

SPECIAL PERMIT	
Petition Received	APR 19 1979
Maps	5/14/79
Action Span	4/19/79 - 6/3/79
Action Date	6/27/79
Recordation	7/9/79

Act by
June 3



DEPARTMENT OF PLANNING
AND ECONOMIC DEVELOPMENT

LAND USE COMMISSION

GEORGE R. ARIYOSHI
Governor

CHARLES W. DUKE
Chairman

SHINICHI NAKAGAWA
Vice Chairman

Suite 1795, Pacific Trade Center, 190 S. King Street, Honolulu, Hawaii 96813

September 7, 1979

COMMISSION MEMBERS:

James Carras
Colette Machado
Shinsei Miyasato
Mitsuo Oura
George Pascua
Carol Whitesell
Edward Yanai

GORDAN FURUTANI
Executive Officer

City Planning Commission
Honolulu Municipal Building
650 South King Street
Honolulu, Hawaii 96813

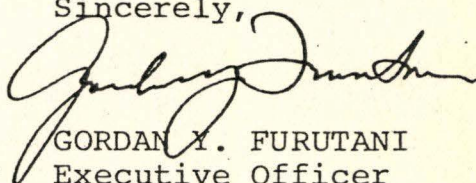
Attention: Mr. Eugene B. Connell, Executive Secretary
to the Planning Commission

Gentlemen:

Subject: SP79-341 - BOARD OF WATER SUPPLY

In reference to our letter to you dated
July 2, 1979, enclosed is a copy of the
Decision and Order on SP79-341 for your information
and records.

Sincerely,


GORDAN Y. FURUTANI
Executive Officer

Encl.

cc: George Moriguchi
Dept. of General Planning

Tyrone Kusao
Dept. of Land Utilization

Board of Water Supply

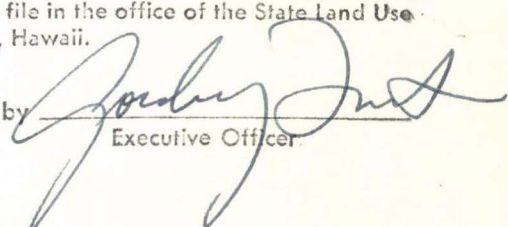
BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII

In the Matter of the)	SP79-341
Petition for Special Permit)	
of BOARD OF WATER SUPPLY,)	BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU)	
)	
)	

This is to certify that this is a true and correct copy of the
Decision and Order on file in the office of the State Land Use
Commission, Honolulu, Hawaii.

SEP 7 1979
Date

by


Executive Officer

DECISION AND ORDER

BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII

In the Matter of the)	SP79-341
Petition for Special Permit)	
of BOARD OF WATER SUPPLY,)	FINDINGS OF FACT,
CITY AND COUNTY OF HONOLULU)	CONCLUSIONS OF LAW AND
)	DECISION AND ORDER
)	

The Land Use Commission of the State of Hawaii, having duly considered the entire record in the above entitled matter, makes the following findings of fact and conclusions of law.

FINDINGS OF FACT

1. The Petition for Special Permit was filed by the BOARD OF WATER SUPPLY, CITY AND COUNTY OF HONOLULU, to allow the establishment of a water well and reservoir system on approximately one (1) acre of land situated within the State Land Use Agricultural District at Kahuku, Oahu, Tax Map Key 5-6-08: portion of 2.

2. The subject site is situated mauka of Kamehameha Highway and the Kahuku Hospital.

3. The principle reason for the proposed water well and reservoir system is to serve the Koolauloa Housing Project. This water system is also designed to ultimately serve all the existing domestic water users in Kahuku Town. This water system will replace the older private water system which has been serving Kahuku Town since the past century.

4. The petitioner will be utilizing loan and grant funds of \$1.2 million from the Farmers Home Administration to construct the proposed water system.

5. The Environmental Impact Statement prepared for the proposed water system project was approved by the Governor on January 2, 1979.

6. The Land Study Survey Bureau's overall master productivity soil rating for agricultural use is Class "B" or "Good" for soils of the subject site.

7. The City and County's detailed land use map designates the subject property Agricultural. The County's zoning designation is AG-1 Restricted Agriculture.

8. The subject property is presently vacant of improvements and is former sugar cane land.

9. The County Department of Parks and Recreation and Department of Public Works had no objections to the permit request.

10. The State Department of Agriculture had no objections to the requested use but did note that the subject site was within the area being proposed for a Kahuku Agricultural Park.

11. The U.S.D.A. Soil Conservation Service stated that most of the water well and reservoir site is on prime agricultural land. The Soil Conservation Service recommended the relocation of the entire housing project to another site.

12. Other agencies cooperating in the review of the permit request, including the State Department of Health and U. S. Army Core of Engineers, had no objections to the application for Special Permit.

13. The County Department of Land Utilization sent an advance notification letter and map to neighboring landowners, the Neighborhood Board, community organizations and legislators from the area, apprising them of the permit request. No comments

were received by the Department of Land Utilization.

14. The Department of Land Utilization has recommended the approval of the Special Permit request.

15. The City Planning Commission conducted a public hearing on the application for Special Permit on February 20, 1979.

16. The Petitioner's loan commitment from the Farmers Home Administration will be jeopardized should the project be prevented by the denial of the Special Permit.

CONCLUSIONS OF LAW

1. "Unusual and reasonable" uses other than those which are permitted in an Agricultural District may be permitted by Special Permit pursuant to HRS, Chapter 205-6, and State Land Use Commission District Regulation, Part V.

2. The petitioned use will not be contrary to the objectives sought to be accomplished by the Land Use Law and Regulations. Although a "subdivision" of the subject parcel is necessary in the conveyance of the parcel from Campbell Estate to the Board of Water Supply, City and County of Honolulu, the exception to encumbrances provided under Chapter 205-4.5 (b), when mortgage financing is jeopardized, is available to the Petitioner since the mortgage with the Farmers Home Administration would be terminated if the special permit is denied.

3. The requested use will not adversely affect surrounding property. The proposed water facility will service the water needs of Kahuku Town. The facility will be landscaped to blend in with the surrounding area and designed to deter erosion. The site has been under lease to the military and has not been used for agricultural purposes in recent years.

4. The proposed use will not unreasonably burden public agencies to provide services and facilities. The proposed water well and reservoir system are intended to improve and replace the existing water system presently serving the area. Adequate access will be provided, and construction of the facilities will not impose additional burden upon other agencies to provide services and facilities.

5. Unusual conditions, trends and needs have arisen since the district boundaries and regulations were established. The planned development of the Koolauloa Housing Project within the adjoining urban district requires construction of the proposed well and reservoir. The elevation of the reservoir required to properly service this development, together with other engineering considerations, necessitate construction of the water facility within the Agricultural District.

6. The use described in the petition is an unusual and reasonable use pursuant to HRS, Chapter 205-6, and State Land Use Commission District Regulation, Part V.


DECISION AND ORDER

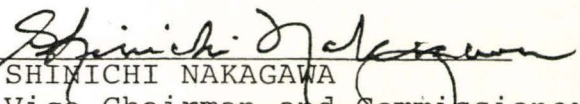
IT IS HEREBY ORDERED that Special Permit Number 79-341 for the establishment of a water well and reservoir system on approximately one (1) acre of land situated within the State Land Use Agricultural District at Kahuku, Oahu, Tax Map Key 5-6-08: portion of 2, be approved subject to the following condition:

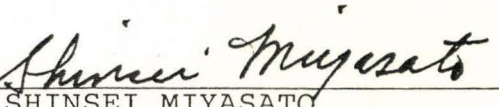
1. That construction of the water well and reservoir system commence within one (1) year from the effective date of the Special Permit.

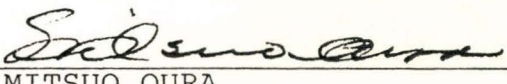
DATED: Honolulu, Hawaii, August 29, 1979.

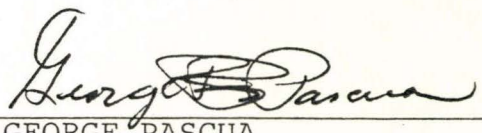
LAND USE COMMISSION

By 
C. W. DUKE
Chairman and Commissioner

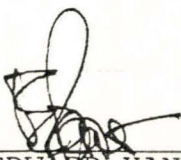
By 
SHINICHI NAKAGAWA
Vice Chairman and Commissioner

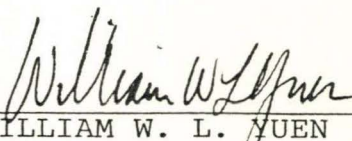
By 
SHINSEI MIYASATO
Commissioner

By 
MITSUO OURA
Commissioner

By 
GEORGE PASCUA
Commissioner

By 
CAROL WHITESELL
Commissioner

By 
EDWARD YANAI
Commissioner

By 
WILLIAM W. L. YUEN
Commissioner

P01 5235291

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

SENT TO				
Eugene Connell				
STREET AND NO.				
650 South King Street				
P.O., STATE AND ZIP CODE				
Honolulu, Hawaii 96813				
POSTAGE			\$ 41	
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE		80 ¢	
	OPTIONAL SERVICES	SPECIAL DELIVERY	¢	
		RESTRICTED DELIVERY	¢	
		RETURN RECEIPT SERVICE	SHOW TO WHOM AND DATE DELIVERED	45 ¢
			SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
			SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
	SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY		¢	
TOTAL POSTAGE AND FEES			\$ 1.66	
POSTMARK OR DATE				



**STICK POSTAGE STAMPS TO ARTICLE TO COVER FIRST CLASS POSTAGE,
CERTIFIED MAIL FEE, AND CHARGES FOR ANY SELECTED OPTIONAL SERVICES. (see front)**

1. If you want this receipt postmarked, stick the gummed stub on the left portion of the address side of the article, **leaving the receipt attached**, and present the article at a post office service window or hand it to your rural carrier. (no extra charge)
2. If you do not want this receipt postmarked, stick the gummed stub on the left portion of the address side of the article, date, detach and retain the receipt, and mail the article.
3. If you want a return receipt, write the certified-mail number and your name and address on a return receipt card, Form 3811, and attach it to the front of the article by means of the gummed ends if space permits. Otherwise, affix to back of article. Endorse front of article **RETURN RECEIPT REQUESTED** adjacent to the number.
4. If you want delivery restricted to the addressee, or to an authorized agent of the addressee, endorse **RESTRICTED DELIVERY** on the front of the article.
5. Enter fees for the services requested in the appropriate spaces on the front of this receipt. If return receipt is requested, check the applicable blocks in Item 1 of Form 3811.
6. Save this receipt and present it if you make inquiry.

- SENDER: Complete items 1, 2, and 3.
Add your address in the "RETURN TO" space on reverse.

1. The following service is requested (check one).

- ☒ Show to whom and date delivered. ¢
☐ Show to whom, date, and address of delivery. ¢
☐ RESTRICTED DELIVERY
 Show to whom and date delivered. ¢
☐ RESTRICTED DELIVERY.
 Show to whom, date, and address of delivery. \$ ____
 (CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:

Eugene Connell

3. ARTICLE DESCRIPTION:

REGISTERED NO.

CERTIFIED NO.

INSURED NO.

5235291

(Always obtain signature of addressee or agent)

I have received the article described above.

SIGNATURE

☐ Addressee☐ Authorized agent

4.

DATE OF DELIVERY

9/10/79

POSTMARK

SEP 10 1979

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE:

CLERK'S
INITIALS

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

UNITED STATES POSTAL SERVICE
OFFICIAL BUSINESS

SENDER INSTRUCTIONS

Print your name, address, and ZIP Code in the space below.

- Complete items 1, 2, and 3 on the reverse.
- Attach to front of article if space permits. Otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.

PENALTY FOR PRIVATE
USE TO AVOID PAYMENT
OF POSTAGE, \$300



**RETURN
TO**



State of Hawaii

LAND USE COMMISSION

Suite 1795, Pacific Trade Center

100 South King Street

Honolulu, Hawaii 96813

(City, State, and ZIP Code)

PO1 5235290

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

SENT TO				
Board of Water Supply				
STREET AND NO.				
630 So. Beretania St.				
P.O., STATE AND ZIP CODE				
Honolulu, HI 96813				
POSTAGE			\$ 41	
CONSULT POSTMASTER FOR FEES	OPTIONAL SERVICES	CERTIFIED FEE		80 ¢
		SPECIAL DELIVERY		¢
	RETURN RECEIPT SERVICE	RESTRICTED DELIVERY		¢
		SHOW TO WHOM AND DATE DELIVERED		45 ¢
		SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY		¢
		SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY		¢
	SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY		¢	
TOTAL POSTAGE AND FEES			\$ 1.66	
POSTMARK OR DATE				



**STICK POSTAGE STAMPS TO ARTICLE TO COVER FIRST CLASS POSTAGE,
CERTIFIED MAIL FEE, AND CHARGES FOR ANY SELECTED OPTIONAL SERVICES. (see front)**

1. If you want this receipt postmarked, stick the gummed stub on the left portion of the address side of the article, **leaving the receipt attached**, and present the article at a post office service window or hand it to your rural carrier. (no extra charge)
2. If you do not want this receipt postmarked, stick the gummed stub on the left portion of the address side of the article, date, detach and retain the receipt, and mail the article.
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4. If you want delivery restricted to the addressee, or to an authorized agent of the addressee, endorse **RESTRICTED DELIVERY** on the front of the article.
5. Enter fees for the services requested in the appropriate spaces on the front of this receipt. If return receipt is requested, check the applicable blocks in Item 1 of Form 3811.
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- SENDER: Complete items 1, 2, and 3.
Add your address in the "RETURN TO" space on reverse.

1. The following service is requested (check one).

- ☒ Show to whom and date delivered. ¢
☐ Show to whom, date, and address of delivery. ¢
☐ RESTRICTED DELIVERY
 Show to whom and date delivered. ¢
☐ RESTRICTED DELIVERY.
 Show to whom, date, and address of delivery. \$ ____
 (CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:

Board of Water Supply

3. ARTICLE DESCRIPTION:

REGISTERED NO.	CERTIFIED NO.	INSURED NO.
	5235290	

(Always obtain signature of addressee or agent)

I have received the article described above.

SIGNATURE ☐ Addressee ☐ Authorized agent

4.

DATE OF DELIVERY

8/10/79

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE:

CLERK'S
INITIALS

UNITED STATES POSTAL SERVICE
OFFICIAL BUSINESS

SENDER INSTRUCTIONS

Print your name, address, and ZIP Code in the space below.

- Complete items 1, 2, and 3 on the reverse.
- Attach to front of article if space permits. Otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.

PENALTY FOR PRIVATE
USE TO AVOID PAYMENT
OF POSTAGE, \$300



**RETURN
TO**



State of Hawaii

(Name of Sender)

LAND USE COMMISSION

Suite 1706, Pacific Trade Center

190 South King Street

(Street or P.O. Box)

Honolulu, Hawaii 96813

(City, State, and ZIP Code)

BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII

In the Matter of the)	SP79-341
Petition for Special Permit)	
of BOARD OF WATER SUPPLY,)	BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU)	
)	
)	

CERTIFICATE OF SERVICE

I hereby certify that a copy of the Land Use Commission's Decision and Order was served upon the following by certified mail:

EUGENE B. CONNELL, Executive Secretary to
the Planning Commission
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

BOARD OF WATER SUPPLY
City and County of Honolulu
630 South Beretania Street
Honolulu, Hawaii 96813

DATED: Honolulu, Hawaii, this 7th day of September, 1979.



GORDAN Y. FURUTANI
Executive Officer

July 2, 1979

Department of Planning and
Economic Development
State of Hawaii
250 South King Street
Honolulu, Hawaii 96813

Attention: Mr. Hideto Kono, Director

Gentlemen:

At its meeting on June 27, 1979, the Land Use Commission voted to approve a Special Permit request by the Board of Water Supply, City and County of Honolulu (SP79-341) to allow the construction and operation of a water well and reservoir system on approximately one (1) acre of land situated within the State Land Use Agricultural District at Kahuku, Oahu, Tax Map Key 5-6-08: portion of 2. Approval of this Special Permit is subject to the conditions imposed by the City Planning Commission.

Please note that a copy of the Land Use Commission's Decision and Order on this matter on file at the Commission's office.

Sincerely,

GORDAN Y. FURUTANI
Executive Officer

GYF:vc
Encls.

cc: Tax Map Recorder, Dept. of Taxation
Property Technical Office, Dept. of Taxation
Real Property Tax Assessor, Dept. of Taxation
Office of Environmental Quality Control
Division of Land Management, DLNR
Department of Taxation, Oahu

July 2, 1979

City Planning Commission
Honolulu Municipal Building
650 South King Street
Honolulu, Hawaii 96813

Attention: Mr. Eugene B. Connell, Executive Secretary
to the Planning Commission


Gentlemen:

At its meeting on June 27, 1979, the Land Use Commission voted to approve a Special Permit request by the Board of Water Supply, City and County of Honolulu (SP79-341) to allow the construction and operation of a water well and reservoir system on approximately one (1) acre of land situated within the State Land Use Agricultural District at Kahuku, Oahu, Tax Map Key 5-6-08: portion of 2.

Approval of this Special Permit is subject to the conditions imposed by the City Planning Commission. Please be advised that the petitioner's failure to comply with any of the delineated conditions of approval, particularly those relating to time, shall be reason for termination of the Special Permit. The Land Use Commission will not consider any request for time extension which is filed after the stipulated commencement or expiration dates.

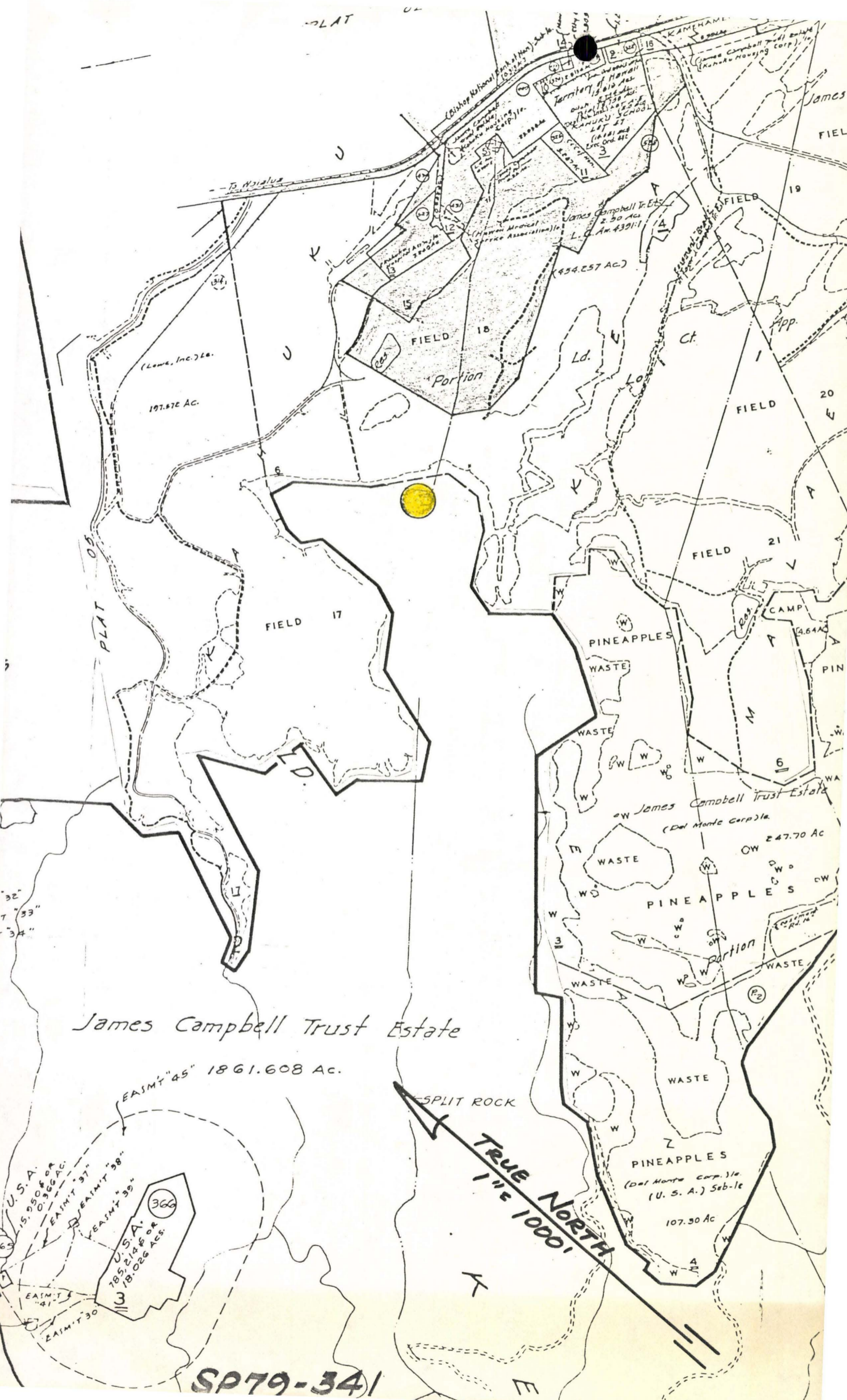
A copy of the staff memorandum is herewith enclosed for your information. The Land Use Commission's Decision and Order on SP79-341 will be forwarded to you at a later date.

