

JOHN WAIHEE  
GOVERNOR OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES

P. O. BOX 821  
HONOLULU, HAWAII 96808

'91 MAR 21 P2:46

OFC. OF ENVIRONMENTAL  
QUALITY CONTROL

WILLIAM W. PATY, CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES

DEPUTES

KEITH W. AHUE  
MANABU TAOMORI  
Dan T. Kochi

AQUACULTURE DEVELOPMENT  
PROGRAM  
AQUATIC RESOURCES  
CONSERVATION AND  
ENVIRONMENTAL AFFAIRS  
CONSERVATION AND  
RESOURCES ENFORCEMENT  
CONVEYANCES  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
PROGRAM  
LAND MANAGEMENT  
STATE PARKS  
WATER AND LAND DEVELOPMENT

REF:OCEA:JN

FILE: OA-3/11/91-2430  
DOC.: 0347E

MAR 20 1991

MEMORANDUM

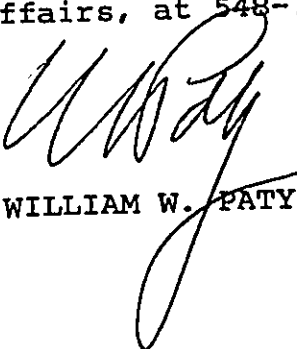
TO: Office of Environmental Quality Control

FROM: William W. Paty, Chairperson  
Board of Land and Natural Resources

SUBJECT: DOCUMENT FOR PUBLICATION IN THE OEQC BULLETIN -  
ENVIRONMENTAL ASSESSMENT FOR CONSERVATION DISTRICT USE  
APPLICATION OA-2455 for a portion of an existing seawall  
TMK: 4-3-3: 75, 4-3-4, 83 and 87

The above mentioned Chapter 343 Document was reviewed and a negative declaration was declared based upon the environmental assessment provided with the CDUA.

Please feel free to call me or Roy Schaefer of our Office of Conservation and Environmental Affairs, at 548-7837, if you have any questions.

  
WILLIAM W. PATY

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1991-04-08-DA-FEA - Mitchell after the fact seawall Lanikai

## FILE COPY

### ATTACHMENT A

#### ENVIRONMENTAL ASSESSMENT FOR A SEAWALL LOCATED AT 1426 MOKULUA DRIVE, LANIKAI, KAILUA, HAWAII

##### I. IDENTIFICATION OF APPLICANT

Stanley D. Suyat, agent for the Cyril Thomson Mitchell Trust, Applicant herein, files this environmental assessment in connection with a Conservation District Use Application ("CDUA") for after-the-fact approval of the use of State Conservation District land, which is occupied by minor portions of a lava rock seawall, located along the shoreline at Lanikai, Kailua, Hawaii.

The seawall is largely constructed on three parcels, which are described in detail in Part V of this assessment, and its street address is 1426 Mokulua Drive, Lanikai, Kailua, Oahu.

##### II. IDENTIFICATION OF APPROVING AGENCY

This CDUA is being submitted to the Department of Land and Natural Resources ("DLNR") for after-the-fact approval for the existing placement of minor portions of the seawall that extend into the State Conservation District. The CDUA requests the Board of Land and Natural Resources ("Board") to grant its approval for the existing placement of those minor portions of the seawall that extend into the State Conservation District. DLNR is requested to file a negative declaration

with the Office of Environmental Quality Control subsequent to a review of this assessment.

### III. AGENCIES CONSULTED

Informal discussions were held with the Land Management Division and the Office of Conservation and Environmental Affairs ("OCEA"), both agencies being offices of DLNR.

### IV. DESCRIPTION OF PROPOSED ACTION

This CDUA requests after-the-fact approval for the use of State land for minor portions of a seawall that encroach into the State Conservation District. The encroachments, which are 9 square feet and 133 square feet, respectively, will require easements from the Land Management Division, DLNR, when this CDUA is granted.

This CDUA includes a surveyor's drawing depicting (a) the Applicant's property, (b) the certified shoreline as of June 1, 1986, and (c) the two encroachments (labeled Easement "A" and Easement "B", respectively).<sup>1</sup>

The proposed action is the result of extensive discussions with DLNR and the Department of Land Utilization ("DLU"), City and County of Honolulu ("City"). A detailed chronology of the events associated with this particular seawall is set forth in Attachment B of this CDUA.

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<sup>1</sup>Exhibit A-1.

Concurrent with this CDUA, a petition is being submitted to Land Court, State of Hawaii, to approve the consolidation of Tax Map Key ("TMK") Nos. 4-3-03:75 and 4-3-04:83 and to redesignate Applicant's seaward (makai) boundaries for these two parcels to conform to the June 1, 1986 certified shoreline. The consolidation and boundary redesignation does not require action by the Board, although the State of Hawaii, through the Department of the Attorney General, will be served a copy of the Land Court petition.

Applicant has informally consulted with the State Surveyor, who has indicated no objection to redesignating the makai boundary to conform to the June 1, 1986 certified shoreline. The parcel consolidation was approved by DLU on December 18, 1986.

V. DESCRIPTION OF AFFECTED ENVIRONMENT

The seawall is located along the makai boundary of Applicant's property, identified by TMK Nos. 4-3-03:75, 4-3-04:83 and 87.<sup>2</sup> Parcels 75 and 83 were consolidated on December 18, 1986.<sup>3</sup> The property is located on the makai side of Mokulua Drive, Lanikai, Kailua, Oahu.

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<sup>2</sup>Exhibits A-2 and A-3 (tax maps).

<sup>3</sup>Compare Exhibit A-1 with Exhibits A-2 and A-3.

