.B. 2644 PG. 209

FORM 379 5M 7-40

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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

DO NOT EXTEND NOTES THIS SIDE OF THIS LINE

Chief of Party W. S. COWHERD Weather CLOUDY Inst. No. 15097
Notes by W. S. C. Time P.M. Rod No. 21428

Name MARINA SUB. STUDY
Job No. 07397.03
From To
Date JUNE 60
Indexed R. C. Johnson

Number of Station	BACKSIGHT Thread Readings	BACKSIGHT Mean	BACKSIGHT Thread Intervals	BACKSIGHT Sum of Intervals	B.S. Rod and Temp.	FORESIGHT Thread Readings	FORESIGHT Mean	FORESIGHT Thread Intervals	FORESIGHT Sum of Intervals	DESCRIPTION AND REMARKS
	4.781	20.893	.181	2.146		8.469	39.278	.224	2.093	DIFF. ELEV.
	4.600		.180			8.245		.225		FROM M.D.R. BM # 65 +25.493
	4.420					8.020				TO M.D.R. BM # 50 -47.523
7	13.801	4.600	.361	2.507		24.734	8.245	.449	2.542	see pg # 21 -22.030
		25.493					47.523			
	7.311		.212			4.290		.203		FROM M.D.R. BM # 50 TO
	7.099		.216			4.087		.204		M.D.R. BM # 51
	6.883					3.883				see pg # 22
1	21.293	7.098	.428			12.260	4.087	.407		
	3.603		.192			5.720		.200		
	3.411		.191			5.520		.200		
	3.220					5.320				
2	10.234	3.411	.383	.811		16.560	5.520	.400	.807	
	4.525		.195			4.619		.198		
	4.330		.197			4.421		.195		
	4.133					4.226				
3	12.988	4.329	.392	1.203		13.266	4.422	.393	1.200	
		14.838					14.029			

F.B. 2644 PG. 210

FORM 379 SM 7-40

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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

DO NOT EXTEND NOTES THIS SIDE OF THIS LINE

Chief of Party W. S. COWHERD Weather CLOUDY Inst. No. 15097
Notes by W. S. C. Time P.M. Rod No. 27628

Name MARINA SUB. STUDY
Job No. 0739.03
From To
Date JUNE 60
Indexed E. Johnson

Number of Station	BACKSIGHT Thread Readings	BACKSIGHT Mean	BACKSIGHT Thread Intervals	BACKSIGHT Sum of Intervals	B.S. Rod and Temp.	FORESIGHT Thread Readings	FORESIGHT Mean	FORESIGHT Thread Intervals	FORESIGHT Sum of Intervals	DESCRIPTION AND REMARKS
	5.641	14.838	.181	1.203		5.300	14.029	.191	1.200	
	5.460		.181			5.109		.190		
	5.279					4.919				
4.	16.380	5.460	.362	1.565		15.328	5.109	.381	1.581	
	5.357		.114			7.931		.125		DIFF. ELEV.
	5.243		.113			7.806		.126		FROM M.D.R. B.M. #50 + 25.541
	5.130					7.680				TO M.D.R. B.M. #51 - 26.944
5.	15.730	5.243	.227	1.792		23.417	7.806	.251	1.832	- 1.403 ✓
		25.541 ✓					26.944 ✓			
	8.684		.184			4.852		.184		FROM M.D.R. B.M. # 51
	8.500		.186			4.668		.185		TO M.D.R. B.M. # 38 = (L.A.
	8.314					4.483				CITY - VENICE H-3A)
1.	25.498	8.499	.370			14.003	4.668	.369		see pg # 20
	5.057		.147			4.704		.154		
	4.910		.147			4.550		.156		
	4.767					4.394				
2.	14.734	4.911	.294	.664		13.648	4.549	.310	.679	
		13.410 ✓					9.217 ✓			

F.B. 2440 PG. 211

FORM 379 SM 7-40

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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

DO NOT EXTEND NOTES THIS SIDE OF THIS LINE

Chief of Party W. S. COWHERD Weather CLOUDY Inst. No. 15097
Notes by W. S. C. Time PM Rod No. 27828

Name MARINA SUB STUDY
Job No. 07333.03
From To
Date JUNE 6, 1968
Indexed

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B.S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	5.459	18.410	.136	.664		5.501	9.217	.151	.679	
	5.323		.133			5.350		.151		
	5.190					5.199				
3.	15.972	5.324	.269	.933		16.050	5.350	.302	.981	DIFF. ELEV.
		18.734					14.567			FROM M.D.R. BM #51 +18.734
										TO M.D.R. BM #38 -14.567
										see pg #20 +4.167
	5.940		.192			2.708		.233		FROM M.D.R. BM #38
	5.748		.190			2.475		.235		TO M.D.R. BM #52
	5.558					2.240				see pg #22
1.	17.246	5.748	.382			7.423	2.474	.468		
	3.317		.043			6.559		.058		DIFF. ELEV.
	3.274		.041			6.501		.057		FROM M.D.R. BM #38 +9.023
	3.233					6.444				TO M.D.R. BM #52 -8.975
2.	9.824	3.275	.084	.466		19.504	6.501	.115	.583	+0.048
	6.048	9.023				6.062	8.975			DUE TO A NOTE DIFFERENCE OF
	5.820					5.770				+0.048 AS AGAINST +0.172 BY L.V. SMITH
	5.592					5.478				(pg #45) BETWEEN BM #38 & BM #52
1.	17.460	5.820				17.310	5.770			I MADE A SINGLE TURN BETWEEN
										BM #38 & BM #52 AS A SECOND
										CHECK GETTING A DIFFERENCE OF
										+0.050 PROVING ORIGINAL RUN ON
										PAGE #45 IS IN ERROR

DIFF. ELEV. BM #38 TO BM #52 +5.820 +5.770 +0.050 CHECK ON RUN

F.B. 20699 PG. 012

FORM 379 SM 7-40

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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

DO NOT EXTEND NOTES THIS SIDE OF THIS LINE

Chief of Party W. S. COWHERD Weather CLOUDY Inst. No. 15097
Notes by W. S. C. Time A.M. Rod No. 27428

Name MARINA SUB STUDY
Job No. 0739.03
From To
Date JUNE 60
Indexed E. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B.S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	7.649		.170			4.113		.173		FROM MDR BM #52
	7.479		.171			3.940		.174		TO MDR BM #53
	7.308					3.766				see pg #22
1	22.436	7.479	.341			11.819	3.939	.347		
	8.241		.190			7.997		.185		DIFF. ELEV.
	8.051		.190			7.812		.182		FROM MDR. BM #52 + 15.530
	7.861					7.630				TO MDR. BM 53 - 11.752
2	24.153	8.051	.380	.721		23.439	7.813	.367		+ 3.778
		15.530					11.752			

F.B. 2619 PG. 213

FORM 379 5M 7-48

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
700 HALL OF RECORDS

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

DO NOT EXTEND NOTES THIS SIDE OF THIS LINE

Chief of Party W. S. COWHERD Weather Inst. No. 15097
Notes by W. S. C Time Rod No. 27628

Name MARINA SUB STUDY
Job No. 0739:03
From To
Date JUNE 60
Indexed

Number of Station	BACKSIGHT				B. S. Rod and Temp.	FORESIGHT				DESCRIPTION AND REMARKS
	Thread Readings	Mean	Thread Intervals	Sum of Intervals		Thread Readings	Mean	Thread Intervals	Sum of Intervals	

Blank

F.B. 2649 PG. 214

76P526 S & E #379 1-54

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

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

D.F.V

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 142552
Notes by Landa Time Afternoon Rod No. 21 E 22

Name Mar. Sub. Study
Job No. 0737.03
From M.D.R. #53 To M.D.R. #37
Date 6-14-60
Indexed K. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
					72°					M.D.R. #53, pg. 20
					21					
	6303		66			5597		62		
	6237		66			5535		62		
1	6173		130			5173		124		
	18713	6.238		130		16605	5.535		124	
										M.D.R. #37, pg. 20
										Summation of Run Total Backsights = 6.238 " Foresights = 5.535 Diff. in Elev = + 0.703
										F.B. 2619 P.G. 215
		6.238					5.535			

A

76P526 S & E #379 1-54

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

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

D.F. V.