Sincerely,


GORDAN Y. FURUTANI
Executive Officer

GYF:vc
Encls.

cc: Board of Water Supply, C & C of Honolulu
George Moriguchi, Dept. of General Planning
Tyrone Kusao, Dept. of Land Utilization



PLAT

PLAT

(Lowe, Inc.) Co.
197.872 AC.

FIELD 17

FIELD 18
Portion

James Campbell Trust Estate

EASMT "45" 1861.608 AC.

U.S.A.
15,950.6 AC.
0.366 AC.
EASMT "37"
EASMT "38"
EASMT "39"
EASMT "41"
EASMT "30"
366
U.S.A.
185,214.6 AC.
18,026 AC.

SPLIT ROCK
True North
1" = 1000'

SP79-341

July 2, 1979

Mr. Edward Hirata
Manager and Chief Engineer
Board of Water Supply
City & County of Honolulu
630 South Beretania Street
Honolulu, Hawaii 96813

Dear Mr. Hirata:

The original of the attached letter is on file in the office of the Department of General Planning, City and County of Honolulu, 650 South King Street, Honolulu, Hawaii.

Please be advised that failure to comply with any of the delineated conditions of approval, particularly those relating to time, shall be reason for termination of the Special Permit. The Land Use Commission will not consider any request for time extension which is filed after the stipulated commencement or expiration dates.

A copy of the staff memorandum is herewith enclosed for your information. The Land Use Commission's Decision and Order on SP79-341 will be forwarded to you at a later date.

Sincerely,

GORDAN Y. FURUTANI
Executive Officer

GYF:vc

Enclosure

cc: George Moriguchi, Dept. of General Planning
Tyrone Kusao, Dept. of Land Utilization

DEPARTMENT OF GENERAL PLAN. 3
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813

FRANK F. FASI
MAYOR



GEORGE S. MORIGUCHI
CHIEF PLANNING OFFICER

77/SUP-8 (HE)

June 18, 1979

LAND USE COMMISSION
STATE OF HAWAII
JUN 20 10 17 AM '79

Mr. Charles Duke
State Land Use Commission
Pacific Trade Center, Suite 1795
Honolulu, Hawaii 96813

Dear Mr. Duke:

This is to inform you that at the Planning Commission meeting on June 12, 1979, the Planning Commission formally ratified the June 8, 1979 memo which was sent to you regarding the Board of Water Supply's Special Use Permit request (SP79-341).

If we can supply any further information, please let us know.

Sincerely,

A handwritten signature in dark ink, appearing to read "George S. Moriguchi".
GEORGE S. MORIGUCHI
Chief Planning Officer

GSM:th

STATE OF HAWAII
LAND USE COMMISSION

Minutes of Meeting

Conference Room 322 A & B
New State Building
Honolulu, Hawaii

Approved
JAN 8 1980

June 27, 1979 - 9:30 a.m.

COMMISSIONERS PRESENT: Charles Duke, Chairman
Shinichi Nakagawa, Vice Chairman
Shinsei Miyasato
Mitsuo Oura
George Pascua
Carol Whitesell
William Yuen
Edward Yanai
James Carras

STAFF PRESENT: Gordan Furutani, Executive Officer
Daniel Yasui, Planner
Allan Kawada, Deputy Attorney General
Dora Horikawa, Chief Clerk

Ray Russell, Court Reporter

ACTION

SP79-340 - LIHUE PLANTATION CO., LTD.
SPECIAL PERMIT TO ALLOW THE ESTABLISHMENT OF A SAND MINING
OPERATION AT KEALIA, KAUAI

Mr. Daniel Yasui, staff planner, presented a resume of the staff memorandum relative to subject Special Permit and pointed out the location of the property on the maps and oriented its location with various surrounding landmarks.

Vice Chairman Nakagawa recommended adding another condition to the 4 conditions imposed by the County, stating "that all quarrying activities shall, as much as possible, minimize adverse impacts on the residents living in the area".

Counselor Kawada recommended the following wording: "All quarry activities shall as reasonably as possible be conducted in a manner to minimize adverse impacts on residents in the area."

Much concern was expressed by the Commission members regarding the time restraints. Counselor Kawada suggested that the Commission could impose another condition stating that mining activities shall cease at the end of five years from the date of approval of the Special Permit, subject to extension.

Commissioner Pascua moved that the Special Permit be approved, subject to the conditions imposed by the Kauai Planning Commission and to the two additional conditions imposed by the Land Use Commission. The motion was seconded by Vice Chairman Nakagawa and unanimously carried.

✓ SP79-341 - BOARD OF WATER SUPPLY

✓ SPECIAL PERMIT TO ALLOW THE CONSTRUCTION AND OPERATION OF A WATER WELL AND RESERVOIR SYSTEM AT KAHUKU, OAHU

Mr. Yasui read the staff memorandum and pointed out the location of the subject property on the maps.

Vice Chairman Nakagawa moved that the Special Permit be approved, subject to the conditions imposed by the City Planning Commission. It was seconded by Commissioner Whitesell and unanimously carried.

SP79-344 - MAUNA ZIONA CHURCH/STATE DEPARTMENT OF LAND AND NATURAL RESOURCES

SPECIAL PERMIT TO ALLOW THE ESTABLISHMENT OF A PRIVATE SCHOOL AND AUXILIARY PURPOSES AT KALAOA, NORTH KONA, HAWAII

Following presentation of the staff memorandum by Mr. Yasui, it was moved by Commissioner Oura that the Special Permit be approved, subject to the conditions imposed by the Hawaii County Planning Commission. It was seconded by Commissioner Pascua and carried. (Commissioner Carras abstained from voting on this matter since he had not heard the entire discussion.)

A78-444 - LEAR SIEGLER, INC. ET AL

In the matter of the boundary amendment petition by Lear Siegler, Inc. et al, Docket A78-444, on which a hearing was held on February 6, 1979 and February 7, 1979, it was announced by the Chairman that the Commission will act on this petition through the proposed decision procedure since only 6 Commissioners were present during the hearing. It was explained that this procedure will qualify the other Commissioners who have already read the hearing transcripts, to vote on this application after listening to the oral arguments to be presented by all of the parties today.

Appearances

Francis M. Izumi, Attorney representing petitioner

Roger Moseley, Deputy Corporation Counsel, representing
the City & County of Honolulu

STATE OF HAWAII
LAND USE COMMISSION

VOTE RECORD

ITEM SP79-341
Board of Water Supply

DATE June 27, 1979

PLACE Conf. Rm. 322 A & B
New State Bldg.
Honolulu, Hawaii

TIME 9:30 a.m.

NAME	YES	NO	ABSTAIN	ABSENT
MIYASATO, SHINSEI	X			
PASCUA, GEORGE R.	X			
YUEN, WILLIAM W. L.	X			
YANAI, EDWARD	X			
OURA, MITSUO	X			
CARRAS, JAMES				
NAKAGAWA, SHINICHI	X			
WHITESELL, CAROL	X			
DUKE, CHARLES	X			

Comments:

I move that SP79-341, Board of Water Supply, be approved, subject to the conditions set forth by the City Planning Commission.

STATE OF HAWAII
LAND USE COMMISSION

MEMORANDUM

TO: Land Use Commission June 27, 1979
FROM: Staff
SUBJECT: SP79-341 - Board of Water Supply

At its meeting on May 16, 1979, the Land Use Commission voted to remand SP79-341 to the City Planning Commission. This action was taken in order to resolve any problems that may arise in meeting the provisions of Chapter 205-4.5, HRS. In a letter dated May 30, 1979, to the City Planning Commission, the Land Use Commission requested information relative to the following questions in order to resolve this matter:

Will the mortgage be jeopardized by restrictions to agricultural or agriculturally related uses?

If the mortgage financing is jeopardized, is the restriction on uses the sole reason for the mortgage being jeopardized?

By letter response dated June 8, 1979, the Department of General Planning noted that mortgage financing from the Farmers Home Administration will be endangered if the Special Permit is not granted. The Department further requested that the Land Use commission amend the record to reflect this information and grant the Special Permit.

For the Commission's information, the referenced letters of May 30, 1979 and June 8, 1979, as well as the original staff report, have been attached.

GEORGE R. ARIYOSHI
GOVERNOR



WAYNE MINAMI
ATTORNEY GENERAL

LARRY L. ZENKER
ASSISTANT ATTORNEY GENERAL

STATE OF HAWAII
DEPARTMENT OF THE ATTORNEY GENERAL
STATE CAPITOL
HONOLULU, HAWAII 96813
(808) 548-4740

May 30, 1979

City Planning Commission
City and County of Honolulu
Municipal Building
650 South King Street
Honolulu, Hawaii 96813

ATTENTION: Mr. Eugene Connell, Executive
Secretary to the Planning Commission

RE: SP 79-341 Board of Water Supply

Dear Mr. Connell:

At its May 16, 1979 meeting, the Land Use Commission of the State of Hawaii, considered the above captioned special permit in open hearing.

By unanimous vote, the Commission decided to remand the application and record to the Planning Commission of the City and County of Honolulu for further disposition in that the record indicates that the permit application is violative of Chapter 205-4.5, Hawaii Revised Statutes (hereinafter HRS).

Chapter 205-4.5, HRS, says in relevant part that:

Permissible uses within the agricultural districts.

(a) Within the agricultural district all lands with soil classified by the Land Study Bureau's Detailed Land Classification as Overall (Master) Productivity Rating Class A or B shall be restricted to the following permitted uses:

City Planning Commission

May 30, 1979

Page Two

- (1) Cultivation of crops, including but not limited to flowers, vegetables, foliage, fruits, forage and timber;
- (2) Game and fish propagation;
- (3) Raising of livestock, including but not limited to poultry, bees, fish or other animal or aquatic life that are propagated for economic or personal use;
- (4) Farm dwellings, employee housing, farm buildings, or activity or uses related to farming and animal husbandry;

Farm dwelling as used herein shall mean a single-family dwelling located on and used in connection with a farm or where agricultural activity provides income to the family occupying the dwelling.

- (5) Public institutions and buildings which are necessary for agricultural practices;
- (6) Public and private open area types of recreational uses including day camps, picnic grounds, parks and riding stables, but not including dragstrips, airports, drive-in theaters, golf courses, golf driving ranges, country clubs, and over-night camps;
- (7) Public, private, and quasi-public utility lines, and roadways, transformer stations, communications equipment building, solid waste transfer stations, and appurtenant small buildings such as booster pumping stations, but not including offices or

yards for equipment, material, vehicle storage, repair or maintenance, treatment plants and major storage tanks not ancillary to agricultural practices, or corporation yards or other like structures;

- (8) Retention, restoration, rehabilitation or improvement of buildings or sites of historic or scenic interest;
- (9) Roadside stands for the sale of agricultural products grown on the premises;
- (10) Buildings and uses, including but not limited to mills, storage and processing facilities, maintenance facilities that are normally considered direct accessory to the abovementioned uses; or
- (11) Agricultural parks.

(b) Uses not expressly permitted in subsection (a) shall be prohibited, except the uses permitted as provided in section 205-6 and section 205-8, and construction of single-family dwellings on lots existing before [June 4, 1976]. Any other law to the contrary notwithstanding no subdivision of land within the agricultural district with soil classified by the Land Study Bureau's Detailed Land Classification as Overall (Master) Productivity Rating Class A or B shall be approved by a county unless the said A and B lands within the subdivision shall be made subject to the restriction on uses as prescribed in this section and to the condition that the uses shall be primarily in pursuit of an agricultural activity.

Any deed, lease, agreement of sale, mortgage or other instrument of conveyance covering any land within the agricultural subdivision shall expressly contain

City Planning Commission
May 30, 1979
Page Four

the restriction on uses and the condition as prescribed in this section which restriction and condition shall be encumbrance running with the land until such time that the land is reclassified to a land use district other than agricultural district. (Emphasis added).

Chapter 205-4.5(b), HRS, prohibits subdivision of agriculturally classified land that is rated A or B by the Land Study Bureau, unless such subdivision is for either a permitted use within Chapter 205-4.5(a), HRS, or such subdivision is for a use which is "primarily in pursuit of an agricultural activity."

The Land Use Commission noted that the soils on the subject property is classified by the Land Study Bureau as "B" or "good". Furthermore, it is evident that the use requested in the special permit is neither a use enumerated in paragraph (a) of Chapter 205-4.5, HRS, or a use which is "primarily in pursuit of an agricultural activity." In addition, the record further indicates that subject property is owned by Campbell Estate and that a conveyance and subdivision of the property from Campbell Estate to the City and County of Honolulu is required in order to effectuate the proposed use.

In light of the foregoing facts as related to Chapter 205-4.5, HRS, the Land Use Commission decided that the special permit application would violate the foregoing statute if approved.

However, as you may recall, the Land Use Commission recently approved a special permit application from the City and County of Honolulu for a sewage treatment facility on land with soil classified by the Land Study Bureau as "B", and which required a subdivision of land in order to convey the land. The decision in that case was based upon an interpretation of a section of Chapter 205-4.5(b) HRS, which states in relevant part that:

If the foregoing requirement of encumbrances running with the land jeopardizes the owner or lessee from obtaining mortgage financing from any of the mortgage lending agencies set forth hereinbelow, and said requirement is the sole reason for failure to obtain mortgage financing, then such requirement of encumbrances shall, insofar as such mortgage financing is so jeopardized, be conditionally waived by the appropriate county enforcement officer; provided that such conditional waiver shall thereafter become effective only in the event that the property is subjected to foreclosure proceedings by the mortgage lender.

The mortgage lending agencies mentioned hereinabove are the Federal Housing Administration, Federal National Mortgage Association, Veterans Administration, Small Business Administration, Farmers Home Administration, Federal Land Bank of Berkeley, Federal Intermediate Credit Bank of Berkeley, Berkeley Bank for Cooperatives, and any other federal, state or private mortgage lending agency qualified to do business in Hawaii, and their respective successors and assigns.

In regards to the sewage treatment facility, the record in that case indicated that the mortgage on the subject land would have been jeopardized if the land were restricted to agricultural or agriculturally related purposes.

In this case, however, there is no indication that the mortgage, on the subject property would be jeopardized and therefore, the Commission is unable to render a similar decision.

City Planning Commission

May 30, 1979

Page Six

Therefore, the Commission requests that the record be supplemented with the following information:

- a) Will the mortgage be jeopardized by restrictions to agricultural or agriculturally related uses?
- b) If the mortgage financing is jeopardized, is the restriction on uses the sole reason for the mortgage being jeopardized.

The Commission's position in this matter is not based upon the need for the water storage facility or the lack thereof, but instead upon an interpretation of what the Land Use Commission may legally permit under Chapter 205-4.5, HRS.

Should you have any questions, please feel free to call me.

Very truly yours,



Allan G. Fawcett
Deputy Attorney General

AGK/ejk

cc: Mr. George Moriguchi
Chief Planning Officer

Board of Water Supply

ARTMENT OF GENERAL PLANNI
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813

FRANK F. FASI
MAYOR



GEORGE S. MORIGUCHI
CHIEF PLANNING OFFICER

77/SUP-8 (HE)

June 8, 1979

Mr. Charles Duke, Chairman
State Land Use Commission
c/o Daniel Yasui
Pacific Trade Center
Suite 1795
Honolulu, Hawaii 96813

LAND USE COMMISSION
STATE OF HAWAII
JUN 13 11 27 AM '79

Dear Mr. Duke:

SUBJECT: SP 79-341 Board of Water Supply

This is in response to Mr. Allan Kawada's letter of May 30, 1979 regarding the SLUC action on SP 79-341. We were of the opinion that we had indicated that this was an integral part of the Koolauloa Housing project in our transmittal letter of April 18, 1979. If this permit is not granted, the proposed housing project's mortgage financing from Farmers Home Administration will be endangered. FHA, as indicated in the DLU report, will also be used to build the water well and reservoir.

This information was made clear to the Planning Commission by myself and Henry Eng of DLU. We request that the SLUC reconsider its action of May 16, 1979 and amend the record to reflect this information and grant the Special Permit.

Sincerely,

A handwritten signature in dark ink, appearing to read "George S. Moriguchi".
GEORGE S. MORIGUCHI
Chief Planning Officer

GSM:hb1

STATE OF HAWAII
LAND USE COMMISSION

MEMORANDUM

TO: Land Use Commission

May 16, 1979

FROM: Staff

SUBJECT: SP79-341 - Board of Water Supply

The petitioner, Board of Water Supply, City and County of Honolulu, is requesting a Special Permit to allow the construction and operation of a water well and reservoir system on approximately one (1) acre of land situated within the State Land Use Agricultural District at Kahuku, Oahu, Tax Map Key 5-6-08: portion of 2. The subject property is located mauka of Kamehameha Highway and the Kahuku Hospital. (See attached location map).

The primary reason for the proposed water well and reservoir system is to serve the Koolauloa Housing Project. This water system is also designed to ultimately serve all the existing domestic water users in Kahuku Town. This water system is intended to replace the older private water system which has been serving Kahuku Town over the past century.

The proposed Koolauloa Housing Project is being undertaken by the City Department of Housing and Community Development. Federal funds are to be utilized for the acquisition and development of a 300-lot subdivision, district park site and sewer system in Kahuku just mauka of the Kahuku Hospital. The principal intent of the housing project is to relocate families from the existing Kahuku Plantation Homes and to meet the needs of the low and moderate income housing market in the Koolauloa District.