The land area on the mauka side of the seawall is landscaped and relatively flat. The area has been developed with residential structures.<sup>4</sup>

The land area on the makai side of the seawall is a gently sloping sandy beach which, depending upon the seasonal tides and the wash of the waves, may be partially or entirely submerged.<sup>5</sup> A site map and location map are included in Attachment D herein.

VI. SUMMARY OF MAJOR IMPACTS AND ALTERNATIVES CONSIDERED

The major impact upon Applicant's property has been the constant erosion by seasonal tides and wave action, hence the need for a seawall to protect the land from further erosion.

The effects of the wave action and the extent of the erosion on Applicant's property can be demonstrated by comparing the reported land areas in Exhibits A-1, A-2 and A-3.

The land areas that have been used for real property tax assessment purposes are:

<u>TMK</u>	<u>Area (Sq. Ft.)</u>
4-3-03:75	28,289
4-3-04:83	28,672
4-3-04:87	<u>27,904</u>
Total	84,865

<sup>4</sup>Exhibits A-4 and A-5 (photographs of land area mauka of seawall).

<sup>5</sup>Exhibits A-6 and A-7 (photographs of land area makai of seawall).

This report assumes that at some previous time all or most of the land area assessed for real property taxes was above the high water mark.

In comparison, Exhibit A-1 shows the following land area:

<u>Parcel</u>	<u>Area (Sq. Ft.)</u>
336 (TMK 4-3-04:87)	27,904
364 (two parcels consolidated)	<u>38,677</u>
Total	66,581

In summary, the difference in the two reported land areas is as follows:

<u>Exhibit</u>	<u>Area (Sq. Ft.)</u>
A-2 and A-3	84,865
A-1	- <u>66,581</u>
Difference	18,284

Note that the reported land area for TMK 4-3-04:87 remained unchanged in Exhibits A-1 and A-2, although a substantial portion of that parcel extends beyond the certified shoreline.

A surveyor's drawing attached hereto<sup>6</sup> of the three parcels prior to consolidation, showing the certified shoreline as of March 25, 1986 (the shoreline was re-certified on June 1, 1986), further demonstrates the extent of erosion. Note that each parcel shows two land areas, one of which is in

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<sup>6</sup>Exhibit A-8.

parentheses. The land areas in parentheses represent those portions mauka of the certified shoreline, which are still available for Applicant's use. The land areas without parentheses are the "official" parcel sizes. The differences in the two reported land areas for each parcel are indicative of the impact of erosion upon Applicant's property.

The only other alternative considered and rejected by Applicant, other than reconstructing the seawall, was to allow it to remain in a state of disrepair.

The present placement of the seawall does not appear to have any major impacts on the environment. Edward K. Noda & Associates, oceanographic consultants who have also conducted an extensive study of the effect of wave action along the Lanikai beachfront, concluded that the seawall would not result in any significant adverse effect upon the environment.<sup>7</sup>

After receiving correspondence from DLNR dated November 4, 1988 which ordered removal of the seawall (as first reconstructed) from the Conservation District, Applicant demolished the Waimanalo side of the seawall and, to minimize its impact on State-owned land, constructed it outside of the Conservation District. This alternative was undertaken at considerable additional expense to the landowner and after several informal discussions with the Land Management Division and DLU. Even after demolition and reconstruction of the

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<sup>7</sup>Exhibit A-9 (Noda report).

seawall in 1989, there are no significant adverse effects on the environment. The beach area remains unaffected after the seawall was demolished and reconstructed.<sup>8</sup>

VII. MITIGATION MEASURES

This present CDUA is the result of OCEA rejecting Applicant's previous CDUA No. OA-2173 and ordering it by correspondence dated November 4, 1988 to remove portions of the seawall that encroached into the State Conservation District after the first reconstruction.

CDUA No. OA-2173 was initiated because Applicant's contractor initially rebuilt the seawall upon the original foundation, thus aligning with the neighboring seawall. Portions of the original foundation are makai of the June 1, 1986 certified shoreline, which resulted in locating portions of the reconstructed seawall within the State Conservation District.<sup>9</sup>

After subsequent extensive informal discussions with DLNR and building permit difficulties with the City, Applicant agreed to demolish and reconstruct the Waimanalo end of the seawall. Applicant understood that it could apply for an easement for other minor wall encroachments since demolition

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<sup>8</sup>Exhibits A-6 and A-7 (photographs of the beach area makai of the seawall).

<sup>9</sup>Exhibit A-10 (June 1, 1986 certified shoreline and seawall as of December 17, 1987).



and reconstruction of those other portions of the wall were not reasonable or cost effective.

Applicant completed the demolition and second reconstruction of the seawall sometime in September 1989. Applicant's contractor then requested an easement for the minor portions of the seawall which encroached into the State Conservation District. Applicant's contractor was informed by letter dated December 27, 1989 that a CDUA would be required prior to granting the easements.

Applicant has expended in excess of \$70,000 to comply with DLNR's order to remove the seawall from the State Conservation District and to mitigate its first reconstruction efforts.<sup>10</sup> A survey drawing comparison of the first and second reconstruction areas demonstrates the results of Applicant's efforts to mitigate the encroachment.<sup>11</sup> A comparison of "before" and "after" photographs of the second reconstruction also demonstrates these efforts.<sup>12</sup>

Applicant maintains that it has taken more than reasonable measures to mitigate the original encroachment by expending a substantial sum on demolition and a second reconstruction, including obtaining all necessary City permits to relocate the seawall. Applicant further maintains that

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<sup>10</sup>Exhibit A-11 (estimate of seawall reconstruction costs).

<sup>11</sup>Compare Exhibit A-10 with Exhibit A-1.