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 122552
Notes by Landa Time Afternoon Rod No. 21 & 22

Name Marina Sub. Study
Job No. 0739.03
From M.D.R. #37 To M.P.R. 54
Date 6-14-60
Indexed K. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	6218		681		22	5138		629		M. D. R # 37
	5537		679			4509		633		Sec P9 20
	4858		1360			3876		1262		
1	16613	5.538		1360		13523	4.508		1262	
	5499		602			5487		568		
	4897		602			4919		565		
	4295		1204			4352		1133		
2	14691	4.897		2564		14760	4.920		2395	
	5560		660			5698		685		6-15-60
	4922		659			5013		621		Hazy
	4283		1279			4372		1306		
3	14767	4.922		5813		15043	5.014		5281	
	5592		613			5[illegible]		[illegible]		
	4282		609			5081		5[illegible]		
	4373		1221			4[illegible]		[illegible]		
4	14949	4.983		5064		15[illegible]	5.0[illegible]		4864	
	5355		594			6143		666		
	4761		593			5477		662		
	4168		1187			4815		1328		
5	14284	4.761		6251		16435	5.478		6192	
		25.101					25.002			

F.B. 2642 P.G. 216

B

76P526 S & E #379 1-54

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

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

D.F.V

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 122552
Notes by Lanoa Time — Rod No. 21 & 22

Name Marina Sub. Study
Job No. 0739.03
From Mar #37 To Mar #54
Date 6-15-60
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	4902	25.101	651	6251		6201	25.002	620	6192	
	4321		629			5564		638		
	3692		1300			4926		1278		
6	13025	6.342		7551		16694	5.565		7470	
	5133		675			7398		718		M.D.R. #51
	4458		673			6680		716		For Pg. 23
	3185		1348			5964		1434		
7	12776	6.259		8899		20042	6.681		8904	
										Summation of Rod
										Total + = 33.905
										" — = 37.248
										Diff. : — 3.346
		33.905					37.248			

F.B. 2649 P.G. 217

76P526 S & E #379 1-54

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

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

D.F. ✓

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 122552
Notes by Lahla Time — Rod No. 21 & 22

Name Marina Sub. Study
Job No. 0739.03
From M.D.R. 54 To M.D.R. 55
Date 2-15-62
Indexed K. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
1	6652 5969 5285		683 684 1367			6177 5437 4698		740 739 1479		M.D.R. # 54 Per Pg. 23
	17906	5.969		1367		16312	5.437		1479	
2	4922 4311 3698		611 613 1224			5727 5095 4358		632 737 1369		
	12931	4.310		2591		15278	5.093		2748	
3	5243 4503 3765		740 738 1478			5812 5231 4645		645 646 1291		
	13511	1.503		4069		15689	5.230		4062	
4	5099 4445 3792		654 653 1307			6061 5333 4598		634 635 1269		Total + = 23.726 " − = 27.180 Diff in El. = − 3.454
	13336	4.445		5376		16298	5.433		5311	
5	5331 4491 3659		840 840 1680			6844 5982 5137		880 877 1757		M. D. R. # 55 Per. Pg. 23.
	13494	4.498		7056		17961	5.987		7068	
		23.726 ✓					27.180 ✓			

F.B. 2649 P.G. 218

76P526 S & E #379 1-54

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

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

G. D. –

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 142552
Notes by Landa Time — Rod No. 21 & 22

Name Marina Sub. Study
Job No. 0739.03
From M.D.R. #55 To M.D.R. #56
Date 6-15-60
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	6498		659		22	5363		639		M.D.R. #55
	5839		660			4724		638		Per. Pg. 23
	5179		1319			4086		1277		
1	17516	5.839		1319		14173	4.724		1277	
	5167		594			5438		602		
	4573		596			4836		603		
	3977		1190			4233		1205		
2	13717	4.572		2509		14507	4.836		2482	
	5492		647			5692		649		
	4845		648			5043		645		
	4197		1295			4398		1294		
3	14534	4.845		3804		15133	5.044		3776	
	4478		238			4077		312		M.D.R. # 56
	4240		237			3765		311		Per. Pg. 23
	4003		475			3454		623		
4	12721	4.240		4279		11296	3.765		4399	Summation of Run
										Total + = 19.496
										" − = 18.369
										Diff. in El = +1.127
		19.496					18.369			

F.B. 2649 P.G. 219

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 12552
Notes by Landa Time — Rod No. 21 & 22

Name Marina Sub. Study
Job No. 0739.03
From M.D.R. #56 To M.D.R. #57
Date 6-15-60
Indexed A. C. Johnson

F.B. 2649 P.G. 220

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	2563		173		72	3510		153		M.D.R. #56
	2390		173			3157		152		Per. Pg. 23
	2217		326			3005		305		
1	13170	4.390		346		15672	5.157		305	
	5253		632			5751		620		
	4621		629			5131		619		
	3992		1261			4518		1239		
2	13866	4.622		1607		15112	5.137		1511	
	4758		581			5397		657		
	4177		582			4615		654		
	3595		1163			3982		1311		
3	12530	4.177		2770		13923	4.641		2853	Summation of Cu
	5374		570			5259		578		Total + = 23.277
	4804		569			4681		580		" − = 22.966
	4235		1139			4091		1158		Diff. in El. = − 0.789
4	14413	4.804		3909		14031	4.677		4016	
	5443		159			4563		193		M.D.R. #57
	5284		160			4460		193		Per. Pg. 24
	5124		319			4347		206		
5	15851	5.284		4228		13380	4.460		4222	
		23.277					22.066			

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 122552
Notes by Landa Time — Rod No. 21 & 22

Name Marina Sub. Study
Job No. 0737.03
From m.o.e. #57 To m.o.e. #58
Date 6-15-60
Indexed K. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	4634		109		#21	5347		155		m.o.e. #57
	4525		108			5192		157		Per Pg. 24
	4417		217			5035		312		
1	13576	4.525		217		15574	5.191		312	
	6092		540			5329		518		
	5552		540			4811		517		
	5012		1080			4296		1035		
2	16656	5.552		1297		14436	4.811		1347	
	6033		522			5922		567		
	5511		535			5355		568		
	4986		1057			4777		1135		
3	16530	5.510		2354		16064	5.355		2182	
	5403		578			5792		613		
	4825		576			5378		609		
	4249		1154			4768		1222		
4	14477	4.826		3498		16138	5.379		3704	
	5213		639			6176		623		
	4576		638			5551		624		
	3936		1277			4927		1267		
5	13723	4.574		4775		16652	5.551		4951	
	21.987 ✓					26.287 ✓				

F.B. 2449 P.G. 221

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party E.E. Weather Hazy Inst. No. 142552
Notes by Landa Time — Rod No. 21 & 22

Name Marina Sub. Study
Job No. 0739.07
From M.D.R. 57 To M.D.R. #58
Date 6-15-60
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	BACKSIGHT Mean	BACKSIGHT Thread Intervals	BACKSIGHT Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	FORESIGHT Mean	FORESIGHT Thread Intervals	FORESIGHT Sum of Intervals	DESCRIPTION AND REMARKS
	5353	24.987	650	4775		6084	26.287	590	4951	
	4703		647			5494		591		
	4056		1297			4903		1181		
6	14112	4.704		6072		16481	5.494		6132	
	5281		567			4880		528		
	4714		569			4352		532		
	4145		1136			3820		1060		
7	14140	4.713		7208		13052	4.351		7192	
	5583		606			6197		651		
	4977		605			5546		648		
	4372		1211			4898		1299		
8	14932	4.977		8419		16641	5.547		8491	
	5439		345			5726		313		M.D.R. #58
	5094		347			5413		315		Per Pg. 24
	4747		692			5098		628		
9	15280	5.093		9111		16237	5.412		9119	Summation of Run
										Total + = 44.474
										" − = 47.091
										Diff in el = − 2.617
		44.474					47.091			