The City and County has earmarked approximately \$1.5 million of Community Development Block Grant funds to partially fund land acquisition and development of the subdivision improvements. Construction of the waste water treatment and disposal facility is intended to be funded through a \$1.6 million loan and grant from the Farmers Home Administration. The Board of Water Supply will also be using loan and grant funds of \$1.2 million from the Farmers Home Administration to construct the proposed water system.

The Environmental Impact Statement prepared for the proposed water system project was approved by the Governor on January 2, 1979.

The Land Study Bureau's overall master productivity soil rating for agricultural use is class "B" or "Good" for soils of the subject site.

The City and County's detailed land use map designates the subject property Agricultural. The County's zoning designation is AG-1 Restricted Agriculture.

The subject property is presently vacant of improvements and is former sugar cane land.

Pertinent comments from governmental agencies:

1. Department of Parks and Recreation

The County Department of Parks and Recreation stated the following:

"No objection to the special permit to establish a water well and reservoir on lands situated in Kahuku."

2. Department of Public Works

The County Department of Public Works had no objections to the request and further stated that all departmental requirements would have to be complied with.

3. State Department of Agriculture

The Department of Agriculture noted the following:

"The Department of Agriculture has reviewed the subject Special Use Permit application and has no objections or substantive recommendations to offer.

"For your information, however, we should note that the site being proposed for the well and reservoir is located within the area being proposed for a Kahuku Agricultural Park. The exact boundaries of the park will be determined upon completion of the negotiations currently being conducted by this agency and the Campbell Estate. In the interim, we would appreciate being kept apprised of the status of the project so that any potential conflicts can be avoided."

With regard to the comments provided by the Department of Agriculture, the Department of Land Utilization noted the following:

"Follow-up contact with the Department of Agriculture indicates that they are proceeding with plans to lease approximately 3,000 acres of agricultural lands in Kahuku for develop-

ment as an agricultural park. They do not, however, anticipate any conflict with the proposed water facilities under the subject special permit application as the agricultural park could actually surround it if necessary. They wish to be kept informed so as to insure compatibility with area-wide development patterns."

4. U.S.D.A. Soil Conservation Service

The Soil Conservation Service commented as follows:

"A major part of the proposed housing project is on prime ag. land. Most of the water well and reservoir site is on prime ag. lands. In cooperation with the West Oahu Soil and Water Conservation District we recommend that the entire project be relocated, perhaps mauka to avoid using prime ag. lands for other than cropland."

The Department of Land Utilization noted the following with regard to the Soil Conservation Service's comments:

"The housing project is not the subject of this request. The Department of Agriculture does not object to the well and reservoir."

Other agencies cooperating in the review of the permit request, including the State Department of Health and U.S. Army Corps of Engineers, had no objections to the application for Special Permit.

In its evaluation of the subject request, the County Department of Land Utilization sent an advance notification letter and map to neighboring landowners, the Neighborhood Board, community organizations and legislators from the area apprising them of the permit request. No comments were received by the Department of Land Utilization.

The County Department of Land Utilization provided the following analysis and recommendation regarding the application for Special Permit:

"Analysis:

The requested special permit is for a water system to support the reorganization and redevelopment of land uses within Kahuku Town. The primary new development it would serve is the 300-unit Koolauloa Housing project. This report and analysis does not discuss or evaluate the merits of the Koolauloa Housing project. The special permit request for the proposed water facilities is reviewed for compliance with the State Land Use Law.

"Part V-2 of that law provides that certain 'unusual and reasonable' uses within Agricultural and Rural Districts other

than those for which the District is classified may be permitted through the granting of a special permit. Guidelines are established for determining an 'unusual and reasonable' use. These guidelines are listed in the form of five 'Tests to be Applied.' The tests and responses to them are provided below:

'(a) Such use shall not be contrary to the objectives sought to be accomplished by the Land Use Law and Regulations.'

"The proposed water well and reservoir use will only occupy approximately one acre of land. This is a relatively small area within the large existing agricultural district. The site has been under lease to the military and has not been used for agricultural purposes in recent years.

"The choice of the location for the water facilities is largely due to engineering requirements. Construction of the systems on these sites will not preclude accomplishment of the major objective of the Land Use Law. Koolauloa Housing Project is located on a site which has been placed in the Urban District by the Land Use Commission.

'(b) That the desired use would not adversely affect surrounding property.'

"A water well and reservoir are not annoying or obnoxious uses. Landscaping will surround the facility to enhance its appearance and deter erosion. The reservoir will improve the existing water system in the area and also support the uses in the adjoining urban district.

'(c) Such use would not unreasonably burden public agencies to provide roads and streets, sewers, water, drainage and school improvements, and police and fire protection.'

"The water well and reservoir will be owned and operated by the City's Board of Water Supply and thereby provide the City with a more reliable water system to serve the adjoining urban district. Adequate access will be provided, and construction of the facilities should not impose additional burden to other public agencies.

'(d) Unusual conditions, trends and needs have arisen since the district boundaries and regulations were established.'

"Planned development of the Koolauloa Housing Project within the adjoining urban district requires construction of the proposed well and reservoir. Further, the elevation for the reservoir required to properly service this development and terrain conditions in this general area necessitates construction of the facilities within the agricultural district.

"The major regional change here since the land use district boundaries were established has been the closing of the operation of the Kahuku Sugar Plantation. Certain urban uses such as the Kuilima development and the Koolauloa Housing Project have been planned partially to provide additionally employment and housing opportunities in the Kahuku area.

'(e) That the land upon which the proposed use is sought is unsuited for the uses permitted within the District.'

"Engineering requirements dictate the location of the water reservoir. Basically, a certain height differential is needed to provide required water pressure to the service area of the system. The subject site, the only one suited to all requirements, lies in an area that is prime agricultural land. Its size and its location on a hill pose no threat to the intended agricultural use of the area.

"The Department of Land Utilization finds that the proposed water well and reservoir qualify as unusual and reasonable uses within the agricultural district and meet the tests to be applied for State Special Permits.

"Recommendation

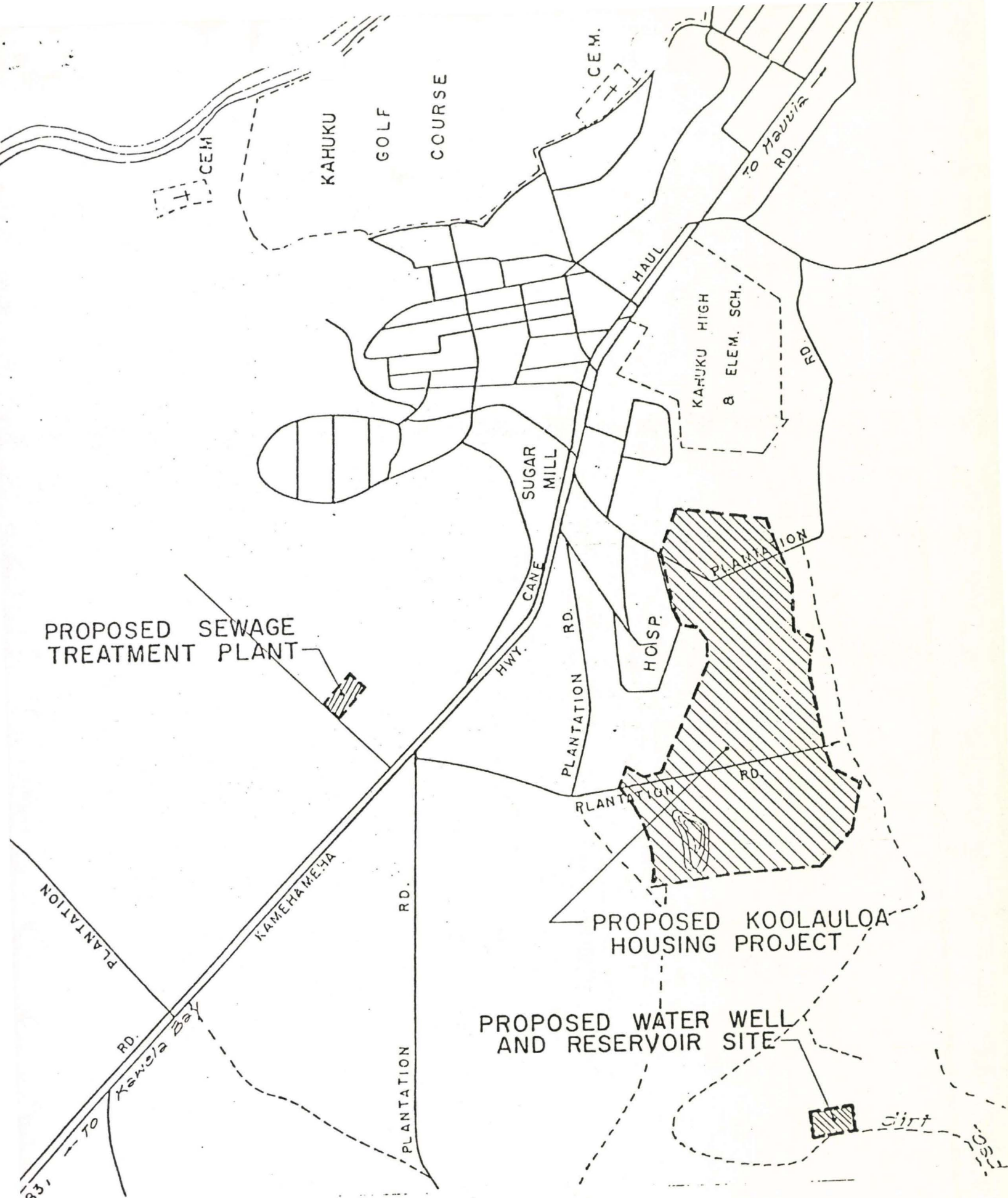
It is recommended that the application of the City and County Of Honolulu, Board of Water Supply, for a Special Permit to construct and operate a water well and reservoir at Kahuku, Oahu, Hawaii, Tax Map Key 5-6-06: portion of 6, be granted."

The City Planning Commission conducted a public hearing on the application for Special Permit on February 20, 1979. At that time, no one testified concerning the subject request. For the Commission's information the meeting minutes of February 20, 1979 has been attached.

On March 20, 1979, the Planning Commission voted to recommend approval of the Special Permit to the Land Use Commission as recommended by the Director of Land Utilization.

In accordance with Section 9-3, Subsection (2) of the Land Use Commission's Rules and Regulations which in part states that "The County Planning Commission shall establish, among other conditions, a reasonable time limit suited to establishing the particular use, which time limit, among other conditions shall be a condition of the Special Use Permit", staff recommends that if the Commission is to approve the subject request, an additional condition be imposed as follows:

"That construction of the water well and reservoir system commence within one (1) year from the effective date of the Special Permit."



LOCATION
MAP

Meeting of the Planning Commission
Minutes
February 20, 1979

LAND USE COMMISSION
STATE OF HAWAII

APR 26 2 51 PM '79

The Planning Commission held a meeting on Tuesday, February 20, 1979 at 1:35 p.m., in the Conference Room of the City Hall Annex. Chairman Charles Izumoto presided.

PRESENT:

Charles Izumoto, Chairman
Charles Sarber, Chairman
Marion Kagan
Jacqueline Lee
Joseph Macapinlac

ABSENT:

Yuklin Aluli
Randall Kamiya
Melvin Kaneshige
Gertrude Zane

DEPARTMENT
REPRESENTATIVES:

George S. Moriguchi, Chief Planning Officer
Eugene B. Connell, Executive Secretary

MINUTES:

The Minutes of February 6, 1979 were approved, on motion by Mr. Macapinlac, seconded by Mrs. Lee and carried.

PUBLIC HEARING
SPECIAL USE PERMIT
(WATER WELL & RESERVOIR
WITHIN AGRICULTURAL DIST.)
KAHUKU
BOARD OF WATER SUPPLY
(FILE #77/SUP-8 HE)

A public hearing was held to consider a request for a State Special Use Permit for a Water Well and Reservoir System on approximately one acre of land within the Agricultural District at Kahuku, mauka of Kamehameha Highway and Kahuku Hospital, Tax Map Key: 5-6-06: portion of 6.

Publication was made in The Honolulu Advertiser on Saturday, February 10, 1979. No letters of protest were received.

Mr. Henry Eng presented the Director's report recommending approval of the request. In accordance with a State Land Use Commission requirement for Special Use Permits, Mr. Eng reported for the record that the proposed water well and reservoir site is on land designated "B" classification in the Land Study Bureau.

There were no questions concerning the Director's report.

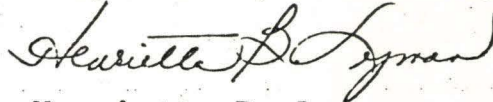
No one was present to speak either FOR or AGAINST the proposal.

The public hearing was closed, and the matter deferred for a statutory period of 15 days to March 20, 1979, on motion by Mr. Macapinlac, seconded by Mrs. Lee and carried.

ADJOURNMENT:

The meeting adjourned at 1:43 p.m.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Henrietta B. Lyman".

Henrietta B. Lyman
Secretary-Reporter

STATE OF HAWAII
LAND USE COMMISSION
Suite 1795
Pacific Trade Center
190 S. King Street
Honolulu, Hawaii 96813

June 13, 1979

Mr. George S. Moriguchi
Chief Planning Officer
Department of General Planning
City & County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Moriguchi:

Enclosed is a Notice of Land Use Commission meeting and the
Agenda for the Meeting.

Please note that petitions

✓ SP79-341 - BOARD OF WATER SUPPLY
A78-444 - LEAR SIEGLER, INC., ET AL

will be acted on at that time.

Should you have any questions on this matter, please contact
this office.

Very truly yours,



GORDAN FURUTANI
Executive Officer

Enclosure - Agenda

STATE OF HAWAII
LAND USE COMMISSION
Suite 1795
Pacific Trade Center
190 S. King Street
Honolulu, Hawaii 96813

June 13, 1979

Mr. Tyrone T. Kusao, Director
Department of Land Utilization
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Kusao:

Enclosed is a Notice of Land Use Commission meeting and the Agenda for the Meeting.

Please note that petitions

✓ SP79-341 - BOARD OF WATER SUPPLY
A78-444 - LEAR SIEGLER, INC., ET AL

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GORDAN FURUTANI
Executive Officer

Enclosure - Agenda

STATE OF HAWAII
LAND USE COMMISSION
Suite 1795
Pacific Trade Center
190 S. King Street
Honolulu, Hawaii 96813

June 13, 1979

Mr. Eugene B. Connell, Executive Secretary
to the Planning Commission
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Connell:

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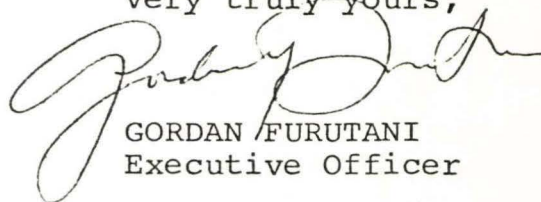
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SP79-341 - BOARD OF WATER SUPPLY

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GORDAN FURUTANI
Executive Officer

Enclosure - Agenda

STATE OF HAWAII
LAND USE COMMISSION
Suite 1795
Pacific Trade Center
190 S. King Street
Honolulu, Hawaii 96813

June 13, 1979

BOARD OF WATER SUPPLY
City and County of Honolulu
650 South Beretania Street
Honolulu, Hawaii 96843

Dear Sirs:

Enclosed is a Notice of Land Use Commission meeting and the Agenda for the Meeting.

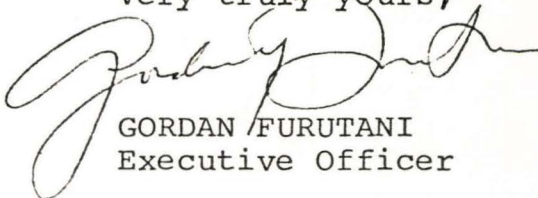
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SP79-341 - BOARD OF WATER SUPPLY

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Very truly yours,



GORDAN FURUTANI
Executive Officer

Enclosure - Agenda

STATE OF HAWAII
LAND USE COMMISSION

NOTIFICATION OF LAND USE COMMISSION MEETING

DATE, TIME AND PLACE

June 27, 1979 - 9:30 a.m.
Conference Room 322 A & B
New State Building
1151 Punchbowl Street
Honolulu, Hawaii

A G E N D A

I. ACTION

1. SP79-340 - Lihue Plantation Co., Ltd. (Kauai)

To allow the establishment of a sand mining operation on approximately 26 acres of land situated within the State Land Use Agricultural District at Kealia, Kauai.

- ✓ 2. SP79-341 - Board of Water Supply (Oahu)

To allow the construction and operation of a water well and reservoir system on approximately one (1) acre of land situated within the State Land Use Agricultural District at Kahuku, Oahu.

3. SP79-344 - Mauna Ziona Church/State Department of Land and Natural Resources (Hawaii)

To allow the establishment of a private school and auxiliary purposes on approximately 1.44 acres of land situated within the State Land Use Agricultural District at Kalaoa, North Kona, Hawaii.

4. A78-444 - Lear Siegler, Inc., et al (Oahu)

To reclassify 8.4 acres of land, more or less, from the Conservation District into the Urban District at Kalauao, Ewa, Oahu, for residential use.

II. MISCELLANEOUS

1. Adoption of Minutes

DEC 13 1978

JAN 11 1979

2. Meeting Schedule

6/15/79 - A COPY OF THIS AGENDA WAS MAILED TO ALL PERSONS AND ORGANIZATIONS ON THE ATTACHED MAILING LISTS:

1. STATEWIDE 2. OAHU 3. HAWAII 4. KAUAI

GEORGE R. ARIYOSHI
GOVERNOR



WAYNE MINAMI
ATTORNEY GENERAL

LARRY L. ZENKER
ASSISTANT ATTORNEY GENERAL

STATE OF HAWAII
DEPARTMENT OF THE ATTORNEY GENERAL
STATE CAPITOL
HONOLULU, HAWAII 96813
(808) 548-4740

May 30, 1979

City Planning Commission
City and County of Honolulu
Municipal Building
650 South King Street
Honolulu, Hawaii 96813

ATTENTION: Mr. Eugene Connell, Executive
Secretary to the Planning Commission

RE: SP 79-341 Board of Water Supply

Dear Mr. Connell:

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By unanimous vote, the Commission decided to remand the application and record to the Planning Commission of the City and County of Honolulu for further disposition in that the record indicates that the permit application is violative of Chapter 205-4.5, Hawaii Revised Statutes (hereinafter HRS).

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Farm dwelling as used herein shall mean a single-family dwelling located on and used in connection with a farm or where agricultural activity provides income to the family occupying the dwelling.

- (5) Public institutions and buildings which are necessary for agricultural practices;
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yards for equipment, material, vehicle storage, repair or maintenance, treatment plants and major storage tanks not ancillary to agricultural practices, or corporation yards or other like structures;

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(b) Uses not expressly permitted in subsection (a) shall be prohibited, except the uses permitted as provided in section 205-6 and section 205-8, and construction of single-family dwellings on lots existing before [June 4, 1976]. Any other law to the contrary notwithstanding no subdivision of land within the agricultural district with soil classified by the Land Study Bureau's Detailed Land Classification as Overall (Master) Productivity Rating Class A or B shall be approved by a county unless the said A and B lands within the subdivision shall be made subject to the restriction on uses as prescribed in this section and to the condition that the uses shall be primarily in pursuit of an agricultural activity.