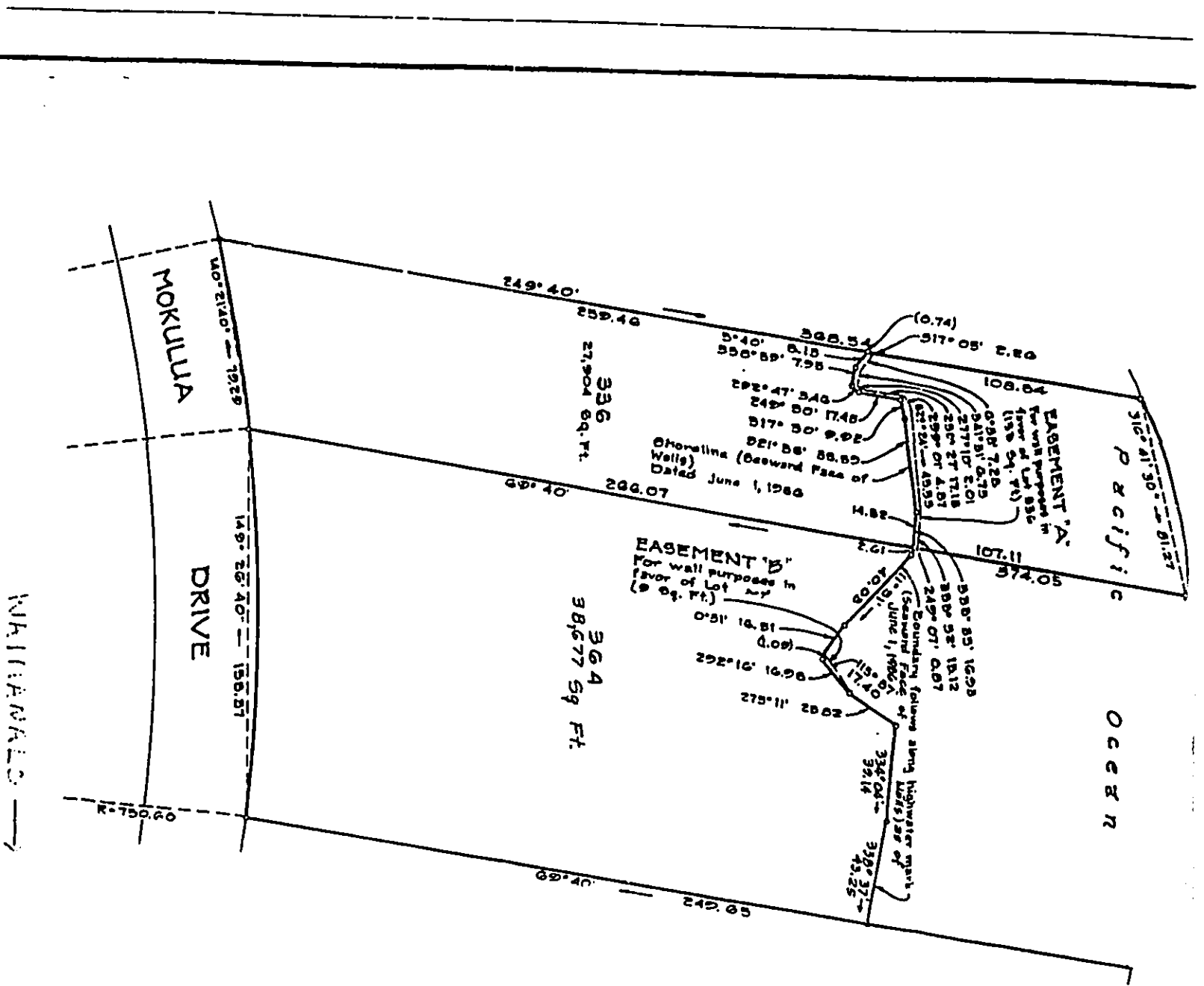
<sup>12</sup>Compare Exhibit A-12 ("before") and Exhibit A-13 ("after").

approving this CDUA to grant the requested easement is, under the circumstances, a reasonable measure.

VIII. DETERMINATION

Maintaining the seawall at its present site will not result in any major adverse environmental impact. The photographs and drawings submitted by Applicant show that the seawall has been substantially removed from the Conservation District. The report by Edward K. Noda & Associates suggests that maintaining the seawall at its present location will not result in any significant adverse effect upon the beach or the surrounding environment.