F.B. 2649 P.G. 222

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party Epte / Weather HAZY Inst. No. 142.552
Notes by Clifford Time MORNING Rod No 21622

Name Marina Sub Study
Job No. 0739.03
From M.D.R 58 To M.D.R 57
Date 6-15-60
Indexed J C Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	5271		513		22	4945		668		M.D.R. #58
	4758		512			4277		665		
	4246		1025			3612		1333		
1	14275	4.758		1025		12834	4278		1333	
	5918		563			6191		568		
	5355		563			5623		568		
	4792		1126			5055		1136		
2	16065	5355		2151		16869	5623		2469	
	5392		403			5827		546		M.D.R. #59
	4989		404			5281		545		See pg. 24
	4585		807			4736		1091		
3	14966	4989		2958		15844	5281		3560	
									2958	
									6518	
	L.									
										Summation of RUN
										TOTAL + 15.102
										TOTAL - 15.182
										DIFF IN EL = -.080
		15.102					15.182			

P.B. 264 PG. 223

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 142552
Notes by Landa Time — Rod No. 21 & 22

Name Marina Sub. Study
Job No. 0739.03
From M.D.R. #59 To M.D.R. 31
Date 6-15-60
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	BACKSIGHT Mean	BACKSIGHT Thread Intervals	BACKSIGHT Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	FORESIGHT Mean	FORESIGHT Thread Intervals	FORESIGHT Sum of Intervals	DESCRIPTION AND REMARKS
1	5032 4412 3792 [illegible]	4.412	620 620 1240	1240	21	5591 5004 4418 5013	5.004	585 586 1171	1171	M.D.R. # 59
2	6026 5429 4830 16285	5.428	597 599 1196	2436		4262 3645 3032 10939	[illegible]	617 613 1230	2401	
3	7737 7272 6803 21812	7.271	465 469 934	3370		3176 2692 2208 8076	2.692	484 484 968	3369	
4	7098 6776 6455 20329	6.776	322 321 643	4013		5734 5433 5132 16299	5.433	301 301 602	3971	M.D.R. # 31 Per Pg. 20 Summation of Run Total + = 23.887 Total − = 16.775 Diff. in el. = + 7.112
		23.887					16.775			

F.B. 2649 P.G. 224

76P526 S & E #379 1-54

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

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

D.F.

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 42552
Notes by Landa Time 8:50 - 2:22 Rod No. 21 & 22

Name Marina Sub. Study
Job No 0739.03
From M.D.R. #59 To M.D.R. #66
Date 6-13-60
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	4396		612		#22	2976		654		M.O.R. #59
	3784		610			2322		650		SEE Pg. 24
	3174		1222			1672		1304		RERUN
1	11354	3.785		1222		6970	2.323		1304	See Pg. 57
	6569		554			5334		522		↑ Foulger
	6015		533			5812		522		
	5662		1107			5288		1044		
2	18046	6.015		2329		17434	5.811		2350	
	7108		602			4807		579		
	4506		605			4218		585		
	5901		1207			3633		1164		
3	19515	6.505		3536		12658	4.219		3524	Summation of Run
	4754		570			6035		527		Total Backsight = 25.700
	4184		571			5508		531		" Foresight = 22.199
	3613		1141			4977		1058		Diff. in El. = +3.501
4	12551	4.184		4177		16520	5.507		4582	
	5496		285			4644		305		M.O.R. # 66
	5211		284			4339		306		SEE Pg. 29
	4927		569			4033		611		
5	15634	5.211		5246		13016	4.339		5193	
		25.700					22.199			

Pg. 225

76P526 S & E #379 1-54

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

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

DF. V

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 42552
Notes by Landa Time 9:20 - 10:[illegible] Rod No. 21822

Name Marina Sub. Study
Job No. 0737.03
From M.D.R. #66 To M.D.R. #67
Date 6-13-56
Indexed C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	3054		237		21.	5290		255		M.D.R. #66
	2817		237			5045		243		Plant test car
	2580		474			4802		488		
1	8451	2.817		474		15137	5.046		488	
	4572		590			5386		611		
	3982		586			4775		615		
	3396		1176			4132		1226		
2	11950	3.983		1650		14293	4.764		1712	
	4978		514			6192		516		
	4464		512			5676		517		
	3952		1026			5159		1033		
3	13394	4.465		2676		17027	5.676		2715	Summation of Rod
	6058		617			4939		641		Total Backsights: 21.406
	5441		617			4298		640		Total Foresights: - 24.218
	4824		1234			3658		1281		Diff. in Elev = - 2.812
4	16323	5.441		3910		12895	4.298		4026	
	5073		373			4857		454		M. D. R. # 67
	4700		372			4453		400		
	4328		745			4053		854		SEE Pg. 27
5	14101	4.700		4655		13363	4.454		4830	
		21.406					24.218			

F.B. 2649 P.G. 226

76P526 S & E #379 1-54

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

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

DF. V

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 142552
Notes by Landa Time 10:00 - 10:20 Rod No. 21 & 22

Name Marina Sub. Study
Job No. 0739.03
From M.D.R. #67 To M.D.R. #68-A
Date 6-13-60
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	10728		376		22	9862		407		M.D.R. # 67
	10352		378			3455		410		
	9974		752			3045		819		
1	31054	10.351		754		10358	3.453		819	
	5963		574			5206		508		
	5367		574			2698		505		
	4793		1150			2193		1013		
2	16103	5.368		1904		14397	4.799		1832	
	4917		595			3987		554		
	4322		593			3433		555		
	3729		788			2878		1109		
3	12968	1.523		3092		10298	3.433		2941	Summation of Eqn
										Total Backsights: +29.352
										Total foresights: -17.963
	4254		518			4800		569		Diff. in Elev. = +11.389
	3104		545			4231		569		
	3159		1093			3662		1138		
4	11517	3.705		4185		12693	4.231		4079	(1½" I.P. Plug & Tag)
										M.D.R. # 68-A
										35' N of M.D.R. # 68
										(M.D.R. 68 destroyed)
	6135		530			2893		747		SEE Pg. 27
	5605		529			2146		744		
	5076		1059			1202		1891		
5	16816	5.605		5244		6241	2.167		5579	
		29.352					17.963		5244	
									10814	

F.B. 2440 P.G. 227

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather — Inst. No.
Notes by Time — Rod No.

Name Macing Sub. Study
Job No. 2739.23
From — To —
Date 6-13-60
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	BACKSIGHT Mean	BACKSIGHT Thread Intervals	BACKSIGHT Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	FORESIGHT Mean	FORESIGHT Thread Intervals	FORESIGHT Sum of Intervals	DESCRIPTION AND REMARKS

Blank Pg.

F.B. 2649 P.G. 228

76P526 S & E #379 1-54

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

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

D.F. V

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 142552
Notes by Landa Time 10:20 - 11:00 Rod No. 21822

Name Marina Sub. Study
Job No. 07392.03
From M.D.R. # 68-A To M.D.R. # 69
Date 6-13-60 C. Johnson
Indexed

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	3314		511		21	5752		500		M.D.R. # 68-A
	2803		511			5252		500		
	2292		1022			4752		1000		
1	8409	2.803		1022		15756	5.252		1000	
	5012		1380			5339		756		
	4392		1380			4585		758		
	3712		1360			3827		1512		
2	13176	4.392		2582		13751	4.584		2512	
	4572		620			5663		559		
	3952		620			4106		559		
	3332		1240			4125		1118		
3	11856	3.952		3622		16112	4.704		3630	
	4614		5118			5803		577		
	1038		5575			5226		575		
	3463		1153			4657		1152		
4	12117	4.039		4775		15680	5.227		4782	
	5238		596			4798		592		
	4642		5113			4206		589		
	3849		1189			5617		1181		
5	13329	4.443		5964		14621	4.207		5963	
		19.629					23.974			

F.B. 766 P.G. 229

5

76P526 S & E #379 1-54

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

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

DF. ✓

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 142552
Notes by Landa Time 10:20 11:00 Rod No. 21 & 22