Any deed, lease, agreement of sale, mortgage or other instrument of conveyance covering any land within the agricultural subdivision shall expressly contain

City Planning Commission
May 30, 1979
Page Four

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The Land Use Commission noted that the soils on the subject property is classified by the Land Study Bureau as "B" or "good". Furthermore, it is evident that the use requested in the special permit is neither a use enumerated in paragraph (a) of Chapter 205-4.5, HRS, or a use which is "primarily in pursuit of an agricultural activity." In addition, the record further indicates that subject property is owned by Campbell Estate and that a conveyance and subdivision of the property from Campbell Estate to the City and County of Honolulu is required in order to effectuate the proposed use.

In light of the foregoing facts as related to Chapter 205-4.5, HRS, the Land Use Commission decided that the special permit application would violate the foregoing statute if approved.

However, as you may recall, the Land Use Commission recently approved a special permit application from the City and County of Honolulu for a sewage treatment facility on land with soil classified by the Land Study Bureau as "B", and which required a subdivision of land in order to convey the land. The decision in that case was based upon an interpretation of a section of Chapter 205-4.5(b) HRS, which states in relevant part that:

If the foregoing requirement of encumbrances running with the land jeopardizes the owner or lessee from obtaining mortgage financing from any of the mortgage lending agencies set forth hereinbelow, and said requirement is the sole reason for failure to obtain mortgage financing, then such requirement of encumbrances shall, insofar as such mortgage financing is so jeopardized, be conditionally waived by the appropriate county enforcement officer; provided that such conditional waiver shall thereafter become effective only in the event that the property is subjected to foreclosure proceedings by the mortgage lender.

The mortgage lending agencies mentioned hereinabove are the Federal Housing Administration, Federal National Mortgage Association, Veterans Administration, Small Business Administration, Farmers Home Administration, Federal Land Bank of Berkeley, Federal Intermediate Credit Bank of Berkeley, Berkeley Bank for Cooperatives, and any other federal, state or private mortgage lending agency qualified to do business in Hawaii, and their respective successors and assigns.

In regards to the sewage treatment facility, the record in that case indicated that the mortgage on the subject land would have been jeopardized if the land were restricted to agricultural or agriculturally related purposes.

In this case, however, there is no indication that the mortgage, on the subject property would be jeopardized and therefore, the Commission is unable to render a similar decision.

City Planning Commission
May 30, 1979
Page Six


Therefore, the Commission requests that the record be supplemented with the following information:

- a) Will the mortgage be jeopardized by restrictions to agricultural or agriculturally related uses?
- b) If the mortgage financing is jeopardized, is the restriction on uses the sole reason for the mortgage being jeopardized.

The Commission's position in this matter is not based upon the need for the water storage facility or the lack thereof, but instead upon an interpretation of what the Land Use Commission may legally permit under Chapter 205-4.5, HRS.

Should you have any questions, please feel free to call me.

Very truly yours,



Allan G. Fawcett
Deputy Attorney General

AGK/ejk

cc: Mr. George Moriguchi
Chief Planning Officer

Board of Water Supply

DEPARTMENT OF GENERAL PLANNING
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813

FRANK F. FASI
MAYOR



GEORGE S. MORIGUCHI
CHIEF PLANNING OFFICER

77/SUP-8 (HE)

June 8, 1979

JUN 13 11 27 AM '79
LAND USE COMMISSION
STATE OF HAWAII

Mr. Charles Duke, Chairman
State Land Use Commission
c/o Daniel Yasui
Pacific Trade Center
Suite 1795
Honolulu, Hawaii 96813

Dear Mr. Duke:

SUBJECT: SP 79-341 Board of Water Supply

This is in response to Mr. Allan Kawada's letter of May 30, 1979 regarding the SLUC action on SP 79-341. We were of the opinion that we had indicated that this was an integral part of the Koolauloa Housing project in our transmittal letter of April 18, 1979. If this permit is not granted, the proposed housing project's mortgage financing from Farmers Home Administration will be endangered. FHA, as indicated in the DLU report, will also be used to build the water well and reservoir.

This information was made clear to the Planning Commission by myself and Henry Eng of DLU. We request that the SLUC reconsider its action of May 16, 1979 and amend the record to reflect this information and grant the Special Permit.

Sincerely,

A handwritten signature in dark ink, appearing to read "George S. Moriguchi".
GEORGE S. MORIGUCHI
Chief Planning Officer

GSM:hb1

STATE OF HAWAII
LAND USE COMMISSION

Minutes of Meeting

Conference Room, State Building
54 High Street
Wailuku, Maui

Approved
OCT 16 1979

May 16, 1979 - 9:30 a.m.

COMMISSIONERS PRESENT: Charles Duke, Chairman
Mitsuo Oura
George Pascua
Carol Whitesell
Edward Yanai
William Yuen

COMMISSIONERS ABSENT: James Carras
Shinichi Nakagawa, Vice Chairman

STAFF PRESENT: Gordan Furutani, Executive Officer
Daniel Yasui, Planner
Allan Kawada, Deputy Attorney General
Dora Horikawa, Chief Clerk

Ray Russell, Court Reporter

HEARING

A78-451 - MAHINAHINA VENTURE & RICHARD K. G. STURSBURG

Chairman Duke opened the hearing on the subject docket and announced, for the record, that the hearing on A78-451 will be continued until tomorrow morning, due to the absence of Vice Chairman Nakagawa.

The parties were identified as follows:

William F. Crockett, attorney, representing the petitioners

Roy Yempuku, Deputy Corporation Counsel, representing the
Maui Planning Department

Esther Ueda, Planner, representing the Department of
Planning & Economic Development

It was reported by Mrs. Ueda that Deputy Attorney General Annette Chock will represent the State at the continued hearing tomorrow.

Commissioner Oura moved to approve the amendment to the Special Permit as requested by petitioner, subject to the nine conditions imposed by the Hawaii County Planning Commission. It was seconded by Commissioner Yuen and unanimously passed.

SP79-340 - LIHUE PLANTATION CO., LTD.

It was recommended by the Chairman that action on SP79-340 be deferred until tomorrow, May 17, 1979, as requested by Vice Chairman Nakagawa. It was so moved by Commissioner Pascua and seconded by Commissioner Whitesell. The motion was carried.

SP79-342 - MOLOKAI CHILDREN'S DAY CARE CO-OP
SPECIAL PERMIT TO ALLOW THE ESTABLISHMENT OF A CHILDREN'S DAY
CARE FACILITY AT MANAWAINUI, MOLOKAI

A resume of the subject request was presented by Mr. Yasui, and the area pointed out on the map.

Inasmuch as Molokai Ranch was involved in the agreement for the use of the unimproved roadway access, it was recommended by the Chairman that Commissioner Yuen abstain from voting on this request.

Upon motion by Commissioner Whitesell, seconded by Commissioner Miyasato, it was unanimously agreed to approve SP79-342, subject to the conditions imposed by the Maui Planning Commission.

SP79-343 - GOODFELLOW BROS., INC.
SPECIAL PERMIT TO ALLOW THE ESTABLISHMENT OF A TEMPORARY ROCK
CRUSHING FACILITY, ETC., AT KIHEI, MAUI

Commissioner Yuen reported that his law firm represents Haleakala Ranch, lessor of the subject property, and therefore the Chair ruled that a conflict existed and excused Commissioner Yuen from the deliberation.

Staff planner presented a resume of the request and identified the parcel on the map.

Commissioner Yanai moved to approve SP79-343, subject to the conditions imposed by the Maui Planning Commission. It was seconded by Commissioner Miyasato and unanimously carried.

SP79-341 - BOARD OF WATER SUPPLY
SPECIAL PERMIT TO ALLOW THE CONSTRUCTION & OPERATION OF A WATER
WELL AND RESERVOIR SYSTEM AT KIHEI, MAUI

Chairman Duke requested counsel from Deputy Attorney General Kawada as to whether subject request complied with the mandates

of Chapter 205, Section 4.5 of the Hawaii Revised Statutes.

Mr. Kawada advised that there was no information within the record upon which the Commission could make this determination, and therefore recommended that the application be remanded back to the City Planning Commission for clarification.

Commissioner Whitesell moved that subject request be remanded back to the City Planning Commission for clarification. The motion was seconded by Commissioner Yanai and carried.

Chairman Duke directed Counselor Kawada to communicate with the City Planning Commission regarding the Commission's foregoing action.

In response to a request by Commissioner Whitesell for a legal opinion by the Attorney General regarding the provisions of Chapter 205, Section 4.5, Chairman Duke advised that it was his intention to meet with the Attorney General and Counselor Kawada to discuss this matter.

The Executive Officer expressed his feeling that the Commission should employ a common-sense and practical approach in considering this request. Chairman Duke agreed in part with the Executive Officer's views; however, he felt that the Commission would be bound by the legal interpretation from the Attorney General's office.

The meeting was recessed at 11:36 a.m. to be continued at 9:30 a.m., May 17, 1979, at the Lanaina Community Center.

STATE OF HAWAII
LAND USE COMMISSION

VOTE RECORD

ITEM SP79-341 - BOARD OF WATER SUPPLY DATE May 16, 1979

PLACE Conf. Rm., State Building TIME 9:30 a.m.
Wailuku, Maui

	NAME	YES	NO	ABSTAIN	ABSENT
	RASCUA, GEORGE R.	X			
M	WHITESELL, CAROL	X			
	OURA, MITSUO	X			
	YUEN, WILLIAM W. L.	X			
	MIYASATO, SHINSEI	X			
	NAKAGAWA, SHINICHI				X
	CARRAS, JAMES				X
S	YANAI, EDWARD	X			
	DUKE, CHARLES	X			

Comments: I move that we remand this back to the City and County
for clarification.

STATE OF HAWAII
LAND USE COMMISSION

MEMORANDUM

TO: Land Use Commission

May 16, 1979

FROM: Staff

SUBJECT: SP79-341 - Board of Water Supply

The petitioner, Board of Water Supply, City and County of Honolulu, is requesting a Special Permit to allow the construction and operation of a water well and reservoir system on approximately one (1) acre of land situated within the State Land Use Agricultural District at Kahuku, Oahu, Tax Map Key 5-6-08: portion of 2. The subject property is located mauka of Kamehameha Highway and the Kahuku Hospital. (See attached location map).

The primary reason for the proposed water well and reservoir system is to serve the Koolauloa Housing Project. This water system is also designed to ultimately serve all the existing domestic water users in Kahuku Town. This water system is intended to replace the older private water system which has been serving Kahuku Town over the past century.

The proposed Koolauloa Housing Project is being undertaken by the City Department of Housing and Community Development. Federal funds are to be utilized for the acquisition and development of a 300-lot subdivision, district park site and sewer system in Kahuku just mauka of the Kahuku Hospital. The principal intent of the housing project is to relocate families from the existing Kahuku Plantation Homes and to meet the needs of the low and moderate income housing market in the Koolauloa District.

The City and County has earmarked approximately \$1.5 million of Community Development Block Grant funds to partially fund land acquisition and development of the subdivision improvements. Construction of the waste water treatment and disposal facility is intended to be funded through a \$1.6 million loan and grant from the Farmers Home Administration. The Board of Water Supply will also be using loan and grant funds of \$1.2 million from the Farmers Home Administration to construct the proposed water system.

The Environmental Impact Statement prepared for the proposed water system project was approved by the Governor on January 2, 1979.

The Land Study Bureau's overall master productivity soil rating for agricultural use is class "B" or "Good" for soils of the subject site.

The City and County's detailed land use map designates the subject property Agricultural. The County's zoning designation is AG-1 Restricted Agriculture.

The subject property is presently vacant of improvements and is former sugar cane land.

Pertinent comments from governmental agencies:

1. Department of Parks and Recreation

The County Department of Parks and Recreation stated the following:

"No objection to the special permit to establish a water well and reservoir on lands situated in Kahuku."

2. Department of Public Works

The County Department of Public Works had no objections to the request and further stated that all departmental requirements would have to be complied with.

3. State Department of Agriculture

The Department of Agriculture noted the following:

"The Department of Agriculture has reviewed the subject Special Use Permit application and has no objections or substantive recommendations to offer.

"For your information, however, we should note that the site being proposed for the well and reservoir is located within the area being proposed for a Kahuku Agricultural Park. The exact boundaries of the park will be determined upon completion of the negotiations currently being conducted by this agency and the Campbell Estate. In the interim, we would appreciate being kept apprised of the status of the project so that any potential conflicts can be avoided."

With regard to the comments provided by the Department of Agriculture, the Department of Land Utilization noted the following:

"Follow-up contact with the Department of Agriculture indicates that they are proceeding with plans to lease approximately 3,000 acres of agricultural lands in Kahuku for develop-

ment as an agricultural park. They do not, however, anticipate any conflict with the proposed water facilities under the subject special permit application as the agricultural park could actually surround it if necessary. They wish to be kept informed so as to insure compatibility with area-wide development patterns."

4. U.S.D.A. Soil Conservation Service

The Soil Conservation Service commented as follows:

"A major part of the proposed housing project is on prime ag. land. Most of the water well and reservoir site is on prime ag. lands. In cooperation with the West Oahu Soil and Water Conservation District we recommend that the entire project be relocated, perhaps mauka to avoid using prime ag. lands for other than cropland."

The Department of Land Utilization noted the following with regard to the Soil Conservation Service's comments:

"The housing project is not the subject of this request. The Department of Agriculture does not object to the well and reservoir."

Other agencies cooperating in the review of the permit request, including the State Department of Health and U.S. Army Corps of Engineers, had no objections to the application for Special Permit.

In its evaluation of the subject request, the County Department of Land Utilization sent an advance notification letter and map to neighboring landowners, the Neighborhood Board, community organizations and legislators from the area apprising them of the permit request. No comments were received by the Department of Land Utilization.

The County Department of Land Utilization provided the following analysis and recommendation regarding the application for Special Permit:

"Analysis:

The requested special permit is for a water system to support the reorganization and redevelopment of land uses within Kahuku Town. The primary new development it would serve is the 300-unit Koolauloa Housing project. This report and analysis does not discuss or evaluate the merits of the Koolauloa Housing project. The special permit request for the proposed water facilities is reviewed for compliance with the State Land Use Law.

"Part V-2 of that law provides that certain 'unusual and reasonable' uses within Agricultural and Rural Districts other

than those for which the District is classified may be permitted through the granting of a special permit. Guidelines are established for determining an 'unusual and reasonable' use. These guidelines are listed in the form of five 'Tests to be Applied.' The tests and responses to them are provided below:

- '(a) Such use shall not be contrary to the objectives sought to be accomplished by the Land Use Law and Regulations.'

"The proposed water well and reservoir use will only occupy approximately one acre of land. This is a relatively small area within the large existing agricultural district. The site has been under lease to the military and has not been used for agricultural purposes in recent years.

"The choice of the location for the water facilities is largely due to engineering requirements. Construction of the systems on these sites will not preclude accomplishment of the major objective of the Land Use Law. Koolauloa Housing Project is located on a site which has been placed in the Urban District by the Land Use Commission.

- '(b) That the desired use would not adversely affect surrounding property.'

"A water well and reservoir are not annoying or obnoxious uses. Landscaping will surround the facility to enhance its appearance and deter erosion. The reservoir will improve the existing water system in the area and also support the uses in the adjoining urban district.

- '(c) Such use would not unreasonably burden public agencies to provide roads and streets, sewers, water, drainage and school improvements, and police and fire protection.'

"The water well and reservoir will be owned and operated by the City's Board of Water Supply and thereby provide the City with a more reliable water system to serve the adjoining urban district. Adequate access will be provided, and construction of the facilities should not impose additional burden to other public agencies.

- '(d) Unusual conditions, trends and needs have arisen since the district boundaries and regulations were established.'

"Planned development of the Koolauloa Housing Project within the adjoining urban district requires construction of the proposed well and reservoir. Further, the elevation for the reservoir required to properly service this development and terrain conditions in this general area necessitates construction of the facilities within the agricultural district.

"The major regional change here since the land use district boundaries were established has been the closing of the operation of the Kahuku Sugar Plantation. Certain urban uses such as the Kuilima development and the Koolauloa Housing Project have been planned partially to provide additionally employment and housing opportunities in the Kahuku area.

'(e) That the land upon which the proposed use is sought is unsuited for the uses permitted within the District.'

"Engineering requirements dictate the location of the water reservoir. Basically, a certain height differential is needed to provide required water pressure to the service area of the system. The subject site, the only one suited to all requirements, lies in an area that is prime agricultural land. Its size and its location on a hill pose no threat to the intended agricultural use of the area.

"The Department of Land Utilization finds that the proposed water well and reservoir qualify as unusual and reasonable uses within the agricultural district and meet the tests to be applied for State Special Permits.

"Recommendation

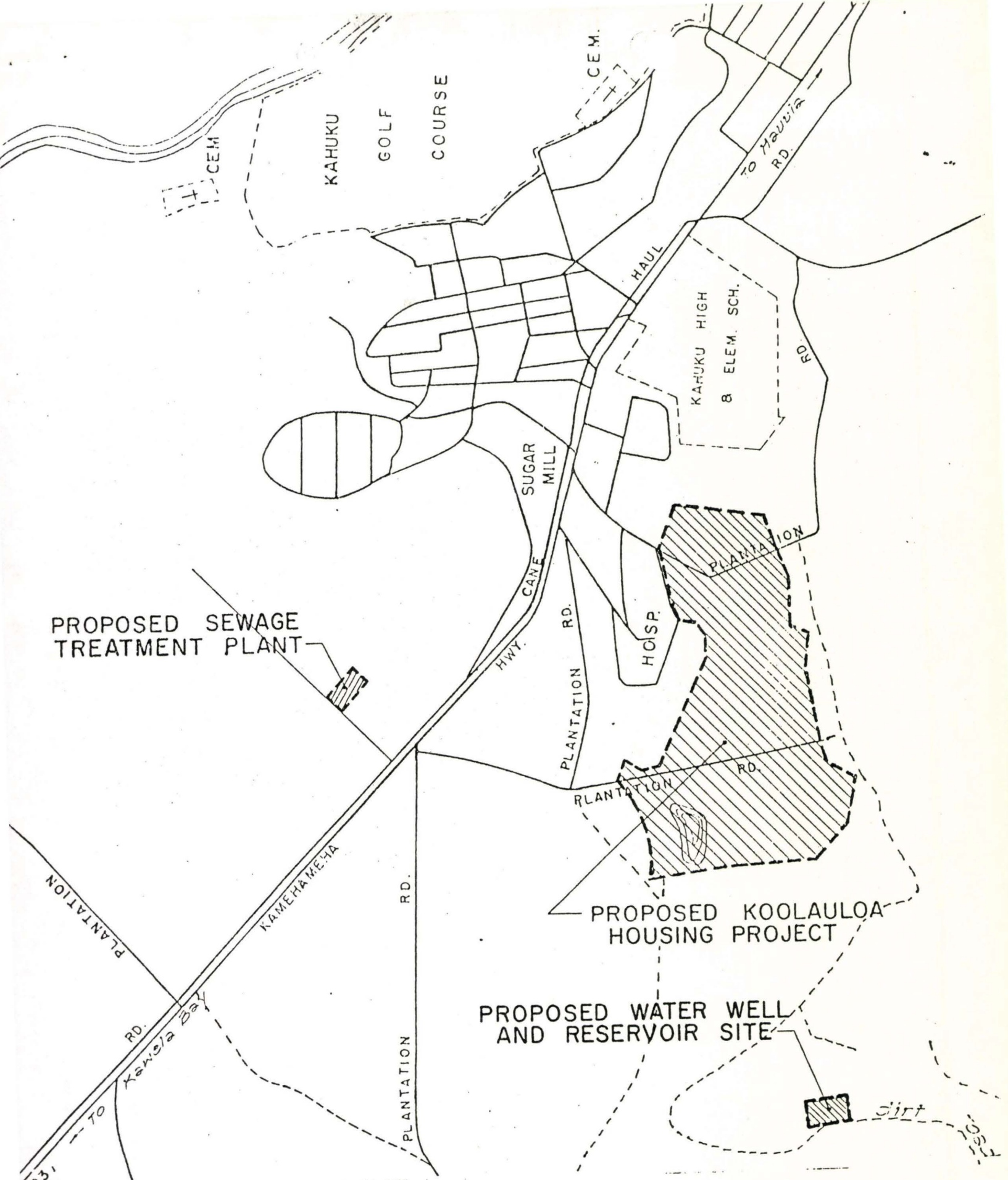
It is recommended that the application of the City and County Of Honolulu, Board of Water Supply, for a Special Permit to construct and operate a water well and reservoir at Kahuku, Oahu, Hawaii, Tax Map Key 5-6-06: portion of 6, be granted."