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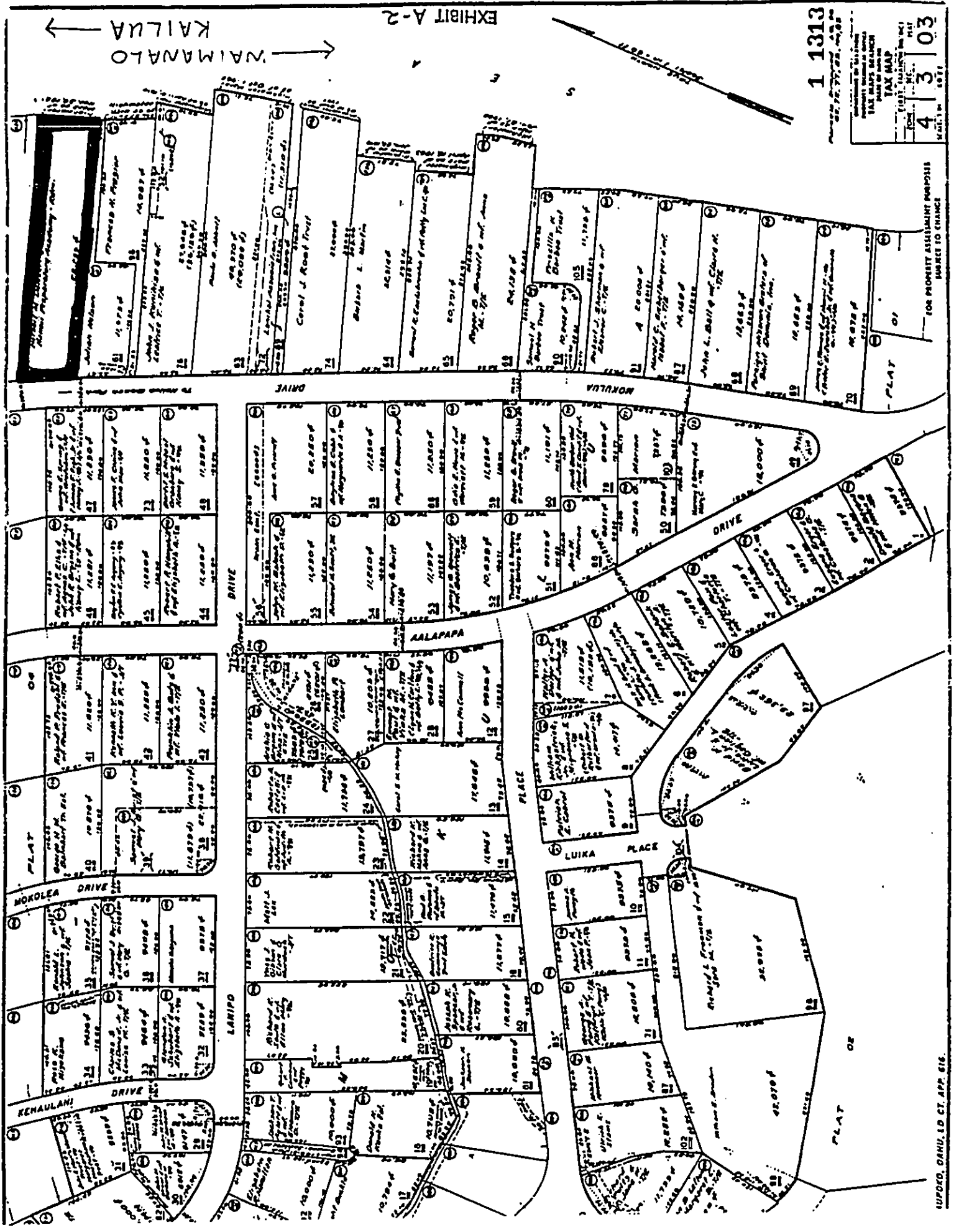
TRUE NORTH  
 Scale: 1 Inch = 40 Feet

DE  
 EASEMENT "A"  
 AS SH.  
 OF LAND COL  
 AT KAILUA, KOO  
 Scale: 1 in. = 40 Ft.  
 Owner: Cyril Thompson

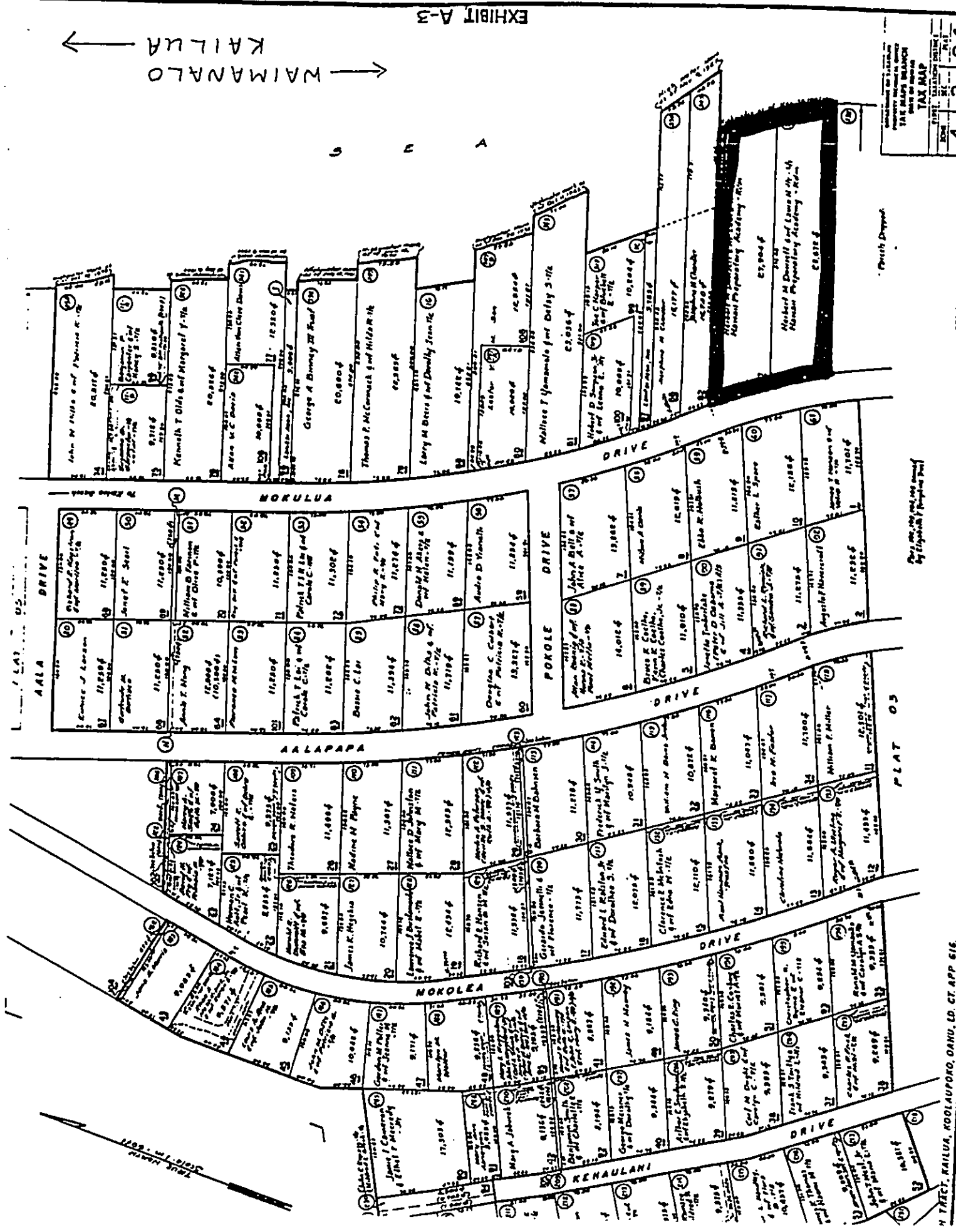


This work was  
 or under my  
*Dennis*  
 Registered F  
 Surveyor Cer.