Name Marina Sub. Study
Job No. 0739.03
From M.D.R. 68-A To M.D.R. 69
Date
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	BACKSIGHT Mean	BACKSIGHT Thread Intervals	BACKSIGHT Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	FORESIGHT Mean	FORESIGHT Thread Intervals	FORESIGHT Sum of Intervals	DESCRIPTION AND REMARKS
	5425	19.629	568	5964		5403	23.974	586	5963	
	4857		566			4817		584		
	4291		1134			4233		1170		
6	14573	4.858		7098		14453	4.818		7133	
	5048		477			9102		506		
	4511		474			8596		505		
	4097		951			8091		1011		
7	13716	4.572		8049		25789	8.596		8144	
	2547		486			4817		554		M.D.R. # 69
	2061		486			4263		551		
	1575		972			3712		1105		
8	6183	2.061		9.021		12792	4.264		9249	
									9021	Summation of Run
									18.270	Total Backsights = 31.120
										Total Foresights = -41.652
										Diff. in Ft. = -10.532
		31.120					41.652			

6

F.B. 2649 P.G. 230

76P526 S & E #379 1-54

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

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

D.F. ✓

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 142552
Notes by Landa Time 11:00 - 11:30 Rod No. 21422

Name Marina Sub. Study
Job No. 2739.03
From MOR# 69 To MOR# 70
Date 6-13-60
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	BACKSIGHT Mean	BACKSIGHT Thread Intervals	BACKSIGHT Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	FORESIGHT Mean	FORESIGHT Thread Intervals	FORESIGHT Sum of Intervals	DESCRIPTION AND REMARKS
	4652		548		#21	2393		491		M.O.R # 69
	4104		546			1902		494		SEE Pg. 28
	3558		1094			1408		985		
1	12314	4.105		1094		5703	1.901		985	
	7752		566			6901		613		
	7186		568			6288		613		
	6618		1134			5675		1226		
2	21556	7.185		2228		18864	6.288		2211	
	5478		725			7239		674		
	4753		721			6565		671		
	4032		1446			5894		1345		
3	14263	4.754		3674		19698	6.566		3556	
	6901		550			4058		595		
	5451		553			3463		591		
	4898		1103			2872		1186		
4	16350	5.450		4777		10393	3.464		4742	
	5862		635			5042		585		
	5227		635			4457		584		
	4592		1270			3873		1169		
5	15681	5.227		6047		13372	4.457		5911	
		26.721					22.676			

F.B. 2649 P.G. 231

76P526 S & E #379 1-54

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

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

D.F. ✓

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party: English Weather: Hazy Inst. No.: 112552
Notes by: Landa Time: 11:00 - 11:30 Rod No.: 21322

Name: Marina Sub. Study
Job No.: 0739.03
From: M.D.R. 69 To: M.D.R. 70
Date: 6-13-60
Indexed: A. C. Johnson

Number of Station	Backsight Thread Readings	Backsight Mean	Backsight Thread Intervals	Backsight Sum of Intervals	B. S. Rod and Temp.	Foresight Thread Readings	Foresight Mean	Foresight Thread Intervals	Foresight Sum of Intervals	Description and Remarks
	6068	26.721	621	6047		3087	22.676	637	5911	
	5447		619			2450		637		
	4828		1240			1813		1274		
6	16343	5.448		7267		7350	2.450		7185	
	6777		237			3343		290		
	6540		237			3053		290		
	6303		474			2763		580		
7	19620	6.540		7741		9159	3.053		7765	
	8004		379			2109		356		M.D.R. #70
	7625		379			1753		356		SEE Pg. 28
	7246		758			1397		692		
8	22875	7.625		6519		5259	1.753		6159	

SUMMATION OF RUN
TOTAL BACKSIGHTS = 46.334
TOTAL FORESIGHTS = -29.932
DIFF. IN EL. = +16.402 ✓

F.B. 2649 P.G. 232

8

46.334 ✓ 29.932 ✓

76P526 S & E #379 1-54

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

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

D.F. V

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 142552
Notes by Landa Time 11:30 - 12:00 Rod No. 21822

Name Marina Sub. Study
Job No. 0739.03
From M.D.E. #70 To M.D.E. 71
Date 6-13-60
Indexed C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	1627		335		#21	2523		345		M.D.E. # 70
	1292		336			2178		346		
	0956		671			1832		691		
1	3875	1.292		671		21683	7.228		691	
	3813		268			2388		336		
	3549		267			2054		332		
	3282		535			1722		666		
2	10644	3.548		1206		6164	2.055		1357	
	4335		602			3315		533		Summation of Sum
	3733		598			2782		531		Total Backsights = 18.998
	3135		1200			2251		1064		Total Foresights = -29.839
3	11203	3.734		2406		8348	2.783		2421	Diff in Elev. = -10.841 ✓
	4388		575			2607		599		
	3813		576			2008		596		
	3237		1151			5812		1195		
4	11438	3.813		3557		19227	6.409		3616	
	6264		356			5127		364		M.D.E. # 71
	5910		355			5363		361		SEE Pg. 28
	6265		709			5002		725		
5	19829	6.610		4266		15092	5.364		1341	
		18.998 ✓					29.839 ✓			

F.B. 2442 P.G. 233

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 42552
Notes by Landa Time 11:00 - 1:15 Rod No. 21422

Name Marina Sup. Study
Job No. 0737.03
From M.O.R. #71 To B.M. 19
Date 6-13-60
Indexed K. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	5388		589		#22	3931		634		M. O. R. #71
	4799		587			3297		632		
	4212		1176			2665		1266		
1	14399	4.800		1174		9893	3.298		1266	
	4686		595			5885		548		
	4093		598			5317		565		
	3025		1193			4752		1133		
2	12276	4.092		2369		15954	5.318		2399	
	6036		631			6383		600		
	5405		630			5783		601		
	4775		1261			5182		1201		
3	16216	5.405		3630		17368	5.783		3600	
	6181		527			5799		563		
	5654		528			5236		563		
	5126		1055			4673		1126		
4	16961	5.654		4685		15708	5.236		4726	
	5493		458			4927		465		
	5035		457			4462		464		
	4578		915			3998		929		
5	15106	5.035		5600		13387	4.462		5255	
		24.986	1				24.097	1		

F.B. 2621 P.G. 234

10

76P526 S & E #379 1-54

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

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

D.F. ✓

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No.
Notes by Landa Time 1:00 - 1:45 Rod No. 21 & 22

Name Marina Sub. Study
Job No. 0739.03
From M.D.R. #71 To B.M. #19
Date 6-13-60
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	BACKSIGHT Mean	BACKSIGHT Thread Intervals	BACKSIGHT Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	FORESIGHT Mean	FORESIGHT Thread Intervals	FORESIGHT Sum of Intervals	DESCRIPTION AND REMARKS
	5538	24.986	329	5600		1217	24.097	334	5655	B.M. #19
	5209		330			0883		335		SEE Pg. 15
	4879		659			0548		669		
6	15626	5.209		6259		2648	0.883		6324	Summation of Run
		30.195					24.980			Total Backsights = +30.195
										" Foresights = -24.980
										Diff. in El. = + 5.215
	1141		335		#22	5463		330		B.M. #19
	0806		334			5133		330		See Pg. 15 & 68
	0472		669			4803		660		
1	2419	0.806		669		15399	5.133		660	
	4938		481			6155		470		
	4457		482			5685		468		
2	3975		963			5217		938		
	13370	4.457		1632		17057	5.686		1598	
		5.263					10.819			

F.B. 2649 P.G. 235

76P526 S & E #379 1-54

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

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

p.f. V

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 162552
Notes by Landa Time 1:45 - 2:30 Rod No. 21 & 22

Name Marina 516 Study
Job No. 0739.03
From B.M. #19 To M.R. #21
Date 6-13-69
Indexed K. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	6397	5.263	526	1432		6162	10.819	535	1598	
	5871		529			5627		532		
	5342		1055			5095		1067		
3	17610	5.870		2687		16884	5.628		2665	
	6396		571			6084		549		
	5823		570			5505		550		
	5253		1141			4955		1099		
2	17470	5.823		3828		16516	5.505		3716	
	5906		573			4753		708		
	5333		576			4045		708		
	4757		1149			3337		1416		
5	15996	5.332		4977		12135	4.045		5180	
	5982		640			6117		603		
	5342		640			5514		606		
	4702		1280			4908		1209		
6	16026	5.342		6257		16539	5.513		6389	
	5597		272			5647		284		
	5325		271			5363		284		
	5052		543			5099		568		
7	15974	5.325		6800		16109	5.383		6957	
	32.955					36.893				