The City Planning Commission conducted a public hearing on the application for Special Permit on February 20, 1979. At that time, no one testified concerning the subject request. For the Commission's information the meeting minutes of February 20, 1979 has been attached.

On March 20, 1979, the Planning Commission voted to recommend approval of the Special Permit to the Land Use Commission as recommended by the Director of Land Utilization.

In accordance with Section 9-3, Subsection (2) of the Land Use Commission's Rules and Regulations which in part states that "The County Planning Commission shall establish, among other conditions, a reasonable time limit suited to establishing the particular use, which time limit, among other conditions shall be a condition of the Special Use Permit", staff recommends that if the Commission is to approve the subject request, an additional condition be imposed as follows:

"That construction of the water well and reservoir system commence within one (1) year from the effective date of the Special Permit."



PROPOSED SEWAGE
TREATMENT PLANT

PROPOSED KOOLAULOA
HOUSING PROJECT

PROPOSED WATER WELL
AND RESERVOIR SITE



SCALE 1"=800'

LOCATION
MAP

Meeting of the Planning Commission
Minutes
February 20, 1979

LAND USE COMMISSION
STATE OF HAWAII

APR 26 2 51 PM '79

The Planning Commission held a meeting on Tuesday, February 20, 1979 at 1:35 p.m., in the Conference Room of the City Hall Annex. Chairman Charles Izumoto presided.

PRESENT:

Charles Izumoto, Chairman
Charles Sarber, Chairman
Marion Kagan
Jacqueline Lee
Joseph Macapinlac

ABSENT:

Yuklin Aluli
Randall Kamiya
Melvin Kaneshige
Gertrude Zane

DEPARTMENT
REPRESENTATIVES:

George S. Moriguchi, Chief Planning Officer
Eugene B. Connell, Executive Secretary

MINUTES:

The Minutes of February 6, 1979 were approved, on motion by Mr. Macapinlac, seconded by Mrs. Lee and carried.

PUBLIC HEARING
SPECIAL USE PERMIT
(WATER WELL & RESERVOIR
WITHIN AGRICULTURAL DIST.)
KAHUKU
BOARD OF WATER SUPPLY
(FILE #77/SUP-8 HE)

A public hearing was held to consider a request for a State Special Use Permit for a Water Well and Reservoir System on approximately one acre of land within the Agricultural District at Kahuku, mauka of Kamehameha Highway and Kahuku Hospital, Tax Map Key: 5-6-06: portion of 6.

Publication was made in The Honolulu Advertiser on Saturday, February 10, 1979. No letters of protest were received.

Mr. Henry Eng presented the Director's report recommending approval of the request. In accordance with a State Land Use Commission requirement for Special Use Permits, Mr. Eng reported for the record that the proposed water well and reservoir site is on land designated "B" classification in the Land Study Bureau.

There were no questions concerning the Director's report.

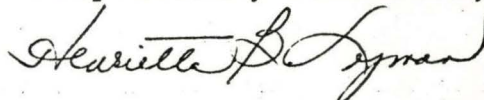
No one was present to speak either FOR or AGAINST the proposal.

The public hearing was closed, and the matter deferred for a statutory period of 15 days to March 20, 1979, on motion by Mr. Macapinlac, seconded by Mrs. Lee and carried.

ADJOURNMENT:

The meeting adjourned at 1:43 p.m.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Henrietta B. Lyman".

Henrietta B. Lyman
Secretary-Reporter

STATE OF HAWAII
LAND USE COMMISSION
Suite 1795
Pacific Trade Center
190 S. King Street
Honolulu, Hawaii 96813

May 4, 1979

Mr. George S. Moriguchi
Chief Planning Officer
Department of General Planning
City & County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Moriguchi:

Enclosed is a Notice of Land Use Commission meeting and the Agenda for the Meeting.

Please note that petition

SP79-341 - BOARD OF WATER SUPPLY

will be acted on at that time.

Should you have any questions on this matter, please contact this office.

Very truly yours,



GORDAN FURUTANI
Executive Officer

Enclosure - Agenda

STATE OF HAWAII
LAND USE COMMISSION
Suite 1795
Pacific Trade Center
190 S. King Street
Honolulu, Hawaii 96813

May 4, 1979

Mr. Eugene B. Connell
Executive Secretary to the Planning Commission
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Connell:

Enclosed is a Notice of Land Use Commission meeting and the Agenda for the Meeting.

Please note that petition

SP79-341 - BOARD OF WATER SUPPLY

will be acted on at that time.

Should you have any questions on this matter, please contact this office.

Very truly yours,



JORDAN FURUTANI
Executive Officer

Enclosure - Agenda

STATE OF HAWAII
LAND USE COMMISSION
Suite 1795
Pacific Trade Center
190 S. King Street
Honolulu, Hawaii 96813

May 4, 1979

Mr. Tyrone T. Kusao, Director
Department of Land Utilization
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Kusao:

Enclosed is a Notice of Land Use Commission meeting and the Agenda for the Meeting.

Please note that petition

SP79-341 - BOARD OF WATER SUPPLY

will be acted on at that time.

Should you have any questions on this matter, please contact this office.

Very truly yours,



GORDAN FURUTANI
Executive Officer

Enclosure - Agenda

STATE OF HAWAII
LAND USE COMMISSION

NOTIFICATION OF LAND USE COMMISSION MEETING

DATE, TIME AND PLACE

May 16, 1979 - 9:30 a.m.
Conference Room, State Building
54 High Street
Wailuku, Maui

A G E N D A

I. HEARING

1. A78-451 - Mahinahina Venture and Richard K. G. Stursberg (Maui)

To reclassify approximately 26.905 acres of land presently in the Agricultural District into the Urban District at Honokowai, Kaanapali, Lahaina, Maui, for a residential subdivision.

II. ACTION

1. SP78-296 - Christian Broadcasting Association (Amendment)
(Molokai)

To amend Condition No. 1 of Special Permit 78-296 which allowed the construction and operation of a radio transmission facility on approximately thirty (30) acres of land situated within the State Land Use Agricultural District at Kaluakoi, Molokai.

2. SP78-298 - Suisan Company, Ltd. (Amendment) (Hawaii)

To amend the Special Permit to allow the establishment of a frozen food storage and wholesaling operation and to increase the land area of the permit by 2.2 acres at Panaewa Farm Lots, 2nd Series, Waiakea, Hawaii.

3. SP79-340 - Lihue Plantation Co., Ltd. (Kauai)

To allow the establishment of a sandmining operation on approximately 26 acres of land situated within the State Land Use Agricultural District at Kealia, Kauai.

4. SP79-342 - Molokai Children's Day Care Co-op (Molokai)

To allow the establishment of a children's day care facility on approximately one (1) acre of land situated within the State Land Use Agricultural District at Manawainui, Molokai.

5. SP79-343 - Goodfellow Bros., Inc. (Maui)

To allow the establishment of a temporary rock crushing facility and materials storage area on approximately 14 acres of land situated within the State Land Use Agricultural District at Kihei, Maui.

✓ 6. SP79-341 - Board of Water Supply (Oahu)

To allow the construction and operation of a water well and reservoir system on approximately one (1) acre of land situated within the State Land Use Agricultural District at Kahuku, Oahu.

III. MISCELLANEOUS

1. Adoption of Minutes

NOV 16 1978

DEC 5 1978

2. Meeting Schedule

5/8/79 - A COPY OF THIS AGENDA WAS MAILED TO ALL PERSONS AND ORGANIZATIONS ON THE ATTACHED MAILING LISTS:

- | | | | |
|--------------|------------|-----------|---------|
| 1. STATEWIDE | 2. OAHU | 3. HAWAII | 4. MAUI |
| 5. KAUAI | 6. MOLOKAI | | |

Meeting of the Planning Commission
Minutes
February 20, 1979

LAND USE COMMISSION
STATE OF HAWAII

APR 26 2 51 PM '79

The Planning Commission held a meeting on Tuesday, February 20, 1979 at 1:35 p.m., in the Conference Room of the City Hall Annex. Chairman Charles Izumoto presided.

PRESENT:

Charles Izumoto, Chairman
Charles Sarber, Chairman
Marion Kagan
Jacqueline Lee
Joseph Macapinlac

ABSENT:

Yuklin Aluli
Randall Kamiya
Melvin Kaneshige
Gertrude Zane

DEPARTMENT
REPRESENTATIVES:

George S. Moriguchi, Chief Planning Officer
Eugene B. Connell, Executive Secretary

MINUTES:

The Minutes of February 6, 1979 were approved, on motion by Mr. Macapinlac, seconded by Mrs. Lee and carried.

PUBLIC HEARING
SPECIAL USE PERMIT
(WATER WELL & RESERVOIR
WITHIN AGRICULTURAL DIST.)
KAHUKU
BOARD OF WATER SUPPLY
(FILE #77/SUP-8 HE)

A public hearing was held to consider a request for a State Special Use Permit for a Water Well and Reservoir System on approximately one acre of land within the Agricultural District at Kahuku, mauka of Kamehameha Highway and Kahuku Hospital, Tax Map Key: 5-6-06: portion of 6.

Publication was made in The Honolulu Advertiser on Saturday, February 10, 1979. No letters of protest were received.

Mr. Henry Eng presented the Director's report recommending approval of the request. In accordance with a State Land Use Commission requirement for Special Use Permits, Mr. Eng reported for the record that the proposed water well and reservoir site is on land designated "B" classification in the Land Study Bureau.

There were no questions concerning the Director's report.

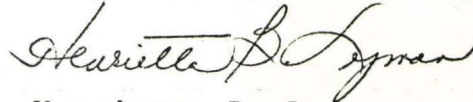
No one was present to speak either FOR or AGAINST the proposal.

The public hearing was closed, and the matter deferred for a statutory period of 15 days to March 20, 1979, on motion by Mr. Macapinlac, seconded by Mrs. Lee and carried.

ADJOURNMENT:

The meeting adjourned at 1:43 p.m.

Respectfully submitted,

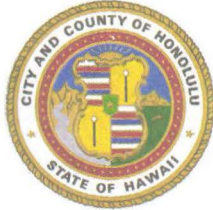
A handwritten signature in cursive script, appearing to read "Henrietta B. Lyman".

Henrietta B. Lyman
Secretary-Reporter

DEPARTMENT OF GENERAL PLANNING
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813

FRANK F. FASI
MAYOR



GEORGE S. MORIGUCHI
CHIEF PLANNING OFFICER

77/SUP-8(HE)

April 18, 1979

Mr. Charles Duke
State Land Use Commission
Pacific Trade Center, Suite 1795
Honolulu, Hawaii 96813

SP79-341

LAND USE COMMISSION
STATE OF HAWAII
APR 19 12 18 PM '79

Dear Mr. Duke:

Subject: Request for a State Special Use Permit for construction and operation of a water well and reservoir system to support the proposed Koolauloa Housing Project at Kahuku.

Applicant: Board of Water Supply
Location: Mauka of Kam Hwy. and Kahuku Hospital
Area: Approximately 1 acre
Tax Map Key: 5-6-06: Portion of 6

The Planning Commission held a public hearing on the application of the Board of Water Supply for a State Special Use Permit on February 20, 1979. The applicant proposes to construct and operate a water well and reservoir system to support the proposed Koolauloa Housing Project at Kahuku on a portion of the property identified by Tax Map Key: 5-6-06: portion of 6. The details of the proposal are contained in the attached report from the Director of Land Utilization.

As requested in a previous communication from Mr. Kawada related to the Special Permit request SP78-317 which was also for Koolauloa Housing Project, the Planning Commission has determined that the property involved in this request has a "B" classification in the Land Bureau Study.

The Planning Commission on March 20, 1979 voted to recommend approval of the State Special Use Permit in agreement with the Director of Land Utilization.

The other materials and exhibits which are pertinent to the application are also attached.

FORWARDED:

A handwritten signature in dark ink, appearing to read "George S. Moriguchi".
GEORGE S. MORIGUCHI
Chief Planning Officer
EBC:hb1
Attchs.

Sincerely,

A handwritten signature in dark ink, appearing to read "Eugene B. Connell".
EUGENE B. CONNELL
Executive Secretary
to the Planning Commission

APPLICATION DATA & ROUTING FORM

APPLICANT City & County Board of Water Supply

FOLDER NO. 77/SUP-8

PLANNER _____

EXTENSION NO. _____

AGENT Park Engineering, Inc.

COUNCIL DIST. _____

Suite 2085, Pacific Trade Center

190 S. King St.

Honolulu, HI 96813

LANDOWNER Campbell Estate

TAX MAP KEY 5-6-06: Por 6
~~5-6-02: portion of 1~~

LOCATION Kahuku Kahuku

AREA 3.7 acres ^{Approx} 1 Acre

STATE LAND USE DISTRICT Agriculture

GENERAL PLAN Agriculture

DETAILED LAND USE MAP Agriculture

DEVELOPMENT PLAN Ag

EXISTING ZONING AG-1

EXISTING LAND USE Ag / vacant

REQUEST To allow construction & operation
of water well & reservoir in Agricultural Dist.

ADJOINING PROPERTY OWNERS (TAX MAP KEYS)

DEPARTMENT OF LAND UTILIZATION
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813

Authorization	<i>WBC</i>
Advertisement	<i>2/10/79</i>
Public Hearing	<i>2/20/79</i>

FRANK F. FASI
MAYOR



TYRONE T. KUSAO
DIRECTOR

77/SUP-8 (HE)

January 23, 1979

MEMORANDUM

TO : PLANNING COMMISSION

FROM : TYRONE T. KUSAO, DIRECTOR OF LAND UTILIZATION

SUBJECT: 77/SUP-8 - CONSTRUCTION AND OPERATION OF WATER
WELL AND RESERVOIR

Transmitted herewith for appropriate action is my report
on the subject request.

A handwritten signature in cursive script, reading "Tyrone T. Kusao".

TYRONE T. KUSAO
Director of Land Utilization

TTK:fm

Attach.

DEPARTMENT OF LAND UTILIZATION
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813

FRANK F. FASI
MAYOR



TYRONE T. KUSAO
DIRECTOR

77/SUP-8 (HE)

January 23, 1979

DIRECTOR'S REPORT
STATE SPECIAL USE PERMIT
Water Well and Reservoir System within
the Agricultural District to Support the
Proposed Koolauloa Housing Project at
Kahuku, Oahu, Hawaii

REQUEST	✓: Construction and Operation of a Water Well and Reservoir
APPLICANT	✓: Board of Water Supply
LANDOWNER	: Campbell Estate
LOCATION	✓: Mauka of Kamehameha Highway and Kahuku Hospital
AREA	✓: Approximately 1 Acre
TAX MAP KEY	✓: 5-6-06: Portion of 6
STATE LAND USE DISTRICT	✓: Agricultural
DETAILED LAND USE MAP	✓: Agricultural
DEVELOPMENT PLAN	✓: None adopted for the area.
EXISTING ZONING	✓: AG-1 Restricted Agriculture
EXISTING LAND USE	✓: Vacant, former sugar cane land



OCEAN

R-6 RESIDENTIAL DISTRICT

AG-1 RESTRICTED AGRICULTURAL DISTRICT

AG-2 GENERAL AGRICULTURAL DISTRICT

PD-SC DIST. NO. 1

PROPOSED SEWAGE TREATMENT PLANT

PROPOSED KOOLAULOA HOUSING PROJECT

AG-1

PAMEHAUENA O HAWAII

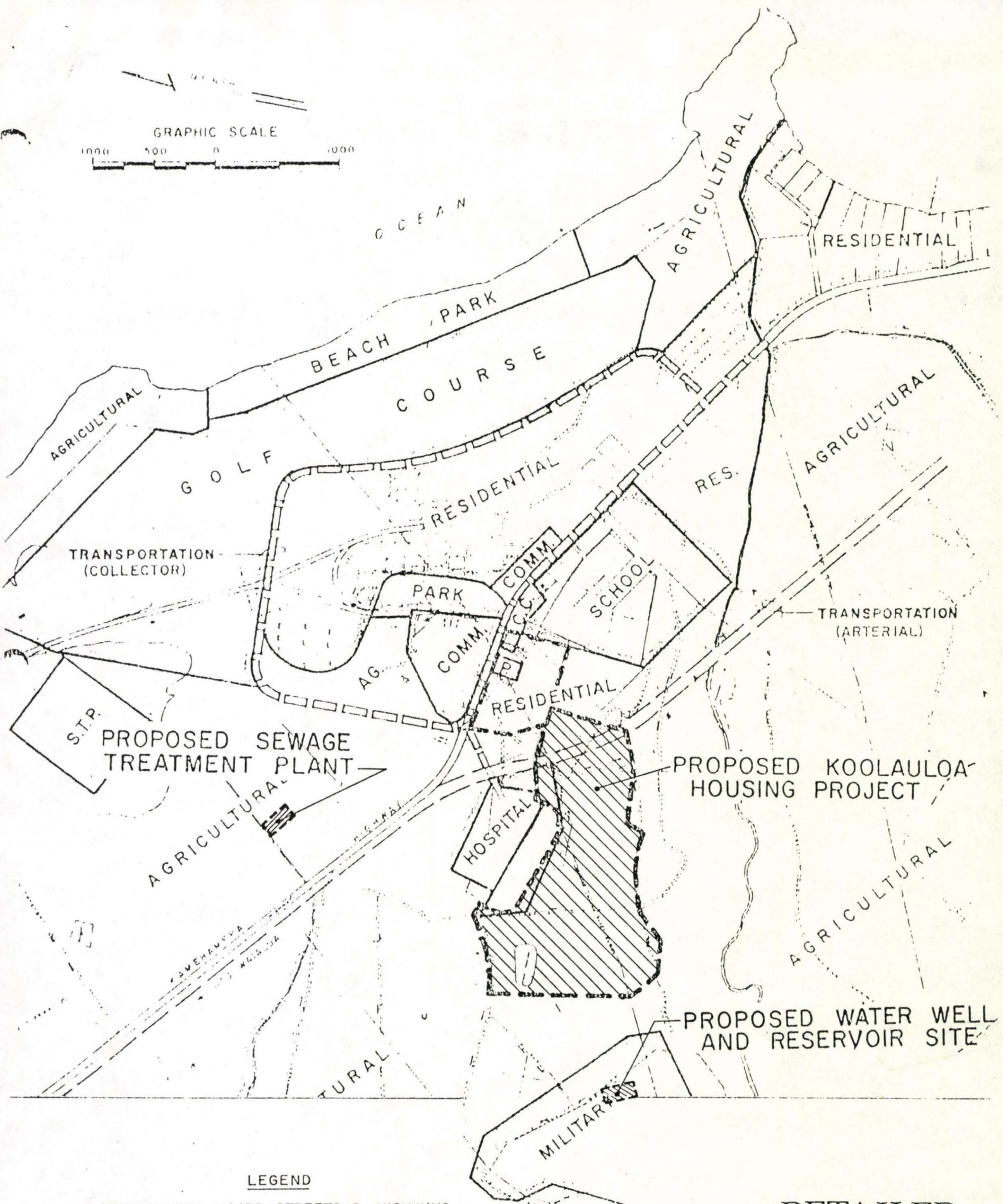
HIGHWAY

RESTRICTED AGRICULTURAL



DISTRICT

PROPOSED WATER WELL AND RESERVOIR SITE

ZONING MAP



LEGEND

-  MAJOR STREETS & HIGHWAYS
-  STREETS & HIGHWAY WIDENING

DETAILED
LAND USE
MAP

Proposal

Construction and operation of a water well and reservoir by the Board of Water Supply. The primary reason for the water facilities is to serve the Koolauloa Housing Project. The water system is also designed to serve ultimately all of the existing domestic water users in Kahuku Town.