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TAX MAP  
 4 3 04  
 HONOLULU, HAWAII

FOR PROPERTY ASSESSMENT PURPOSES  
SUBJECT TO CHANGE

See map for description of adjacent property

4 THREET, KAILUA, KOOLAUPONO, OAHU, IS. CT. APP. 616

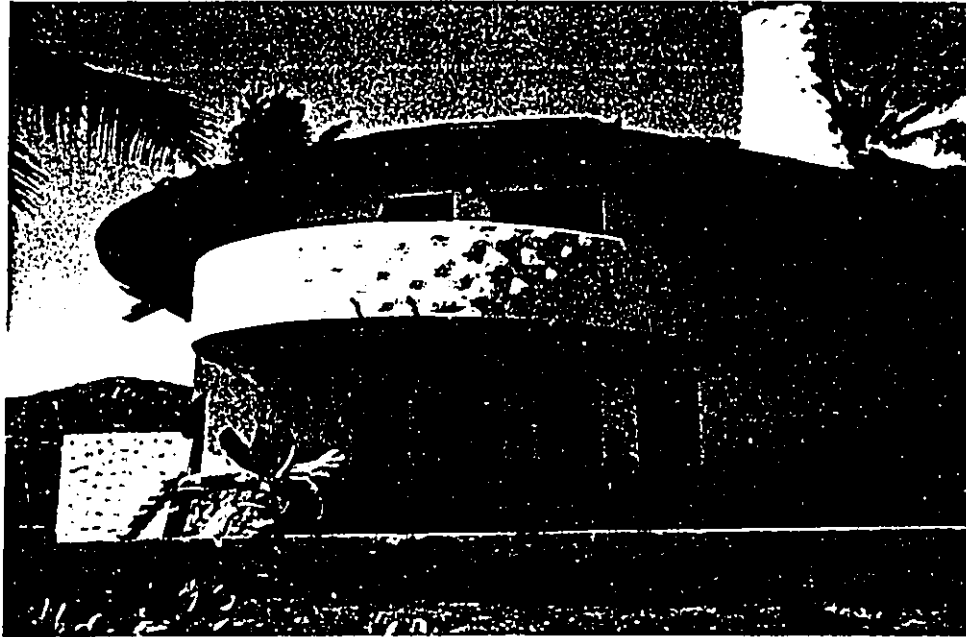


EXHIBIT A-4  
(Land area mauka of seawall, Waimanalo  
end of property)



EXHIBIT A-5  
(Land area mauka of seawall, Kailua end  
of property)