12

F.B. 2619 P.G. 236

76P526 S & E #379 1-54

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

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

D.F. ✓

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 142552
Notes by Landa Time 1:45 - 2:30 Rod No. 21 & 22

Name Marina Sub. Study
Job No. 0739.03
From B.M. #19 To M.D.R. #21
Date 6-13-60
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	BACKSIGHT Mean	BACKSIGHT Thread Intervals	BACKSIGHT Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	FORESIGHT Mean	FORESIGHT Thread Intervals	FORESIGHT Sum of Intervals	DESCRIPTION AND REMARKS
	5745	32.955	618	6800		5916	36.893	643	6957	
	5127		615			5273		646		
	4512		1233			4627		1289		
8	15384	5.128		8033		15816	5.272		8246	
	5552		648			6304		577		
	4904		646			5727		574		
	4258		1294			5153		1151		
9	14714	4.905		9327		17184	5.728		9397	
	5632		329			4558		295		M.D.R #21
	5303		326			4263		295		52nd Pl. & Spdwy.
	4977		655			3968		590		derrick footing
10	15912	5.304		9982		12789	4.263		9987	SEE Pg. 16
										Summation of Run
										Total Backsights = +48.292
										" Foresights = -52.156
										Diff. in El. = - 3.864
		48.292					52.156			

F.B. 2449 P.G. 237

13

76P526 S & E #379 1-54

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

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

D.F. ✓

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 142552
Notes by Landa Time noon Rod No. 21 & 22

Name Marina Sub Study
Job No. 0739.03
From M.D.R. #21 To M.D.R. #22
Date 6-13-40
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	BACKSIGHT Mean	BACKSIGHT Thread Intervals	BACKSIGHT Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	FORESIGHT Mean	FORESIGHT Thread Intervals	FORESIGHT Sum of Intervals	DESCRIPTION AND REMARKS
	4265		592		22	6118		603		M.D.R. #21
	3673		595			5515		602		
	3078		1187			4913		1205		
1	11016	3.672		1187		16546	5.515		1205	
	5860		387			6378		338		M.D.R. #22
	5473		388			6040		337		℄ Inter. Spdwy. &
	5085		775			5703		675		51st Ave.
2	16418	5.473		1962		18121	6.040		1880	SEE Pg. 16
										Summation of Rem
										Total Backsights = 9.145
										" Foresights = 11.555
										Diff. in El. = − 2.410 ✓
		9.145 ✓					11.555 ✓			

F.B. 2649 P.G. 238

14

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 142552
Notes by Landa Time Noon Rod No. 21 & 22

Name Marina Sub. Study
Job No. 0739.03
From M.O.E. #22 To M.O.E. #23
Date 6-13-60
Indexed E C Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B.S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	6048		576		22	6174		596		M.O.E. #22 & inter. Spdwy. & 51st Ave.
	5872		579			5578		593		
	5293		1155			4985		1189		
1	17613	5.871		1155		16737	5.579		1189	
	6032		679			5305		580		
	5753		677			4725		581		
	5076		1356			4144		1161		
2	17261	5.754		2511		14174	4.725		2350	
	6128		547			6318		643		
	5581		548			5675		642		
	5033		1095			5033		1285		
3	16742	5.581		3606		17026	5.675		3635	
	6250		566			4948		570		
	5684		567			4378		567		
	5117		1133			3811		1137		
4	17051	5.684		4739		13137	4.379		4772	
	5871		515			7082		531		
	5356		513			6551		533		
	4843		1028			6018		1064		
5	16070	5.357		5767		19651	6.550		6836	
		28247					26.908			

F.B. 2449 P.G. 239

15

76P526 S & E #379 1-54

PLEASE RETURN TO

LOS ANGELES COUNTY SURVEYOR

726 LOS ANGELES COUNTY
ENGINEERING BLDG.

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 162552
Notes by Landa Time [illegible] Rod No. 21422

Name Marina [illegible]
Job No. 0789.03
From M.O.C. 22 To M.O.C. #23
Date 6-13-62
Indexed A. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	5545	28.2471	198	5767		3986	26.908	186	5756	M.O.C. # 23
	5347		198			3802		186		Well [illegible] Ave. & [illegible]
	5149		396			3616		370		
4	16041	5.347		6163		11404	3.801		6206	SEE Pg. 17
										Summation of Run
										Total Backsights + 33.592
										" Foresights = -30.709
										Diff. in Elev = +2.883
		33.592					30.709			

F.B. 2649 P.G. 240

16

76P526 S & E #379 1-54

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 142552
Notes by Landa Time noon Rod No. 21 & 22

Name Marina Sub. Study
Job No. 0739.03
From M.D.R. #23 To M.D.R. #24
Date 6-13-60
Indexed C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	3910		187		#22	5363		217		M.D.R. #23
	3723		187			5126		218		Well footing 46th
	3536		374			4908		435		Ave & Spdwy.
1	11169	3.723		374		15377	5.126		435	
	6547		721			6303		699		
	5823		725			5604		701		
	5098		1449			4903		1400		
2	17468	5.823		1823		16810	5.603		1835	
	6659		583			6498		675		
	6076		584			5823		676		
	5492		1167			5147		1351		
3	18227	6.076		2990		17468	5.823		3186	
	7123		847			4738		723		M.D.R. #24
	6276		844			4015		723		Bridge Curbing
	5432		1691			3292		1446		Pacific & 43rd Ave.
4	18831	6.277		4681		12045	4.015		4632	SEE Pg. 17
										Summation of Run
										Total Backsights = 21.899
										" Foresights = 20.567
										Diff. in El. = + 1.332
		21.899					20.567			

F.B. 2649 P.G. 241

17

76P526 S & E #379 1-54

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

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

IRC

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Hazy Inst. No. 122552
Notes by Landa Time afternoon Rod No. 21 & 22

Name Marina Sub. Study
Job No. 0739.03
From M.O.R. #24 To M.O.R. #25
Date 6-13-60
Indexed L. C. Johnson

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	4077	21.899	252		22	6432	20.567	169		M.O.R. # 24
	3825		250			6263		168		Bridge Curbing
	3575		502			6095		337		Pacific Ave & 43rd Ave
1	11477	3.826		502		18796	6.263		337	
										M.O.R. #25
										Inter. Pacific & 43rd Ave
										SEE Pg. 18
										Summation of Run
										Total Backsights = 3.826
										" Foresights = 6.263
										Diff. in Elev. = -2.437
		25.725					26.830			

F.B. 2449 P.G. 242

76P526 S & E #379 1-54

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

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

D.F. ✓

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Clear Inst. No. 142552
Notes by Landa Time — Rod No. 21 & 22

Name Marina Sub. Study
Job No. 0739.03
From M.D.R. #67 To M.D.R. #68-A
Date 6-22-60
Indexed

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	11043		636		#22	3524		655		B.M. M.D.R. #67
	10407		633			2869		656		See pg. 27
	9774		1269			2213		1311		Re-Run #3
1	31224	10.408		1269		8606	2.869		1311	
	5387		648			5524		573		
	4739		644			4951		573		
	4095		1292			4378		1146		
2	14221	4.740		2561		14853	4.951		2457	
	6223		579			5296		583		
	5644		576			4713		585		
	5068		1155			4128		1168		
3	16935	5.645		3716		14137	4.712		3625	Summation of Run
	5185		587			5587		550		Total + = 31.109 ✓
	4598		583			5037		549		Total − = 19.726 ✓
	4015		1170			4488		1099		Diff. el = +11.383 ✓
4	13798	4.599		4886		15112	5.037		4724	
	6128		411			2539		382		B.M. M.D.R. #68-A
	5717		410			2157		382		See pg.
	5307		821			1775		764		
5	17152	5.717		5707		6471	2.157		5488	
		31.109 ✓		5488			19.726 ✓			
				.219						