Koolauloa Housing Project

The City Department of Housing and Community Development is proposing to use federal funds for acquisition and development of a 300-lot subdivision, district park site and sewer system in Kahuku just mauka of the Kahuku Hospital. The basic intent of the project is to relocate the families from the existing Kahuku Plantation Homes and to meet the needs of the low- and moderate-income housing market in the Koolauloa District.

At this time, the City has earmarked \$1.5 million of Community Development Block Grant (CDBG) funds to partially fund land acquisition and development of the subdivision improvements.

Additionally, the City, through the Department of Public Works has applied for and obtained a \$1.6 million loan and grant from the Farmers Home Administration for the construction of a waste water treatment and disposal facility with the necessary transmission and collection system. The Board of Water Supply also will be using loan and grant funds of \$1.2 million from the Farmers Home Administration to construct the wells, reservoir and water system.

This new water system will be a part of the Board's public system which is designed to eventually replace the older private water system which has been serving Kahuku Town over the past century.

Because of all this public participation and funding, the City Department of Housing and Community Development (DHCD) has filed an Environmental Impact Statement (EIS) for the Koolauloa Housing Project and waste water treatment system. This EIS was accepted in final form by the Department of Land Utilization on November 30, 1977. Federal EIS procedures have also been complied with by DHCD. The EIS for the water system was approved by the Governor on January 2, 1979.

Approximately 50 acres of the site will be subdivided for single-family residential development including the access road. 7.3 acres will be transferred to Department of Parks and Recreation as a park site to serve the development. The ultimate development is proposed to be a modified subdivision as allowed by Act 179 of the 1974 State Legislature (HRS 359G-4,g). Some lot sizes will probably be less than 5,000 square feet and a zero lot line concept is to be used where appropriate. DHCD also proposes possible elimination of curbs, gutters, sidewalks, driveway aprons and underground utilities. With all subsidies, the target sales price of these homes and fee simple lots is in the \$35,000 range.

Government Agency Review Comments:

Board of Water Supply: "We have no comments or recommendations."

Department of Parks and Recreation: "No objection to the special use permit to establish a water well and reservoir on lands situated in Kahuku."

The location of the proposed project would not have any effect on park or golf course plans in this area.

Department of Public Works: No objections. The project will have to comply with all Department of Public Works requirements.

Department of Health: "We have no comments or objections."

Department of Agriculture: "The Department of Agriculture has reviewed the subject Special Use Permit application and has no objections or substantive recommendations to offer.

"For your information, however, we should note that the site being proposed for the well and reservoir is located within the area being proposed for a Kahuku Agricultural Park. The exact boundaries of the park will be determined upon completion of the negotiations currently being conducted by this agency and the Campbell Estate. In the interim, we would appreciate being kept apprised of the status of the project so that any potential conflicts can be avoided."

Department of Land Utilization Comment: Follow-up contact with the Department of Agriculture indicates that they are proceeding with plans to lease approximately 3,000 acres of agricultural lands in Kahuku for development as an agricultural park. They do not, however, anticipate any conflict with the proposed water facilities under the subject special permit application as the agricultural park could actually surround it if necessary. They wish to be kept informed so as to insure compatibility with area-wide development patterns.

Soil Conservation Service, U.S. Department of Agriculture:

"A major part of the proposed housing project is on prime ag. land. Most of the water well and reservoir site is on prime ag. lands. In cooperation with the West Oahu Soil and Water Conservation District we recommend that the entire project be relocated, perhaps mauka to avoid using prime ag. lands for other than cropland."

Department of Land Utilization Comment: The housing project is not the subject of this request. The Department of Agriculture does not object to the well and reservoir.

Corps of Engineer, U. S. Army: "We have reviewed the proposed actions and find that no Department of Army permits are required. We have no other comments at this time."

Community Input:

An advance notification letter and map were sent to neighboring land-owners, the Neighborhood Board, community organizations and legislators from the area on November 28, 1977. No comments were received.

Analysis:

The requested special permit is for a water system to support the reorganization and redevelopment of land uses within Kahuku Town. The primary new development it would serve is the 300-unit Koolauloa Housing project. This report and analysis does not discuss or evaluate the merits of the Koolauloa Housing project. The special permit request for the proposed water facilities is reviewed for compliance with the State Land Use Law.

Part V-2 of that law provides that certain "unusual and reasonable" uses within Agricultural and Rural Districts other than those for which the District is classified may be permitted through the granting of a special permit. Guidelines are established for determining an "unusual and reasonable" use. These guidelines are listed in the form of five "Tests to be Applied." The tests and responses to them are provided below:

"(a) Such use shall not be contrary to the objectives sought to be accomplished by the Land Use Law and Regulations."

The proposed water well and reservoir use will only occupy approximately one acre of land. This is a relatively small area within the large existing agricultural district. The site has been under lease to the military and has not been used for agricultural purposes in recent years.

The choice of the location for the water facilities is largely due to engineering requirements. Construction of the systems on these sites will not preclude accomplishment of the major objective of the Land Use Law. Koolauloa Housing Project is located on a site which has been placed in the Urban District by the Land Use Commission.

"(b) That the desired use would not adversely affect surrounding property."

A water well and reservoir are not annoying or obnoxious uses. Landscaping will surround the facility to enhance its appearance and deter erosion. The reservoir will improve the existing water system in the area and also support the uses in the adjoining urban district.

"(c) Such use would not unreasonably burden public agencies to provide roads and streets, sewers, water, drainage and school improvements, and police and fire protection."

The water well and reservoir will be owned and operated by the City's Board of Water Supply and thereby provide the City with a more reliable water system to serve the adjoining urban district. Adequate access will be provided, and construction of the facilities should not impose additional burden to other public agencies.

- "(d) Unusual conditions, trends and needs have arisen since the district boundaries and regulations were established."

Planned development of the Koolauloa Housing Project within the adjoining urban district requires construction of the proposed well and reservoir. Further, the elevation for the reservoir required to properly service this development and terrain conditions in this general area necessitates construction of the facilities within the agricultural district.

The major regional change here since the land use district boundaries were established has been the closing of the operation of the Kahuku Sugar Plantation. Certain urban uses such as the Kuilima development and the Koolauloa Housing Project have been planned partially to provide additionally employment and housing opportunities in the Kahuku area.

- "(e) That the land upon which the proposed use is sought is unsuited for the uses permitted within the District."

Engineering requirements dictate the location of the water reservoir. Basically, a certain height differential is needed to provide required water pressure to the service area of the system. The subject site, the only one suited to all requirements, lies in an area that is prime agri-

cultural land. Its size and its location on a hill pose no threat to the intended agricultural use of the area.

The Department of Land Utilization finds that the proposed water well and reservoir qualify as unusual and reasonable uses within the agricultural district and meet the tests to be applied for State Special Permits.

Recommendation

It is recommended that the application of the City and County of Honolulu, Board of Water Supply, for a Special Permit to construct and operate a water well and reservoir at Kahuku, Oahu, Hawaii, Tax Map Key 5-6-06: portion of 6, be granted.

A handwritten signature in dark ink, appearing to read 'Tyrone T. Kusao', is written over the typed name.

TYRONE T. KUSAO
Director of Land Utilization

TTK:st

Meeting of the Planning Commission
Minutes
March 20, 1979

The Planning Commission held a meeting on Tuesday, March 20, 1979 at 1:41 p.m., in the Conference Room of the City Hall Annex. Due to the absence of the Chairman, Commissioner Charles Sarber presided as Acting Chairman.

PRESENT:

Charles Sarber, Acting Chairman
Jacqueline Lee
Randall Kamiya
Melvin Kaneshige
Gertrude Zane

ABSENT:

Charles Izumoto, Chairman
Yuklin Aluli
Marion Kagan
Joseph Macapinlac

DEPARTMENT
REPRESENTATIVES:

Eugene B. Connell, Executive Secretary
Henry Eng, Staff Planner

MINUTES:

The Minutes of February 20, 1979 were approved, on motion by Mrs. Lee, seconded by Mr. Kaneshige and carried.

PUBLIC HEARING
WAIAWA-HALAWA
DLUM AMENDMENT
COMMERCIAL TO RESIDENTIAL
PARK ENGINEERING, INC. &
INTERNATIONAL MANAGEMENT
CORPORATION
(FILE #419/32 WL)

A public hearing was held to consider a request to amend the Detailed Land Use Map by changing the designated land use from Commercial to Residential on approximately 12,658 square feet of property located at Pacific Palisades, Oahu, Tax Map Key: 9-7-93: 11

Publication was made in The Honolulu Advertiser on Saturday, March 10, 1979. No letters of protest were received.

Mr. Eugene Connell presented the report of the Chief Planning Officer recommending approval of the proposal.

There were no questions of staff regarding the recommendation of the Chief Planning Officer.

No one spoke either FOR or AGAINST the request.

The public hearing was closed, on motion by Mr. Kaneshige, seconded by Mrs. Zane and carried.

ACTION: The Commission suspended its rules for deferral and recommended approval of the proposal, on motion by Mr. Kaneshige, seconded by Mrs. Zane and carried.

AYES - Kamiya, Kaneshige, Lee, Sarber, Zane
NAYES - None
ABSENT - Aluli (present at 2:15 p.m.), Izumoto, Kagan, Macapinlac

PUBLIC HEARING
ZONE CHANGE REQUEST
(R-6 RESIDENTIAL TO
I-1 LIGHT INDUSTRIAL)
KALIHI
BLOOD BANK OF HAWAII
(FILE #78/Z-33 EY)

A public hearing was held to consider a request for a zoning change from R-6 Residential to I-1 Light Industrial District on 13,934+ square feet of area in Kalihi-Kai, Tax Map Key: 1-2-09: portion of 11, 14 and 15.

Publication was made in The Honolulu Advertiser on Saturday, March 10, 1979. No letters of protest were received.

Mr. Henry Eng presented the Director's report recommending approval of the request.

There were no questions of staff concerning the Director's report.

TESTIMONY IN SUPPORT

Mr. Revocato Medina, Chairman of Kalihi-Palama Neighborhood Board 25 stated that the proposed zone change is in line with plans for their community.

TESTIMONY AGAINST

None

The public hearing was closed on motion by Mr. Kamiya, seconded by Mr. Kaneshige and carried.

ACTION: The Commission suspended its rules for deferral and recommended approval of the request, on motion by Mr. Kamiya, seconded by Mr. Kaneshige and carried.

AYES - Kamiya, Kaneshige, Lee, Sarber, Zane
NAYES - None
ABSENT - Aluli (present at 2:15 p.m.), Izumoto, Kagan, Macapinlac

PUBLIC HEARING
ZONE CHANGE REQUEST
(P-1 PRESERVATION TO
R-4 RESIDENTIAL)
KAILUA
ENCHANTED LAKE PARTNERS
(FILE #78/Z-29 HE)

A public hearing was held to consider a request for a zone change from P-1 Preservation to R-4 Residential District on approximately 2.8 acres of land situated off of Kuuna Place, Keolu Hills, Kailua, Tax Map Key: 4-2-02: portion of Parcel 41.

Publication was made in The Honolulu Advertiser on Saturday, March 10, 1979. Communication received against the project is summarized in public testimony opposing the proposal.

Mr. Henry Eng presented the Director's report recommending approval of the request.

No questions were raised regarding the Director's report.

TESTIMONY IN SUPPORT

Mr. Henry Alves, representing Enchanted Lake Partners, agreed to the conditions in the Director's report.

TESTIMONY AGAINST

1. Letter dated March 17, 1979 from Susan M. Campbell, President, Kailua Heights Community Association (copy attached)
2. Testimony dated March 19, 1979 presented by Mrs. Kathleen Berg, adjoining property owner (copy attached).

CONCERNS:

1. Inadequate drainage of runoff water during heavy rains. Subject land area is a flood plain.
 - a. Homes along Kuuna Street suffered damage that ranged from mud-flooded swimming pools to ruined carpets from flooded homes.
 - b. Sufficient drainage canals which could be built, paved and maintained would add to the cost of the homes. Consequently to cut costs, tract homes would result or lot sizes minimized to increase the number of lots for sale.
 - c. Based on the long established rainfall pattern and failure of Enchanted Lake Partners' drainage measures at the end of Kina and Kuuna Streets, a flood plain should be maintained behind Kuuna Place.
2. Past experiences with Enchanted Lake Partners about their competence and their manner of doing business is questionable. The applicant's past disregard for existing residents' property indicates that the applicant may not operate in good faith.
3. Existing traffic facilities are inadequate. Impact from the proposal will be substantial.
4. Shortage of parks in the area is evidenced by the number of children who presently play on the streets.
5. Changes in topography caused by landfill will violate the privacy of adjoining property owners.
6. Access through the development to the Preservation District should be allowed.

7. Assurance that the proposed development will mark the end of residential encroachment into the open space of the greenbelt area.

Questioned by the Commission as to whether she would object to the proposal in view of the proposed conditions, particularly that this is the last proposal in the subject area by the applicant, Mrs. Berg stated: "I object personally, yes, but I feel under the circumstances the compromise is probably the best the community can do. We would prefer that they not put in this addition, several of us. Under the circumstances, the past history of development just around the area and the fact that the developer does own the land and probably wants to do this sometime or another, this seems to be a reasonable solution to stop the encroachment from going up the hill before it gets worse. Then the fact that it is legally binding is a reasonable solution."

The public hearing was closed, on motion Mr. Kaneshige, seconded by Mrs. Zane and carried.

ACTION: The Commission suspended its rules for deferral and recommended approval of the proposal, subject to conditions in the Director's report, on motion by Mr. Kaneshige, seconded by Mrs. Zane and carried.

AYES - Kamiya, Kaneshige, Lee, Sarber, Zane

NAYES - None

ABSENT - Aluli (present at 2:15 p.m.), Izumoto, Kagan, Macapinlac

UNFINISHED BUSINESS
SPECIAL USE PERMIT
(WATER WELL & RESERVOIR
WITHIN AGRICULTURAL DISTRICT)
KAHUKU
BOARD OF WATER SUPPLY
(FILE #77/SUP-8 HE)

The public hearing held February 20, 1979 was closed and the matter deferred for a statutory period of 15 days.

No discussion followed.

ACTION: The Commission recommended approval of the Special Use Permit, on motion by Mr. Kamiya, seconded by Mrs. Lee and carried.

AYES - Kamiya, Kaneshige, Lee, Sarber, Zane

NAYES - None

ABSENT - Aluli (present at 2:15 p.m.)
Izumoto, Kagan, Macapinlac

(Commissioner Kuna entered the meeting at this point.)

Before adjourning, Commissioner Kamiya reported the following: "It was brought to my attention that there was introduced in the House and Senate a Bill which would eliminate the role of the Planning Commission in the case of Special Use Permits. In fact, there are two such bills. One would put a limitation to 15 acres which doesn't have to go to the State Land Use Commission. That Bill is okay, but the one that totally eliminates the role of the Planning Commission is unfair.

'This has been going on for many years and whenever it involved us, it was never discussed with us. We are the ones directly involved yet we have never been given any kind of input. If there is further elimination of such duties as this, we might as well just quit.

'At Richard Kawakami's hearing there wasn't anybody opposed to it. There were just the people supporting it.'"

NEW BUSINESS

MOTION: On a motion by Mrs. Aluli, seconded by Mrs. Zane, the Commission added the above subject matter to the agenda.

AYES - Aluli, Kamiya, Kaneshige, Lee, Sarber, Zane
NAYES - None
ABSENT - Izumoto, Kagan, Macapinlac

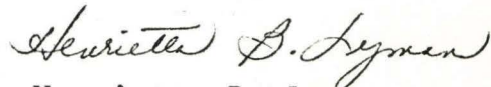
ACTION: The Commission voted that communication be sent to the Legislature indicating their concerns as reported by Mr. Kamiya.

AYES - Aluli, Kamiya, Kaneshige, Lee, Sarber, Zane
NAYES - None
ABSENT - Izumoto, Kagan, Macapinlac

ADJOURNMENT:

The meeting adjourned at 2:41 p.m.

Respectfully submitted,


Henrietta B. Lyman
Secretary-Reporter

Kailua Heights Community Association
1309 Kuuna Street
Kailua, HI, 96734
March 17, 1979

Department of General Planning
Planning Commission
Honolulu Municipal Building
650 South King Street
Honolulu, HI, 96813

*Rec'd. 2:22 pm
3/20/79
R. C. Campbell
H. C. Campbell*

Gentlemen:

This letter is relative to the matter of the Kailua zone change request 78/z-29(HE) which is to be considered at public hearing March 20, 1979 of the Planning Commission.

The Kailua Heights Community Association wishes you to be acquainted with the concerns of the residents in the area of this proposed zone change. I have attached a copy of our letter to the Department of Land Utilization outlining those concerns. I draw your attention especially to the problem of adequate drainage of runoff water during heavy rains.

Thank you for your thoughtful consideration of our position.

Very truly yours,

Susan M. Campbell
Susan M. Campbell

President

Kailua Heights Community Association
1309 Kuuna Street
Kailua, HI, 96734
January 22, 1979

Department of Land Utilization
650 South King Street
Honolulu, HI, 96813

Attention: Henry Eng

Gentlemen:

The Kailua Heights Community Association wishes to acquaint you with its position relative to the request by Enchanted Lake Partners for a zoning change from P-1 Preservation District to R-4 Residential District for a 2.8 acre parcel off Kuuna Place, Kailua, Tax Map Key 4-2-02: Portion of 41.

We feel that the following problems must be resolved before a change in zoning is permitted:

- ① Drainage of runoff water during heavy rains.
2. Changes in topography due to filling that will violate the privacy of adjoining property owners.
- ③ Access through the proposed development to the Preservation District beyond. D.L.U. Recommendation
- ④ Assurance that the proposed development will mark the end of residential encroachment into the open space of the greenbelt area. D.L.U. Recommendation

(The Kailua Heights Community Association feels that the City standards and Enchanted Lake Partners underestimate the amount

of runoff water during heavy rains in this area. There has already been flooding and erosion, accompanied by extensive property damage, because of existing inadequate drainage facilities. If the present drainage system meets the City standards, we maintain that these standards are inadequate and request that standards be upgraded to meet the real needs of this area.