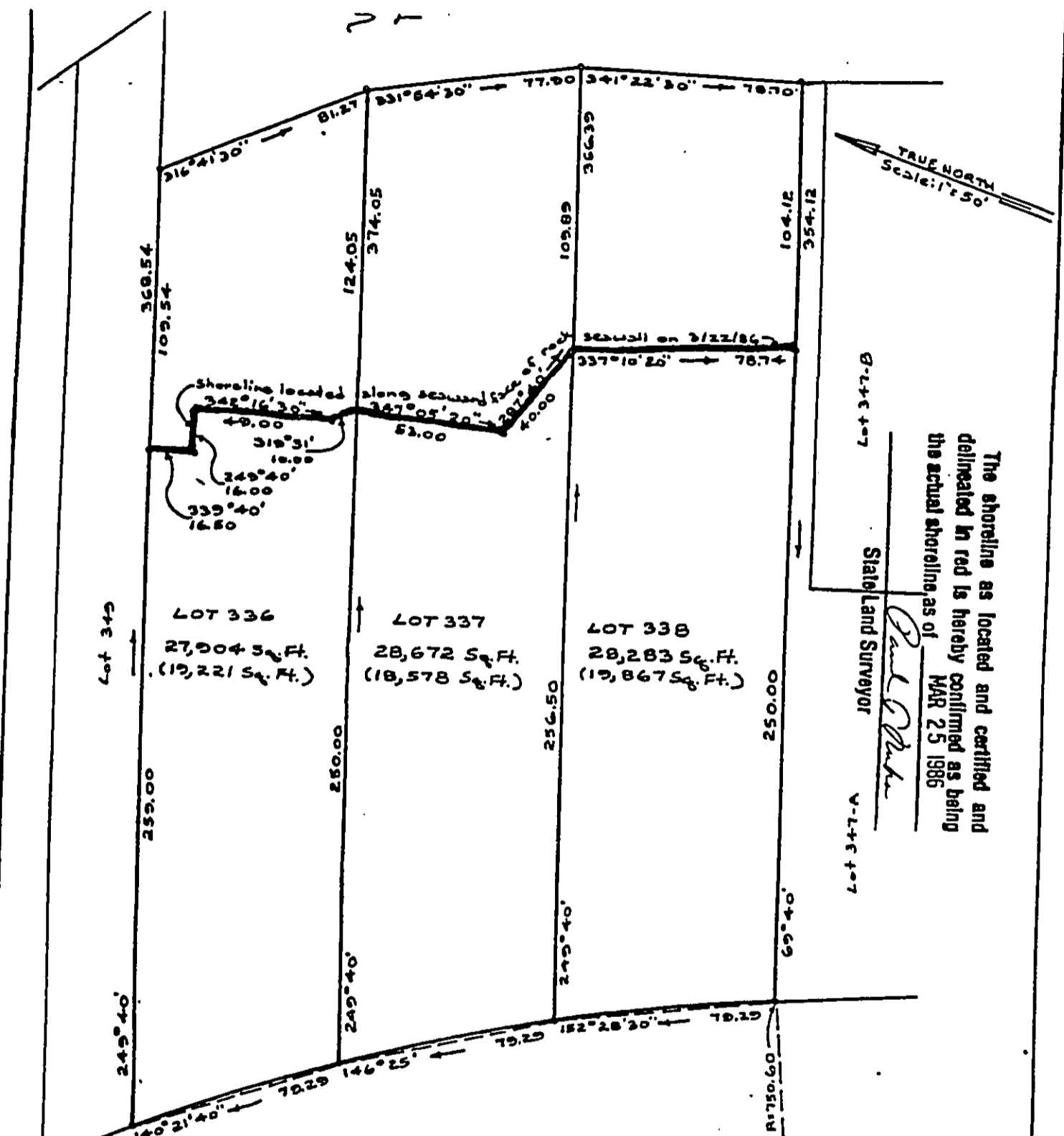


EXHIBIT A-6  
(Land area makai of seawall, facing  
toward Waimanalo)



EXHIBIT A-7  
(Land area makai of seawall, facing toward  
Kailua)

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MAP SHOWING  
 SHORELINE LOCATION OF LOTS 336, 337 AND 338 OF  
 LAND COURT APPLICATION 616  
 AS SHOWN ON MAP 57  
 AT KAILUA, KOOLAUPOKO, OAHU, HAWAII

NOTE: Shoreline was located along seaward face  
 of rock seawall on March 22, 1986

A.F.M. CORPORATION

This work was prepared by

The shoreline as located and certified and  
 delineated in red is hereby confirmed as being  
 the actual shoreline as of  
 MAR 25 1986  
 State Land Surveyor  
 Paul P. [Signature]



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**EDWARD K. NODA & ASSOCIATES, INC.**

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ENGINEERING CONSULTANTS

8 June 1988

Mr. Stanley D. Suyat  
Carlsmith, Wichman, Case, Mukai and Ichiki  
1001 Bishop Street  
P.O. Box 656  
Honolulu, Hawaii 96809

Subject: Seawall at 1426 Mokulua Drive, Lanikai  
TMK 4-3-03-75

Dear Mr. Suyat,

Pursuant to our meeting on 3 June 1988, this letter describes our professional evaluation of the subject seawall and its impact on shoreline processes in the vicinity.

The subject parcel is located in Lanikai, approximately 230 feet northward of the existing open channel drainage outlet. Inclosure 1 is the Tax Map showing the southernmost parcel of the three contiguous parcels comprising the owner's property. The toe of the recently reconstructed seawall at the south end of the subject property extends about 7 feet seaward of the certified shoreline at the extreme south corner of the lot. Enclosure 2 is a shoreline survey of the property showing the present wall in relation to the 1 June 1986 certified shoreline. The toe of the wall is about flush with the toe of the adjacent seawall on the neighboring property. However, because the subject wall is more nearly vertical than the adjacent sloping seawall, the wall crest is a few feet more seaward than the adjacent property's wall crest.

The seawall, as it is presently constructed, is expected to have no influence on the existing littoral processes along this shoreline. While a corner of the seawall extends a few feet seaward of the present certified shoreline, the dynamic movement of the shoreline and beach over the past 40 years has been on the order of 100 feet or more, many times greater than the scale of the seawall intrusion seaward of the June 1986 certified shoreline.

From a recent study conducted for the City and County Department of Public Works relating to Flood Control Improvements in the subject area<sup>1</sup>, the long-term history of shoreline changes

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<sup>1</sup>Edward K. Noda and Associates (1987), "Lanikai Flood Control Project, Oceanographic Design Considerations for Drainage Discharge Structures", prepared for Kwock Associates, Inc. for the City and County of Honolulu, Department of Public Works.

EXHIBIT A-9

were determined by analysis of aerial photos spanning the period April 1950 to December 1982. Figures 1, 3, and 4 (Inclosures 3, 4, and 5, respectively) are reproduced from the Flood Control Project study report, and show the approximate location of the subject property. The analysis revealed dramatic fluctuations in the shoreline and beach width during this time frame. In 1950, the vegetation line was at about the same location as it is presently. From 1950 to 1969, the vegetation line moved seaward about 140 feet and the beach width between the vegetation line and the beach toe was about 100 feet wide. From its most accreted state in 1969, the vegetation line and beach width eroded back to its present state and the line of seawalls fortressing this shore presently prevents further shoreline recession. With the present seawalls, it is still possible that another major accretion cycle could result in seaward movement of the shoreline and increase in dry beach width.

Since the present seawall has no detrimental influence on coastal processes affecting adjacent shorelines, and since removal and reconstruction of the seawall landward of the certified shoreline would have no significant beneficial influence on coastal processes along this shore, then it would seem reasonable to leave the wall in its present state and to obtain a Conservation District Use Permit for the seawall. Removal and reconstruction of the seawall would result in added costs to the owner and unnecessary construction-related impacts to the surrounding neighborhood due to heavy equipment working in the shoreline area, with no significant benefits to be derived from this effort.

If you have any questions regarding the results of our findings or if you require additional information, please do not hesitate to call myself or Elaine Tamaye.