F.B. 2649 P.G. 243

76P526 S & E #379 1-54

DF C

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party English Weather Clear Inst. No. 142552
Notes by Landa Time — Rod No. 21422

Name Marina Sub. Study
Job No. 0739.03
From M.D.R. 68-A To M.D.R. 69
Date 6-60
Indexed

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	2649		396		21	7168		432		B.M. M.D.R.# 68-A
	2053		399			7716		434		See pg. 227
	1654		795			7282		866		
1	6156	2.052		795		23166	7.715		866	Re-Run #3
	6312		595			4238		672		
	5717		592			3566		673		
	5125		1187			2893		1345		
2	17154	5.718		1982		10697	3.566		2211	
	4596		582			5521		524		
	4014		582			4997		524		
	3432		1164			4473		1048		
3	12042	4.014		3146		14991	4.997		3259	
	5278		593			4971		585		
	4685		591			4386		584		
	4094		1184			3802		1169		
4	14057	4.686		4330		13159	4.386		4128	
	5336		539			5741		521		
	4797		539			5223		520		
	4258		1078			4703		1041		
5	14391	4.797		5408		15670	5.223		5469	
		21.267					25.187			

F.B. 2649 P.G. 244

76P526 S & E #379 1-54

DF. V

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

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

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party E.E. Weather Clear Inst. No. 142552
Notes by Landa Time — Rod No 21822

Name Marina Sub. Study
Job No. 0793.03
From M.D.R. #6-A To M.D.R. 69
Date 6-60
Indexed

Number of Station	BACKSIGHT Thread Readings	BACKSIGHT Mean	BACKSIGHT Thread Intervals	BACKSIGHT Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	FORESIGHT Mean	FORESIGHT Thread Intervals	FORESIGHT Sum of Intervals	DESCRIPTION AND REMARKS
	3036	21.267	583	5408		8703	25.887	773	5469	B.M. M.D.R. # 69
	2453		585			7930		775		
	1868		1168			7155		1548		
6	7357	2.452		6576		23788	7.929		7017	
										Summation of Run
										Total + = 23.719
										Total − = 33.816
										Diff. in el = −10.097
		23.719					33.816			

F.B. 2649 P.G. 245

76P526 S & E #379 1-54

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

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

E.M.D.

DO NOT EXTEND NOTES THIS SIDE OF LINE

Chief of Party E. E. Weather Hazy Inst. No. 122552
Notes by Landa Time a.m. Rod No. 21 & 22

Name Marina Sub. Study
Job No. 0739.03
From mon. #1 To B.M. #19
Date 6-23-60
Indexed

Number of Station	BACKSIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	B. S. Rod and Temp.	FORESIGHT Thread Readings	Mean	Thread Intervals	Sum of Intervals	DESCRIPTION AND REMARKS
	6127		551		+21	5332		620		B.M. M.D.R. # 71
	5576		549			4712		619		See Pg. 28
1	5027		1100			4093		1239		
	16730	5.577		1100		14137	4.712		1239	Re Run #3
	5432		638			6052		597		
	4794		639			5455		594		
2	4155		1277	2377		4841		1191	2130	
	14381	4.794				16308	5.436			
	6208		651			6556		664		
	5557		649			5892		663		
3	4908		1200	3577		5229		1327	3757	Summation of Error
	16673	5.5581				17677	5.892			Total + = 27.617
	6017		664			6163		616		Total - = 22.405
	5353		645			5547		615		Diff. el = + 5.212
4	4688		1329	4906		4932		1231	4988	
F.B. 2449 P.G. 246	16058	5.353				16642	5.547			
	6894		559			1402		585		B.M. # 19
	6335		560			0817		582		See Pg. 15
5	5775		1119	6025		0235		1167	6153	
	19004	6.335				2454	0.818			
		27.617					22.405			

76L298 S & E #307 9-54

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

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

Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.		
Preserving Benches To Be Destroyed By Constr.						
B.M. M.D.R. #50	8 01	16 84		8 83	B.M. M.D.R. #50 See pg. 21 (To be destr.)	
B.M. M.D.R. 50-A			5 56	11 28	B.M. M.D.R. #50-A. Westside Lincoln	
M.D.R. 50-A	5 50	16 78		11 28	Blvd. @ Hughes S.D. Ditch, 1 set Bt.	
M.D.R. #50			7 95	8 83	spk. in Conc. Head Wall, 1 ft. N.	
					of S. end Headwall.	
B.M. M.D.R. #51	8 26	15 67		7 43	B.M. M.D.R. #51, See Pg. 22 (To be destr.)	
B.M. M.D.R. 51-A			4 53	11 14	B.M. M.D.R. #51-A, Lincoln Blvd. &	
M.D.R. 51-A	4 45	15 59		11 14	℄ Prod. mole #6, Fd. L & Tag in	
M.D.R. 51			8 16	7 43	Conc. Pvmt. Per F.B. 2380-208.	

Profile No. ____ Notes Red. ____ Date ____ Plotted ____ Date ____ Job No. 0793.03 Division No. 11 F.B. 2649 Pg. 247

X-Sec. No. ____ Notes Chkd. ____ Date ____ Checked ____ Date ____ Survey of Marina Sub. Study Survey by English Notes Land Date 7-27-60

Map No. ____ Date ____ Indexed ____ Date ____

F. B. 2669 Pg. 248 | Job No. 0793.03 | Division No. " | Notes Red | Plotted | Profile

Survey of Marina Sub. Unit | Date | Date | No.

Survey by English | Notes Leeds | Notes Chkd. | Checked | X-Sec.

Indexed | Date | Date | Date | No.

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

761-328 S & E #307 9-54

PLEASE RETURN TO

LOS ANGELES COUNTY SURVEYOR

726 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 Marina Del Rey
Map No.	JN 0739.01 Tape 0195 Std 68 °F
Office Work	Surveyed by English
Checked	Notes Ed. Date 6-60
Date	Indexed JUL 1 8 '61 H. E. CITY

F. B. 2649 PG. 247

MARINA DEL REY

J.N. 0739.01

SURVEY
FOR
SEWER
R/W

June 1960
English
Landa
Foulger
Dupuis
Clifford

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 LOS ANGELES COUNTY ENGINEERING BLDG.
Do not extend this side of this line.
Note: Any Additions or Changes on This Sheet [illegible] Ink With Date and Name of Person Making Change.

76F3098 S&E F247 11-60

F. B. 2649 Pg. 248

INDEX MAP

Pg. 250

Marina Del Rey Bdry. Mole & #2 Prod.

40' Sewer Prod. Easement

E'ly. line pg. 249 Blk. 6

Esplanade

Ave.

Canal Ct.

Pacific Ct.

39th

Pacific Ave.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

Do not extend 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 Marina Del Rey	F. B. 2649 Pg. 249
Map No.		JN 0739.01 Tape 0195 Std. 68 °F	
Office Work		Surveyed by English	
Checked		Notes Ed. Date 6-60	
Date		Indexed H. E. OTT	

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

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

Do not extend this side of this line.

Cont. Pg. 250

137.44

fd. Old 1½" I.P. Up 3" - no plug or nail no ref.

M. 46.14

92°30'30" M.

E'ly. line Blk. 6

Set 1X2 & N. flush Per: plan

100'

10300

fd. 1X2 & Nail - flush fd. nothing dr. 2' Per: L.A. City 11601-53

3' Per: L.A. City

14.84

15.95

fd. L & T.s

10'

Conc. Wlk.

50'

ESPLANADE

10'

Conc. Wlk.

176.72

39th (20) & AVE. (20)

T-68°
176.72 Elev.: 176.72
103.00 " = 103.00

CANAL & CT.