The Kailua Heights Community Association feels that any filling of the proposed development area should be minimal in order that the privacy of adjoining property owners not be violated, and to prevent flooding during construction.

The Kailua Heights Community Association requests that access through the proposed development to the Preservation District beyond be assured. We understand that this assurance was given by Enchanted Lake Partners at the Kailua Neighborhood Board meeting of January 11, 1979.

The Kailua Heights Community Association feels that all boundaries on zoning and planning documents should be consistent and should indicate that all residential development ends at the boundary of this proposed development, to insure conformity with the greenbelt policy of the Kailua Neighborhood Board's development plan. This is in accord with their recommendation that future population growth in Kailua be concentrated in the Kailua core area, rather than in outlying areas.

The Kailua Heights Community Association requests that there be no blasting during construction, with the understanding that this assurance was given by the developer at the Kailua Neighborhood Board meeting of January 11, 1979.

The Kailua Heights Community Association requests that the houses constructed in the proposed development be single family

dwellings similar to existing housing in the adjoining area.

The Kailua Heights Community Association requests that there be some one person from the City designated by name to monitor this project to assure that all conditions are honored by the developer. Because of past experiences, the members of this community feel that it is important to have a single designated contact within the City government to whom we can address our concerns.

Very truly yours,

Susan M. Campbell

Susan M. Campbell

President

cc: Kailua Neighborhood Board No. 31
Councilman Daniel Clement
Councilman Andrew Poepoe
Enchanted Lake Partners

1229 Kuuna Street
Kailua, Hawaii 96734
March 19, 1979

Department of General Planning
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

TO WHOM IT MAY CONCERN:

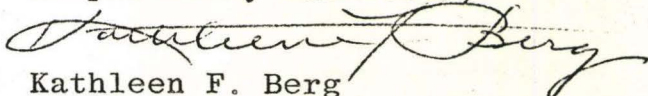
Please file the attached documents to be considered by the Planning Commission in any decisions made about the KAILUA--ZONE CHANGE REQUEST--78/Z-29(HE), concerning Enchanted Lake Partners' request for rezoning from P-1 to R-4 a portion of Parcel 41, TAX MAP KEY: 4-2-02, public hearing to be held 20 Mar 79 at 1:30 p.m.

The documents include:

- 1) An open letter presented by Ms. Kathy Berg at the 11 Jan 79 meeting of the Kailua Neighborhood Board public information meeting held on this issue. The letter itemizes concerns held by many of the residents of the affected Kailua neighborhood. Attachments to the letter support incidents referred to in the letter.
- 2) Minutes of the 11 Jan 79 Kailua Neighborhood Board meeting attended by numerous members of the affected Kailua neighborhood. Pages 1, 2, and 3 reflect the high level of concern of residents regarding the proposed zone change and further development. Note the highlighted portion on page 2 -- the applause after Ms. Kathy Berg's statement (the open letter described above). This is indicative of the general community agreement with the points presented in her statement.

Due to employment commitments during weekdays, members of the neighborhood are unable to personally represent themselves at the 20 Mar 70 public hearing. Lack of attendance does not mean lack of concern. Please take into account the high level of concern documented in the attachments when making any decisions regarding this rezoning request.

Respectfully submitted,


Kathleen F. Berg

January 9, 1979

To Whom It May Concern:

The concerns that prompt some of us in this neighborhood to oppose the rezoning from P-1 to R-4 of the 2.8 acre parcel off of Kuuna Place (located in Kailua, Tax Map Key 4-2-02: Portion of 41) fall into two main categories. First are general concerns about development of any kind on this parcel, and second are concerns based on past experience with Enchanted Lake Partners about their competence and manner of doing business.

First, the general concerns about development of any kind on this parcel are as follows:

1. The land in question does not lend itself well to residential development because it is a flood plain. In heavy rains, and these happen at least annually, rain cascades down the slopes behind this land in waterfalls. In 1977 during grading of lots adjacent to the parcel in question the natural drainage flow was disturbed with disastrous results. The lot at the corner of Kina and Kuuna Streets was completely flooded with water, mud, and debris that damaged the lawn and landscaping of the front and side yards. Many homes along Kuuna suffered damage that ranged from mud-flooded swimming pools to ruined carpets from flooded homes.

Again in 1978 heavy rains rolled down the slopes and quickly overwhelmed the drainage measures that Enchanted Lake Partners and the city engineers had assured us were sufficient to handle any and all rains. The lot at 1230 Kuuna St., a newly developed lot, was flooded as the owners will describe.

These rains are not flukes. They happen almost yearly. It was just such rains that prompted the installation several years ago of a large underground drainage system in the then undeveloped lots at the end of Kina and Kuuna Streets. Residents of the neighborhood have photos that attest to the huge runoff in that area. Note also that the previously established lots in that area have paved drainage ditches between and behind them.

If sufficient drainage canals could be built and paved (which they are not along much of the latest four lots at Kina and Kuuna) and maintained, it would make these lots very expensive. This may mean that costs would be cut in the construction of houses or that lots will be made as small as allowed to increase the number of lots available for sale. All this may be done to make the profit margin on the development of the lots worth the effort. This is what appears to have happened already on the four lots at the end of Kuuna and Kina that Enchanted Lake Partners developed about a year ago. The four houses built on those lots are exactly alike from the outside, or mirror images. They were all painted shades of tan. This type of mindless tract building

is not desirable development. And the high cost of making the lots ostensibly flood-proof encourages it.

Based on the long established rainfall pattern here and the failure of Enchanted Lake Partners' drainage measures at the end of Kina and Kuuna, we feel strongly that a flood plain should be maintained behind Kuuna Place.

2. The Enchanted Lake/Keolu Hills area is straining its present facilities and needs no more development. The back road to Kailua town (Wanaao Road) is strained to handle the present level of traffic. Keolu Drive to Kalaniana'ole Highway already backs up through both traffic lights in the morning. The Hele Street - Keolu Drive intersection, which would be the primary exit route for the proposed area, is a dangerously busy intersection, with car, bus, pedestrian, and bicycle traffic and no traffic light.*

The streets near the area in question are frequently full of playing children (Kina and Kuuna in particular). There are not enough parks or open space near enough for these children to use. More houses would mean more children even further from existing play areas and even less open land than now. There are also being developed now above Enchanted Lake 129 homesites in an area called Hillcrest. The impact of that addition on the overall area, particularly the traffic level, will be substantial. There is no reason to add even more to the problem.

3. Considering the 129 lot Hillcrest development and our current facilities, it would seem that sufficient acreage is already zoned residential here. There are already 5 lots adjacent to the area in question that have been filled and graded for over a year, and there is no construction on them. When areas like this remain empty but readily accessible they frequently become dumps. This happened at the four lots at Kina and Kuuna. The residents adjacent to those lots finally had to clean up the big carpet, plaster, and floor tiles dumped there while the lots sat empty; Enchanted Lake Partners let it sit there for months.

The second category of concerns are those based on past experiences with Enchanted Lake Partners about their competence and their manner of doing business.

1. The most flagrant example of faulty planning is the situation at the corner of Kina and Kuuna where the street and sidewalk levels were planned oblivious of the fact that they would be 2 feet higher than the adjacent lot and make egress from a driveway that had been there six years impossible. When enough construction was done to make the error obvious and the adjacent lot owner suspect that an error was made, the Partners continued to fill and set up forms to pave, in total disregard of the situation. The residents were blocked out of their driveway, and it took the intercession of a city councilman to get the Partners to stop construction by their faulty plans and talk with the city and the resident about the resolution of the problem. The attached copies of letters describe the problem more fully and indicate the unsatisfactory nature

* Note: as of 19 Mar 79 traffic lights are installed but not operating at this intersection.

of both the relationship with the Partners and the resolution of the situation. (The residents now have an almost permanent puddle the width of their carport -- water that used to drain into the street.) Not only was planning faulty here -- an on-site visit by their engineer may have prevented the fiasco -- but the disregard of established residents' property was uncalled for. This distressing unresponsiveness to a problem caused by them does not make us think the Partners would act any differently in future developments in this neighborhood.

Consider also that drainage was a prime problem to be tackled in the four-lot development at Kina - Kuuna. The terrible flooding that occurred in 1977 was during their development, so they were aware of the magnitude of the problem. They assured all of us who repeatedly worried aloud about drainage patterns that they had planned sufficiently for it. Yet, the annual big rainfall in 1978 overwhelmed their unpaved ditch at 1230 Kuuna and proved their planning to be faulty again.

Such performance does not make us believe that the Partners are competent enough to handle the severe drainage problem that development of the parcel in question poses.

2. And there was more than one occasion of disregard for existing property, both residents' and the city's. The sidewalk overlying the drainage channel at the corner of Kina and Kuuna was broken at the same time that the Partners were operating heavy machinery in the development of the four lots in that area. The break (which is now widening) appeared the same time that a chip was made in the residents' adjacent moss rock wall.

This past disregard for existing residents' property makes us feel that the Partners may not operate in good faith even if they could competently plan this addition.


Kathleen Berg


Stephen R. Berg

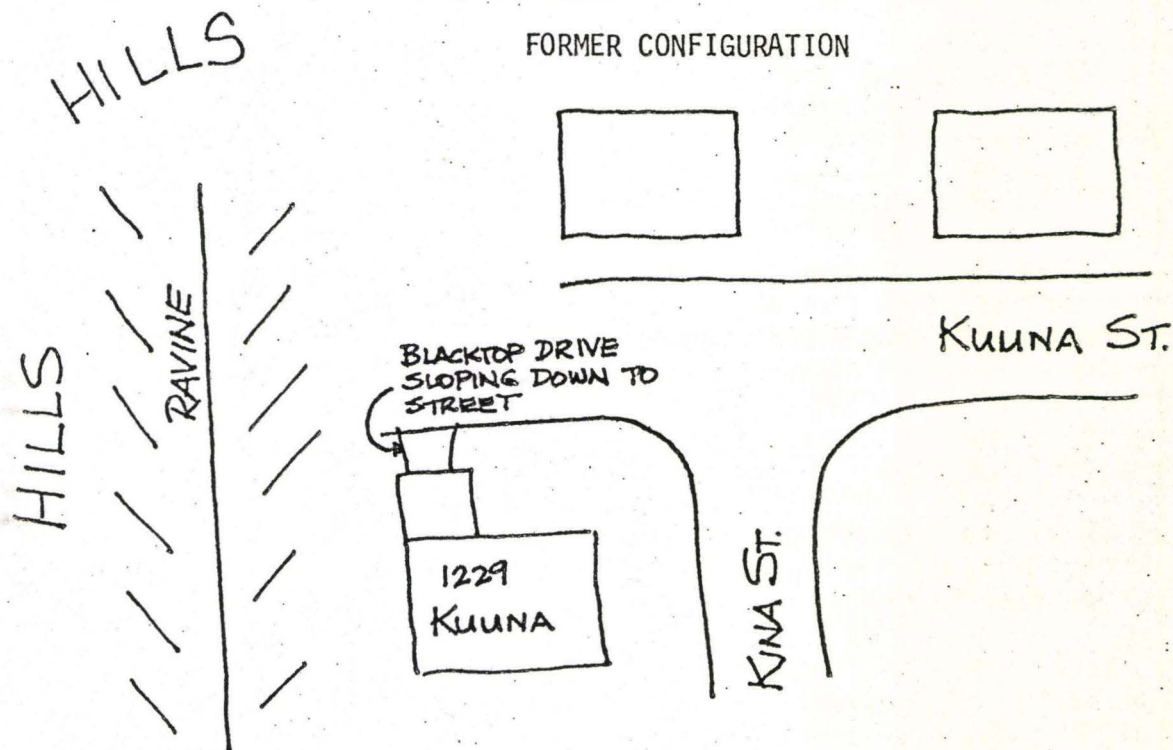
1229 Kuuna St.
Kailua, Hawaii

Stephen R. Berg
1229 Kuuna Street
Kailua, Hawaii 96734
August 10, 1977

Mr. Wallace Miyahira, Chief Engineer
Department of Public Works
City and County of Honolulu
650 S. King Street
Honolulu, Hawaii 96813

Dear Mr. Miyahira,

I am writing regarding a serious problem I am having with the misengineering, and subsequent approval by the city, of a land development surrounding my house. I live at 1229 Kuuna Street, which is on the corner of Kina and Kuuna Streets in Keolu Hills, Kailua. Both streets terminate at my corner, although an access road does extend from my driveway to Kuuna Street.

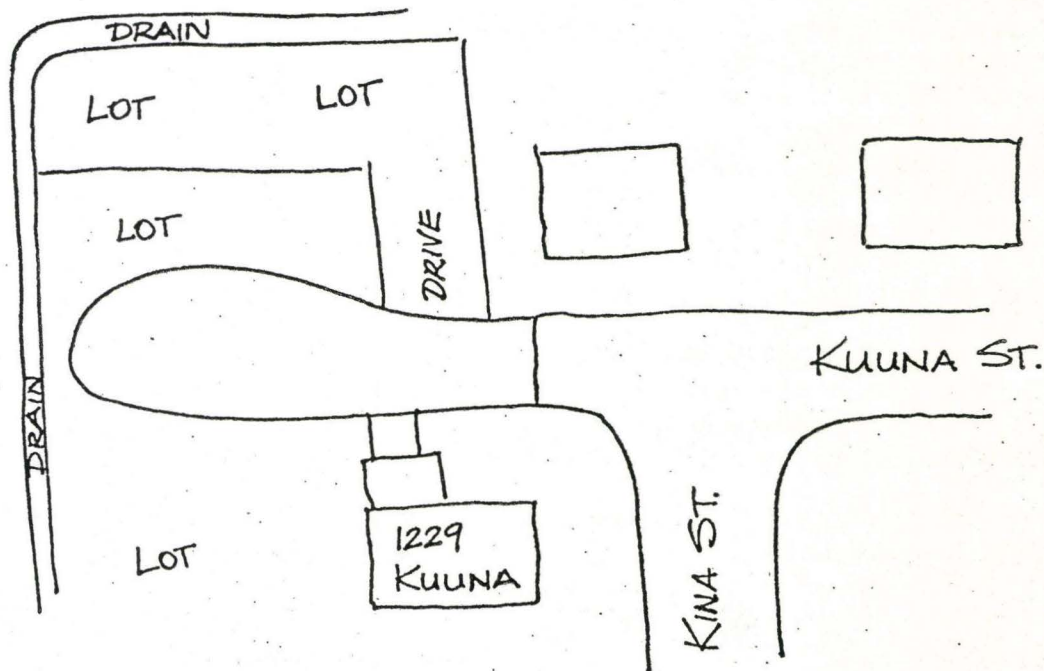


My house was built approximately six years ago by Lone Star Construction, who owned the surrounding land. The grading of my yard was such that the yard was higher than both the access road and city streets, so my driveway slopes downward from my carport.

Sometime later, before I purchased the house, Lone Star sold the surrounding land to Pau Investment Co. (Windward Partners) who hired

Hercules Construction Co. to fill in the ravine and build four lots as shown below.

PRESENT CONFIGURATION



The three mauka lots are terraced up the hill, while the adjacent lot is approximately two feet above mine. Plans for the development call for drainage ditches around the upper two sides of the development to catch the water which drains from Keolu Hills. Even if these are 100% effective and never get clogged, the three (maybe four) lots slope away from these ditches and drain into the proposed street, which slopes away from the new drains.

Two months ago, while filling was underway, we were flooded up to our doorway. Our entire drive and front yard were covered with mud. At that time workmen from Hercules repaired most of the damage.

Recently, as the workmen progressed with the job, they advised me that a serious problem exists. The street (which was filled) will be a total of 9" above my existing driveway. The 3 (or 4) lots will drain into the street, and, it being 9" above my driveway, will drain into my yard again.

The problem exists only because the street was filled not only up to my existing driveway but will eventually be far above it. The city has no future development plans (or grading criteria) for the street because it terminates in front of the new lot adjacent to mine. It cannot go any further because it stops against the hills. The only reason for the street's proposed elevation is because an engineer (Mr. Arakaki) drew a line on a piece of paper. It can be fully 1' lower or

2' higher and make no difference to any surrounding land (except mine) since the road and new lots are all fill.

As the plans for the development were approved by the city fairly recently (November 1976, I believe), I tried to find out if the plans (which would call for the regular flooding of my \$80,000 investment) were approved in error or if there were some extenuating circumstances, etc. I called Mr. Melvin Young in the Division of Engineering Inspectors on August 8, 1977. He sent out Mr. Jimmy Kutsitane who photographed the existing work and took measurements. He (Young) said he would get back to me. On August 9, 1977 I called Mr. Young again and asked if he had seen the data. He said "only briefly" and that he had let the matter drop since a Mr. Lewis was working on it. I called Mr. Lewis in the Control section and he said he had just found out about the problem and would call me back. He has not. On August 10 I received a call from Mr. Stanley Luis who said he was an engineer for the drainage division. He said they "couldn't send an engineer out every time somebody had a problem." Mr. Young acknowledged that probably no city engineer has ever seen the site and that he doesn't know who in his division approved the plans.

During the time all of these phone calls were occurring, work was continuing on the street in front of my house, so that corrective action, when it occurs, will be more and more expensive. Drainage pipes are in deep enough so that the street can be brought down, but recently water and electrical service were put in at minimums so they will have to be reaccomplished when the street is brought down near its former level. As I write this letter, work still progresses on the street.

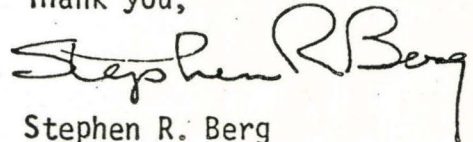
The owner of the land, Pau Investment Co., has never been known for their benevolence and are "playing hard to get" until the work is completed. ~~If the street is lowered now it will cost money.~~ If it is lowered now it will cost money. If it is lowered after the curbs and blacktop are in, however, it will cost even more.

The most frustrating and angering part of this whole affair is the attitude of our Public Servants. At the working level, the people are good. Mr. Jimmy Kutsitane has been very aggressive, understanding, and sympathetic. (Even the construction workers are trying to delay certain parts of the job until I can resolve this problem.) At the middle echelon, however, some of your people have been trying to either hide in the bureaucracy or pass the blame. Mr. Young and Mr. Luis both appear to be working at jobs above their level of ability or interest. Neither seemed willing to assume any responsibility for his job. After being referred around in the building and finding a lack of anyone willing to assume any responsibility (Luis says it's a construction problem or a private problem. Young says it is not his problem, it may be a Control problem. Lewis "will check on it."), I am reminded of the Freddie Prinz line "Das not my job." And all the time this runaround and finger pointing goes on, so does the construction.

Yesterday I called Sandy Holck's office who suggested I call the Office of Information and Complaints. I called Mr. Bob Liftee, who appears

very understanding, and he suggested I advise you personally of this problem. I know as construction work goes, this is a very small job, but through serious misengineering, I am going to be subjected to either continuing flooding or driving up over a dam which will have to be taller than the 9" rise to the street. Neither is an acceptable alternative. I ask your personal assistance in resolving this problem.

Thank you,

A handwritten signature in dark ink, appearing to read "Stephen R. Berg". The signature is fluid and cursive, with the first name "Stephen" and last name "Berg" clearly legible, and "R." as a middle initial.