Sincerely yours,



Edward K. Noda, Ph.D., P.E.  
Principal

Enclosures

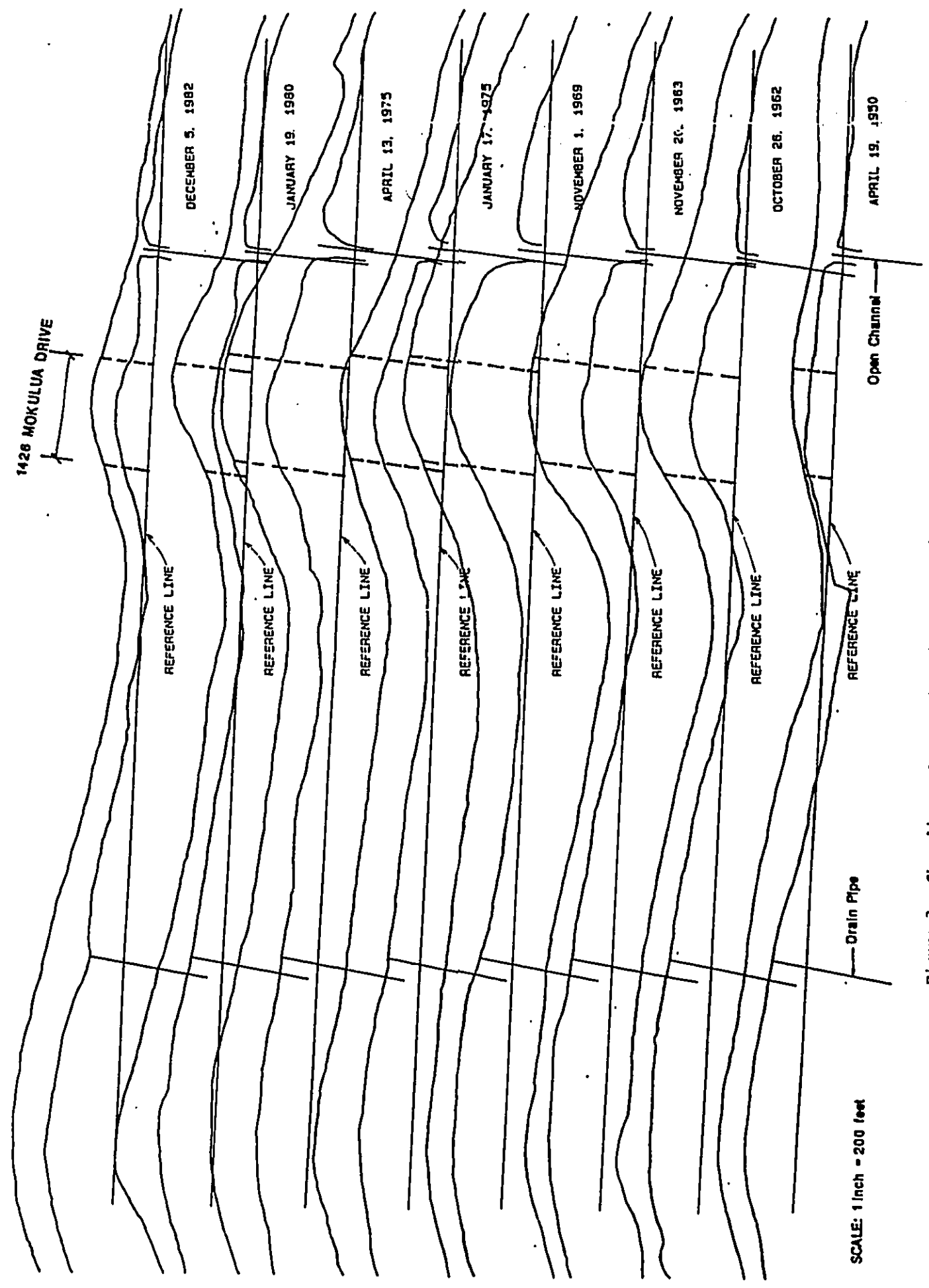
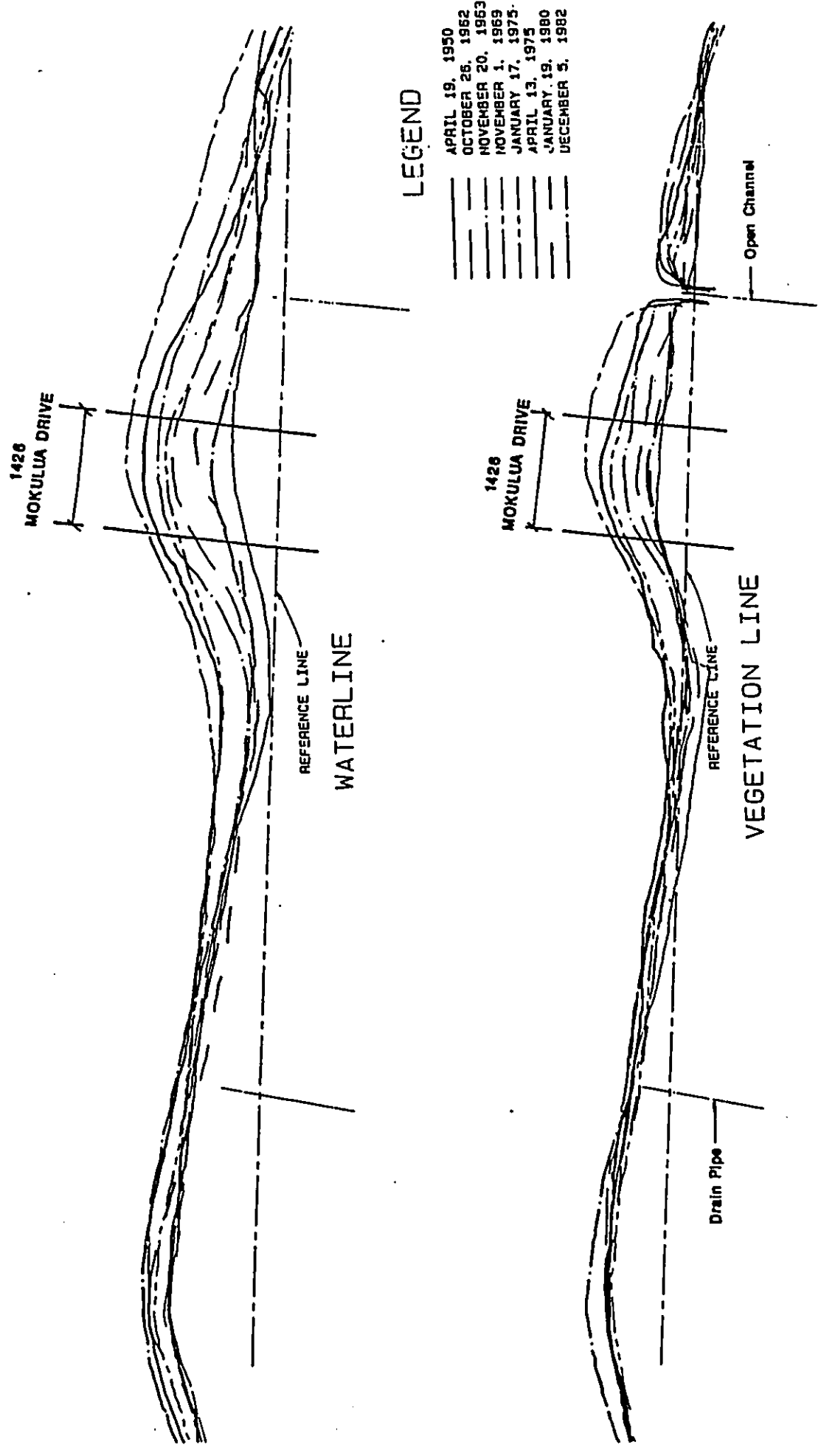