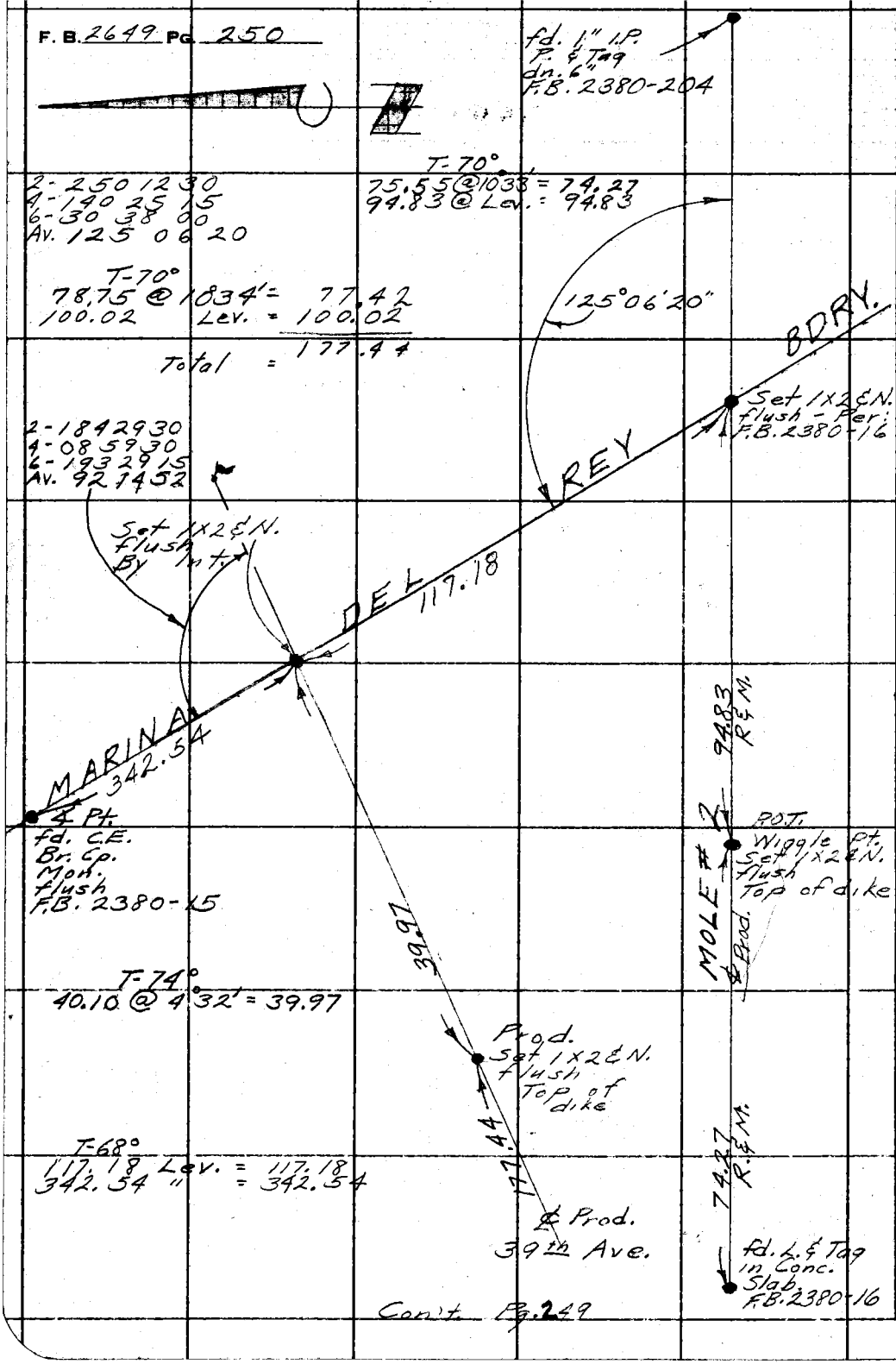
50.00 R. & M.

fd. S. & T. flush Per: "Geo. Horn" - L.A. City Party chief

Int. fd. 4-P.M.s in M.H. rim L.A. City 10524-49

70F309S SEE #247 11-58

F. B. 2649 Pg. 250



Con't. Pg. 249

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

Do not extend 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 Marina Del Rey F. B 2668 Pg. 251
Map No.	JN 0739.01 Tape — Std — °F
Office Work	Surveyed by English
Checked	Notes Landa Date 6-60
Date	Indexed L. E. ON JUL 18 61

MARINA DEL REY

J.N. 0739.01

SEWER EASEMENT

TOPOGRAPHY

June - 1960
English
Landa
Foerster
Dupuis
Clifford

Note: Any Additions 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.

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

78F3095 SSE #247 11-58

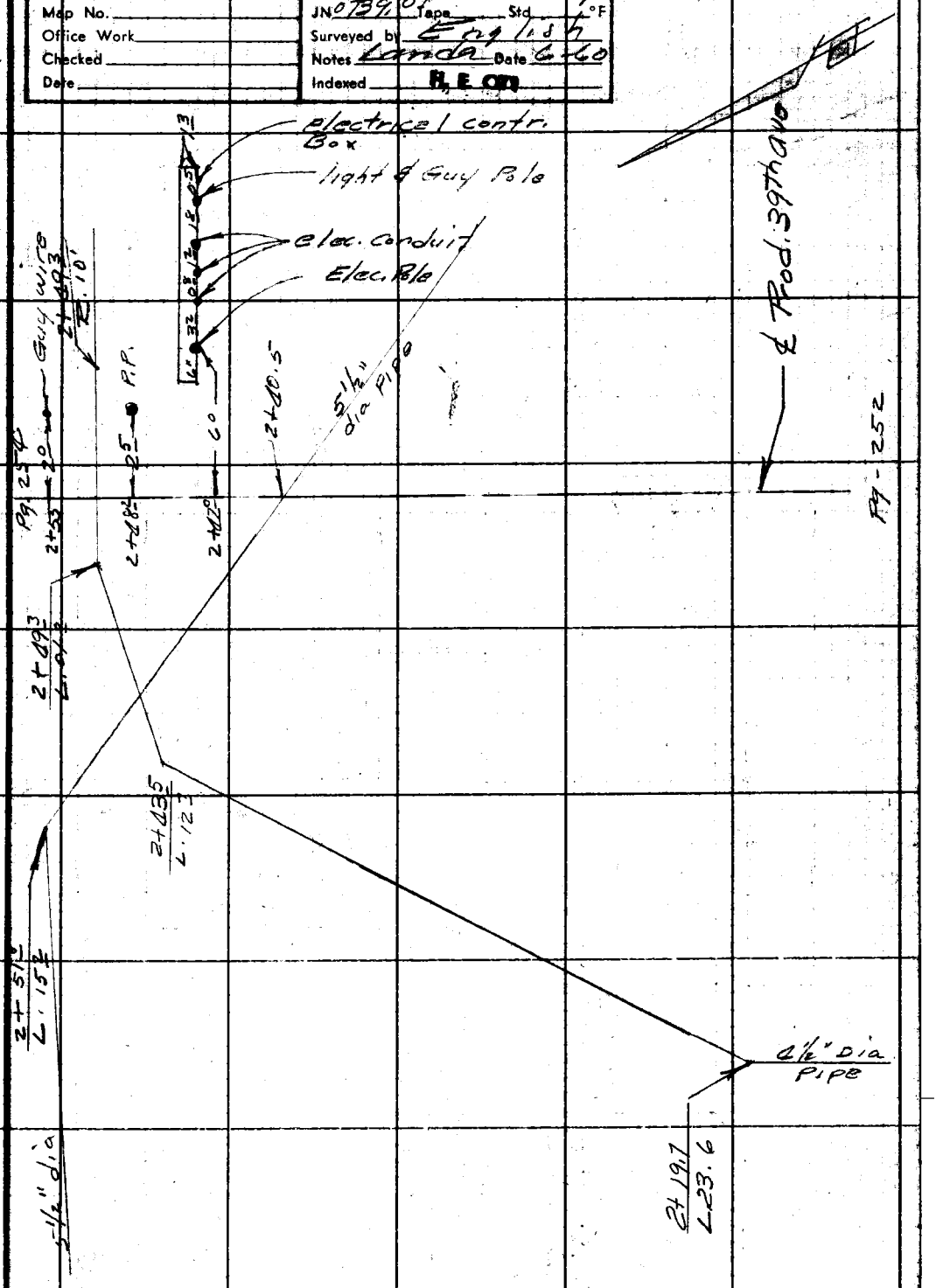
PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 LOS ANGELES COUNTY ENGINEERING BLDG.

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

Do not extend this side of this line.

Notes Ck'd by	Survey of Marina Del Rey
Map No.	JN 0739.01 Tape Std °F
Office Work	Surveyed by English
Checked	Notes Landa Date 6-60
Date	Indexed H. E. Ott

F. B. 2649 PG. 253



Note: Any Additions 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.

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

76F3098 S&E #247 11-58

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

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

Do not extend this side of this line.

Profile No. | Notes Red. | Plotted | Job No. 0739.01 | Division No. 10 | F. B. 2649 Pg. 255

X-Sec. No. | Notes Chkd. | Checked | Survey of Marina Del Rey | Survey by English | Notes Ed. | Date 6-60

Date | Date | Map No. | Indexed H. E. OTT | Date JUL 1 '61

MARINA DEL REY

J.N. 0739.01

SEWER
EASEMENT
X-SEC.S

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

June 1960
English
Lando
Foulger
Dupuis
Clifford

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

NOTE: ANY ADDITIONS OR CHANGES ON THIS SHEET MUST 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 SURVEYOR
726 LOS ANGELES COUNTY ENGINEERING BLDG.

76L295 S & E #307 9-54

76L298 S & E #307 9-54

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

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

Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	M.L.L.W.	℄ Prod. 39th Ave.
Fd.					B.M.	
B.M. MDR.67	435	12 01		7 66	M.D.R. #67, Field El. = 7.66	
D+48 5			6 35	5 66	Sewer M.H. wood rim	8° R. {wood forms, new m.h. under construction}
			257	-13 7	Rod + Rim = 20° 5.66 = 25 7 =	Bot. chamber {under construction}
2+00			6 3	5 7		℄ Prod. - pg. 249
			6 8	5 2		10 R.
			6 7	5 3	30 L.	
2+31			7 9	4 1	Brk.	℄ prod
2+32			9 3	2 7	"	"
2+34			9 3	2 7	"	"
2+36			9 9	2 1	"	"
2+43			7 4	4 6	"	"
2+50			5 8	6 2	"	℄ "
			5 5	6 5		10 R.
			5 7	6 3	30 L.	
2+54			4 8	7 2	Brk.	℄ Prod
2+90			4 0	8 0	"	℄ "
3+00			4 8	7 2		℄ "
			4 6	7 4		10 R.
			4 72	7 29	30 L. derrick floor - wood	
T.P.	9 69	16 36	5 34	6 67		
3+22			10 3	6 1	Brk.	℄ Prod.

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

F. B. 2649 PG. 256 | Job No. 0739.01 | Division No. 10 | Notes Red. | Plotted | Profile
Survey of Marina Del Rey | Date | Date | No.
Survey by English | Notes Ed. | Notes Chkd. | Checked | X-Sec.
Indexed R.E. CTY | Date | Date | Date | No.

76L298 S & E #307 9-54

PLEASE RETURN TO
LOS ANGELES COUNTY SURVEYOR
726 Los Angeles County Engineering Bldg.

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

Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	M.L.L.W.
3+55		16 36	10 5	5 9	dike toe ℄ prod
T.P.	6 96	21 33	1 99	14 37	1 X 2
3+77			1 2	20 1	Top dike ℄ "
3+88			8 7	12 6	Brk.-unfinnished grade ℄ "
4+17 41			8 6	12 7	pg. 250 - Int. 39th Ave. & Marina Bdry.
T.P.	1 33	15 71	6 95	14 38	
B.M. M.D.R. #67			8 10	7 61	M.D.R. #67, Field elev. = 7.66

DATUM
MEAN LOWER LOW WATER
SUB, 2.78 FT. TO CONVERT TO
MEAN SEA LEVEL DATUM

Profile Notes Red. Plotted Job No. 0739.01 Division No. 10 F. B. 2649 Pg. 257
No. Date Date Survey of Marina Del Rey
X-Sec. Notes Chkd. Checked Survey by English Notes Ed. Date 6-60
No. Date Date Map No. Indexed L. E. Ott Date

F. B. 2649 Pg. 258 | 0739.01 Job No. Division No. 10 Notes Red. Plotted Profile

Survey of Marina Del Rey Date Date No.

Survey by English Notes Ed. Notes Chkd. Checked X-Sec.

Indexed Date Date Date No.

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

761298 S & E #307 9-54

PLEASE RETURN TO

LOS ANGELES COUNTY SURVEYOR

726 LOS ANGELES COUNTY ENGINEERING BLDG.

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

Do not extend notes this side of this line.

76L-298 S & E #307—1-56

PLEASE RETURN TO
LOS ANGELES COUNTY ENGINEER
700 Los Angeles County Engineering Bldg.

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

Do not extend notes this side of this line.

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

Profile Notes Red. Plotted Job No. Division No.
No. X-Sec. Date Date Survey of
Notes Chkd. Checked Survey by Notes Date
No. Date Date Map No. Indexed Date

F. B. Pg.

F. B. Pg.

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

Survey of Date Date No.

Survey by Notes Notes Chkd. Checked X-Sec.

Indexed Date Date Date No.

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

76L-295 S & E #307—1-56

PLEASE RETURN TO

LOS ANGELES COUNTY ENGINEER

700 Los Angeles County Engineering Bldg.

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

Do not extend notes this side of this line.

76L-298 S & E #307-1.56

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

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

Do not extend notes this side of this line.

STATION	B. S.	H. I.	F. S.	ELEV.	PIPE LENGTH	GROUND	DATE	
TBM S-#29	5.93	15.93		10.00				
V.C. #26			+1.20	17.13	4.8	12.3	3-9-61	
V.C. #27			0.20	15.73	2.7	13.0	3-9-61	
TBM #28	7.83	17.86		10.03				
V.C. #36			+2.13	19.99	3.9	16.1	3-9-61	
V.C. #35			+1.65	19.51	3.5	16.0	3-9-61	
TBM S-#27	4.89	14.88		9.99				NOTE:
V.C. #34			+3.97	18.85	4.2	14.7	3-9-61	37, 38, 41, 49, 51, 52,
V.C. #33			+4.30	19.18	4.6	14.6	3-9-61	54, 56, & 66 are out.
TBM S-#25	6.95	16.92		9.97				
V.C. #32			+3.00	19.92	5.0	14.9	3-9-61	
V.C. #31			+2.00	18.92	4.9	14.0	3-9-61	
V.C. #30			0.40	16.52	5.0	11.0	3-9-61	
V.C. #29			0.90	16.02	5.0	11.0	3-9-61	
T.P.	6.10	16.83		10.73				
V.C. #42			0.63	16.20	5.4	10.8	3-9-61	
V.C. #43			+0.20	17.03	5.5	11.5	3-9-61	
T.P.	4.33	18.22	2.94	13.89				
V.C. #44			0.61	17.61	5.0	12.6	3-9-61	
V.C. #45			1.56	16.66	3.4	13.3	3-9-61	
T.P.			2.64	15.58				

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

F.B. Pg.

Job No. Division No. Notes Red. Plotted Profile

Survey of Date Date

Survey by Notes Notes Chkd. Checked

Indexed Date Date Date

V.C. #46			4.20	16.45	1.7	14.8	3-10-61
V.C #47			2.93	17.72	2.1	15.6	3-10-61
T.P.	3.92	21.59	2.98	17.67			
V.C. #48			1.30	20.29	4.3	16.0	3-10-61
V.C #50			+0.66	22.25	4.6	17.7	3-10-61
TBM S-#18	11.50	21.47		9.97			
V.C. #40			6.96	14.51	2.9	11.6	3-10-61
V.C. #39			7.22	14.25	3.4	10.9	3-10-61
T.P.	5.38	21.95		16.57			
V.C. #65			1.68	20.27	7.5	12.8	3-13-61