Figure 3. Shoreline and Waterline Along Project Reach from Aerial Photos.



SCALE: 1 Inch = 200 feet

Figure 4. Overplots of Shoreline and Waterline from Aerial Photos.



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**AMBER CONSTRUCTION, INC.**  
 General Contractor Lic. #BC-14926  
 1429 Mokolua Dr.  
 KAILUA, HI 96734  
 (808) 262-0820

JOB \_\_\_\_\_  
 SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_  
 CALCULATED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 SCALE \_\_\_\_\_

SEAWALL COST		Recapulation	10/27/89
<b>WEEK 138</b>			
Games Trucking	1177	\$	397.80
Games Trucking	1204		218.40
Ross Hiltbrand, Masonry			3833.60
		\$	4449.80
<b>WEEK 139</b>			
Island Ready Mix	44433	\$	1465.84
K & S Backhoe Service		\$	4970.68
K & S Backhoe Service		\$	2082.60
Ross Hiltbrand, Masonry		\$	3863.60
		\$	12382.72
<b>WEEK 140</b>			
Ameron	62494	\$	334.03
Ameron	63271	\$	295.40
Games Trucking	1191	\$	374.40
K & S Backhoe Service		\$	951.60
K & S Backhoe Service		\$	2428.40
Ross Hiltbrand, Masonry		\$	4667.20
		\$	9051.03
<b>WEEK 141</b>			
Ameron	63812	\$	346.92
Ameron	64163	\$	339.79
DINS Surveying		\$	458.32
Don Blanchette		\$	404.56
K & S Backhoe Service		\$	3720.60
Ross Hiltbrand, Masonry		\$	4915.20
		\$	10185.39

EXHIBIT A-11

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**AMBER CONSTRUCTION, INC.**  
 General Contractor Lic. #BC-14926  
 1429 Mokoia Dr.  
 KAILUA, HI 96734  
 (808) 262-0520

JOB \_\_\_\_\_  
 SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_  
 CALCULATED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 SCALE \_\_\_\_\_

SEAWALL COST (PG 2)			
<b>WEEK 142</b>			
Ameron	65289	\$	280.83
Gomes Trucking	1301	\$	339.30
* C+P Home Center		\$	1440.00
Ross Hiltbrand Masonry		\$	4020.80
		\$	<u>6080.93</u>
* (C+P cement cost is an estimate: 5 skips - 40 bags ea. skip \$9.1 per bag)			
<b>WEEK 143</b>			
Pineidge Farms (Trucking)	0947	\$	4343.50
Ross Hiltbrand Masonry		\$	1200.00
		\$	<u>5543.50</u>
* AMBER CONSTRUCTION, INC.			
Estimated Labor		\$	13,500.00
SEAWALL TOTAL COST <span style="background-color: black; color: black;">XXXXXXXXXX</span>			
Ameron		\$	1,596.97
Ross Hiltbrand Masonry		\$	22,500.40
K.B.S. Backhoe Service		\$	14,153.88
Gomes Trucking		\$	1,329.90
Amber Construction, Inc		\$	8,112.22
OTHERS		\$	13,500.00
		\$	<span style="background-color: black; color: black;">XXXXXXXXXX</span>
Contractor's Fee		\$	10,000.00
		\$	<u>71,193.37</u>

Aligned with neighboring seawall



Rebuilt on old foundation



(Waimanalo end of seawall (facing toward Waimanalo) prior to demolition)





Set back from neighboring seawall

Old foundation exposed

(Waimanalo end of seawall (facing toward Waimanalo) after demolition and reconstruction)