Stephen R. Berg

cy to: Mr. Jim Loomis
Office of Information and Complaints
(attn: Bob Liftee)

Stephen R. Berg
1229 Kuuna Street
Kailua, Hawaii 96734
16 August 1977

Mr. Wallace Miyahira, Chief Engineer
Department of Public Works
City and County of Honolulu
650 S. King Street
Honolulu, Hawaii 96813

Dear Mr. Miyahira,

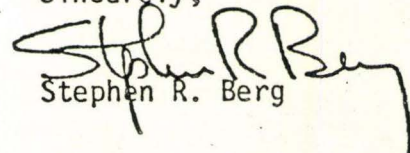
I was disappointed that you were unable to attend the meeting you called yesterday. Instead it was chaired by Mr. Spencer and was attended by only the individuals in your organization whom I had specifically listed in my 10 August 77 letter as those who had in the past been uninterested in the problem. The one individual with whom I had successfully dealt in the past, Mr. Kutsitane, was, interestingly enough, not at the meeting. Significantly, none of your people at the meeting has yet seen the construction site (Mr. Kutsitane is the only one to see the site and thus recognize the problem, but he was not at the meeting). Thus we sat around and looked at the plans that all agreed were in error.

- 1) No driveway is recognized, nor is a curb planned for my house.
- 2) A 10' elevation error exists on the plans at one side of my house.

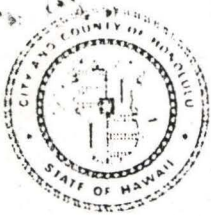
At the meeting I was told that they were essentially deciding who would build my curb (which will not solve the problems). It was acknowledged that they could not say I would not be flooded as a result of this misengineered project. The most distressing part of the meeting was the prefacing of remarks with "Well, at this late date all we can do is" I have been trying to get some action out of your people for over a week -- while the construction continues. It seems like this problem is still being slow rolled and shunted off to the same people who have been actively ignoring it. Apparently the problem has not yet reached a high enough management level at which a resolution can be accomplished.

Again I ask your assistance in resolving this problem. As director it will be you we will look to when we are flooded this fall. In order to assist you and your people in better comprehending the situation, I am enclosing panoramic photographs of the site to assist those who are studying this problem from their office desks.

Sincerely,


Stephen R. Berg

cy to: Bob Liftee (w/o attach)
W. Holck (w/o attach)



CITY COUNCIL

CITY AND COUNTY OF HONOLULU

HONOLULU, HAWAII 96813 / TELEPHONE 523-4000

SANDY HOLCK
COUNCILMAN

September 20, 1977

Mr. Stephen R. Berg
1229 Kuuna Street
Kailua, Hawaii 96734

Dear Mr. Berg:

On August 16, 1977 I wrote to Mr. Wallace Miyahira, Director and Chief Engineer of the Department of Public Works informing him of the problem you are facing by transmitting to him a copy of your communication dated August 10, 1977.

On September 13, 1977 I received a copy of a letter from Mr. Wallace Miyahira to Hercules Construction Company, Inc., that your driveway ramp problem has been resolved and that the adjustments to your driveway will be completed by September 9, 1977. See letter attached.

I hope the foregoing has been satisfactory as I have not received any further information on this matter.

Sincerely,


SANDY HOLCK
Councilman

ct

Attachment

701-21-0409

September 6, 1977

Hercules Construction Co., Inc.
94-163 Leowaena Street
Waipahu, HI 96797

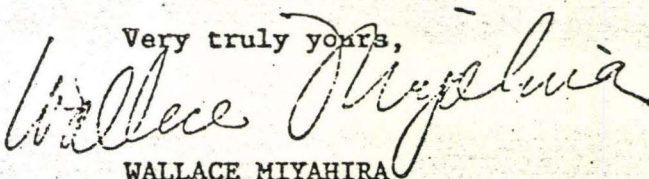
Gentlemen:

SUBJECT: KAILUA HEIGHTS SUBDIVISION 6-A1

As discussed with Mr. Henry Alves on August 30, 1977, you may resume construction of the sidewalks, curbs and gutters on the subject subdivision.

We understand that the driveway ramp problem has been resolved and the adjustment to Mr. Berg's driveway will be completed by September 9, 1977.

Very truly yours,



WALLACE MIYAHIRA
Director and Chief Engineer

MY:ss

cc: Enchanted Lake Partners
Project Inspector

/Sandy Holck

Stephen R. Berg
1229 Kuuna Street
Kailua, HI 96734
October 4, 1977

Mr. Sandy Holck
City Council
City and County of Honolulu
Honolulu, HI 96813

Dear Mr. Holck,

Thank you very much for your letter of 20 September and for your efforts on our behalf in our recent struggle to have the city Department of Public Works and Windward Partners (Enchanted Lakes Partners) rectify their misengineering of Kailua Heights Subdivision 6-A1 adjoining our property. We have been alternately frustrated, enraged, and disappointed in our dealings with Mr. Miyahira of the city and Mr. Carrera and Mr. Hawkins of Windward Partners. The attachment to your letter (a copy of a letter from Mr. Miyahira to Hercules Construction Co.) was a surprise to us. It would seem not only part of his job, but a common courtesy as well, that Mr. Miyahira would have forwarded a copy of that letter to us, or informed us of its contents at least. We knew nothing of any promised 9 September finish date for a ramp. It is now 4 October; the black top people came and went long ago, the last pieces of construction machinery and materials are gone. We have only a pile of gravel in our driveway.

Mr. Carrera and Mr. Hawkins asked us to meet them on two occasions. We did, and were shown detailed plans of a blacktop ramp that they proposed to construct to solve our egress problem. They assured us we would have no drainage problems. We listened and were cordial. A few days after the second meeting we received a call from Mr. Hawkins asking us to come in to his office and sign the plans. We declined. (Our legal council was that it would compromise any suit, should we have to file one in the future.) A day or two later we received another call at which time we gave Windward Partners verbal permission to install the ramp on our property and volunteered to give written permission, all with the stipulation that we retain the right to sue them if any damage, flooding, or property devaluation resulted from their work. They informed us that they had a meeting scheduled with Mr. Miyahira that day and asked if they should need to could they call us during that meeting. We said yes.

We were not invited to that meeting where the "settlement" was decided. Nor did Windward Partners or Mr. Miyahira's department ever contact us again about what their "settlement" was or about needing written permission to proceed. The only other communication from the city was a call from a Department of Public Works employee recently returned from vacation who had been tasked to finish the paperwork and

wrap up this complaint case. He called us to ask if and how it was settled. We were the last to know the true nature of the "settlement," and that was only through your courtesy.

It appears by the pile of gravel in our driveway, and the absence of any ramp, that Windward Partners has again done a bit of "good business" by keeping us in the dark (as they have always tried to do) and by lying to the city. The city Department of Public Works has done us in as well by refusing to deal with the situation directly in the first place, then conferring with only one of the two disputing parties about the "settlement," and then never contacting us to confirm or inform us of any action that was taken or agreements that were made involving us and our property. They certainly, with any sense of fairness or wisdom or public responsibility, should not have left it up to the "good businessmen" of Windward Partners to keep us informed of any promises or agreements they made in order to get their streets and sidewalks done so they could sell their lots. TALK about being thrown to the wolves; thank you Mr. Miyahira.

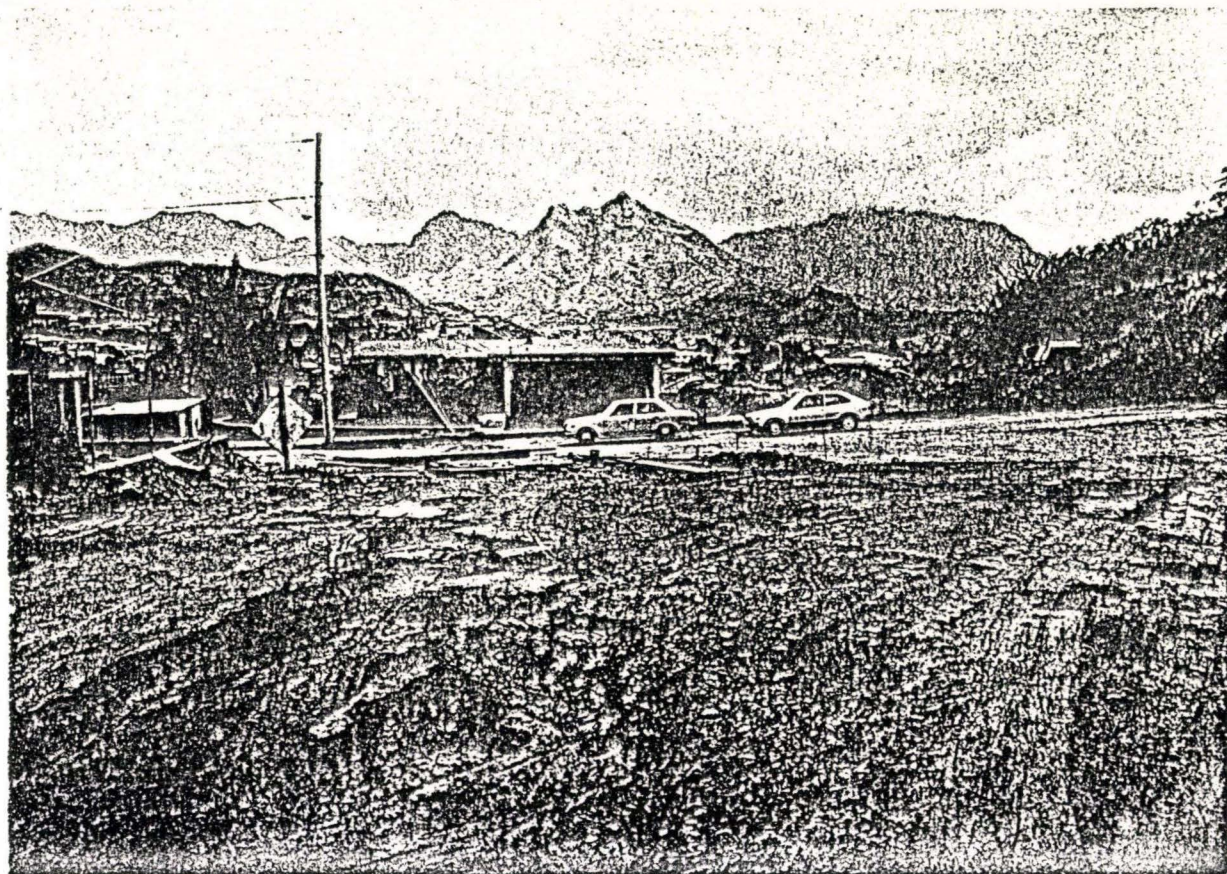
Our contact with you, Councilman, has provided the only flash of hope in this whole ordeal. By your attitude, your actions, and your courtesy, you seem to be doing the jobs that most of the other city employees we contacted were supposed to be doing. Again thank you for all your efforts. Be assured that all of our friends and neighbors know of your willingness to help.

Sincerely,

Stephen R. Berg

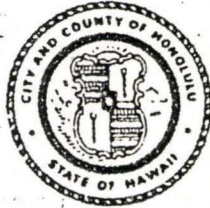
SRB:kb

Attachments



KAILUA NEIGHBORHOOD BOARD NO. 31

P. O. BOX 937
KAILUA, HAWAII 96734



CORRECTIONS TO THE MINUTES
OF THE REGULAR MEETING OF
THE KAILUA NEIGHBORHOOD
BOARD, JANUARY 11, 1979

Beginning at ...

INTRODUCTION OF GUESTS:

Chairman Kupchak introduced State Rep. Whitney Anderson (R-25), Ms. Lucia Davis (representing Councilman Andy Poepoe, [Ms. Lila Grossman (representing Councilman Dan Clement)]), Mr. Mel Roop (Development Area Org. Rep.), and Ms. Nancy Pinkosh (Oahu Traffic Safety Council).

....
....

DEPARTMENT OF LAND UTILIZATION ON KEOLU HILLS ZONE CHANGE:

Mr. Bruce Duncan (DLU) introduced Mr. Harvey Ing (DLU). Mr. Ing presented a proposed Zone change (P-1 Preservation to R-4 Residential) for a 14-[105] unit subdivision extension at the end of Kuuna Place, requested by Enchanted Lakes Partners. The project, on 4.1 acres, has obtained various departmental reviews and conforms to the Detail Land Use Map ("DLUM") [Department of Land Utilization (DLU) maps] for the area. It is not suitable for agriculture.

Chairman Kupchak reviewed the Board's position before the Land Use Commission conditionally approving the change. [regarding development of the]. The Green Belt will [theory concluding this development did] not be adversely affected. [taking into account] The conditions were: (1) must have continued [to have] access to the Green Belt (and the ridge line) and (2) [consider] sufficient drainage and runoff during and after construction should be required. KNB Peterson queried if the cut in the hill would be obviously visible. Mr. Ing replied cutting would probably be below the height of constructed homes.

Mr. Ing displayed maps showing the lot location plan. Replying to a question, Mr. Corres (Lone Star) advised there would be no blasting in the area. Ms. Howard (Kuuna Street) exhibited concern about the continued step-by-step intrusion: development, vacant lots, zone change, more development, etc.; four of the past eight years have been with builders' noise. Precautions should be taken against having homes and pools flooded, as occurred during the last construction. Reply: this is [in] an issue for the development plans on the drawing board at present.

Chairman Kupchak elaborated further on the Green Belt concept advising that concerns such as Mrs. Howard's led to its creation. [It does not impact on the Development Plan. Slope is involved with the Green Belt and] The

Board would have taken a different position if there was greater penetration. The Board's position regarding Akiohalu [Keohala] Place (at the High School) was [elaborated upon] a case in point. Their construction as planned by Enchanted Lake Partners would have [completely] bisected the Green Belt. Contractor planned for 19 homes and settled for 5 following the Board's intervention.

KNB Sloat inquired about the KNB plan for population growth to be in town center. Reply: this represents [too] a small portion of the total projection. KNB Nole asked if individual (fee simple) owners could blast for swimming pools and produce "6 to 8 months of crud and corrosion". Answer: Blasting is expensive and probably beyond the capability of most area homeowners..

...

...

: KNB RB Anderson asked, regarding water supply, what the developer's responsibility was. Answer: Sewers are adequate. If the water supply is not adequate, it is the developer's requirement to absorb the costs. KNB Nole inquired regarding construction height interference with the Green Belt. Answer: Normal construction is limited to 25-feet above high point on the property. She also questioned access points which might be too far from where people want to go. Answer: [(zoning of new are contiguous with present characteristics)??] [She was also concerned that buildings would obstruct the Green Belt.] Chart topography was read off: the top of the ridge is approximately [40-feet, the top] 280-feet [and it goes on] up to 350-feet. Mr. Ing advised also it would take about 2 weeks or so for the completed report to go to the Planning Commission.

Ms. Kathy Berg testified with a prepared report (applause). She asked Lone Star to respond. Lone Star's engineer advised that the property had been used for [talked about] warehousing excess material from the Lanikai sewer project when a storm hit. [Ms. Berg: We desire some answers.] Lone Star regretted any additional problems. Ms. Berg: [Expected] Flooding should have been expected and accommodated.

Mr. Green (Kuuna Street) reported he thinks he bought the best value in Hawaii. But he spent Halloween digging in the rain when a ditch along the side of the house filled with silt and flooded his property. [no longer exists.] He has taken [In his backyard it took] two weeks to [dry] dig out only part. He's concerned when the contractor says "Don't worry, we are building more houses". Mr. Green said he's afraid more rains can either bring down dirt, or bring down houses.

KNB Sloat questioned if conditions could be placed on the developer regarding access and drainage runoff during and after construction. Ing/Duncan replied, yes, but they are working under time constraints with 2 weeks to get the report ready. Mr. Berg brought out concern that drainage may be inadequate even though approved. KNB Kupchak replied [things to be

expected and put them in] that Berg should suggest "Conditions". KNB Morse advised the residents to place the City on notice of the dangerous conditions in order to preserve their rights. After added comments regarding writing the City, and getting Councilmen cooperation, the topic was completed at 9 P.M.

It was agreed Planning Chairman Lake-Randolph (KNB) and committee would visit the site, talk to citizens, the City and Contractor, and [have] recommend a position regarding the Zoning Change [to report] at the next meeting. [in two weeks]

DEPARTMENT OF LAND UTILIZATION - HOW IT FUNCTIONS: Messrs. Duncan and Ing discussed DLU: *Processes Zone change applications which then go to Planning Commission and Council. [Handles Conditional Use Permits, variances and special use permits. The DLU now has decision-making authority in some special design districts (not affecting Kailua). It also processes Shoreline Management Permits. Mr. Duncan reminded the Board that Bill #22 [indicated] requires that DLU must channel requests through Neighborhood Boards, and get replied in 45 days. "Sometimes this doesn't happen". The Department also works to hold joint hearings. He invited telephone calls. DLUMs were explained to establish intermediate city planning policy between the General Plan ("GP") and Zoning; until the adoption of Development Plans ("DP"). DP and GP are the responsibility of DGP.

125 NORTH KALAHEO 10-ROOM 1-FAMILY DWELLING: KNB Babineau asked if DLU could do anything to protect Kailua against this kind of zoning "violation". Answer: City would send zoning inspectors to investigate violations upon request. Building violations would be investigated by the Building Department. [DLU is an implementing department involved with day-to-day. The Department of General Planning is more long range and the Development Plan.] Ing then explained proposed zone change to P-1 of all DLUM preservation, open space and park lands and existing municipal and park lands. This conforms with KNB Green Belt.

DAO: The next KNB meeting (January 25) will be a joint meeting with DAO, including Kaneohe, Kahaluu and Waimanalo. Chairman Kupchak said that after the DAO meeting next time, there will then be called the regular KNB meeting, with at least two items on the agenda: [DLU and the] The Zone Changes of Enchanted Lakes Partners at Kuuna from R-1 to R-4 and DLU's proposed changes to P-1 to conform with the DLUM [of P-1 to R-4] (report from Planning Committee).

KNB ELECTION SURVEY: Chairman Kupchak reported the Neighborhood Commission processed 451 of the 2000+ survey forms obtained at the November election and asked for volunteers to complete the rest. It is the most comprehensive survey conducted in Kailua and questions will be invited next time. The results established sizeable majorities in favor of existing KNB Development Plan objectives.



DEPARTMENT OF PLANNING
AND ECONOMIC DEVELOPMENT

LAND USE COMMISSION

RECEIVED

Suite 1795, Pacific Trade Center, 190 S. King Street, Honolulu, Hawaii 96813

'79 JAN 19 AM 8:41
January 16, 1979

DEPT. OF LAND
UTILIZATION
C & C HONOLULU

GEORGE R. ARIYOSHI
Governor

CHARLES W. DUKE
Chairman

SHINICHI NAKAGAWA
Vice Chairman

COMMISSION MEMBERS:

James Carras
Colette Machado
Shinsei Miyasato
Mitsuo Oura
George Pascua
Carol Whitesell
Edward Yanai

GORDAN FURUTANI
Executive Officer

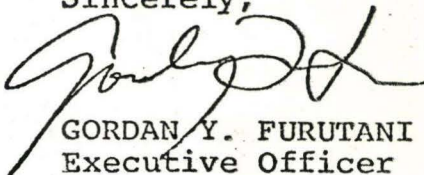
Mr. Charles K. Izumoto, Chairman
City Planning Commission
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Izumoto:

In its efforts to actively implement the provisions of Chapter 205-4.5(b) HRS, the Land Use Commission has directed its staff to request that the County Planning Commissions include as part of the transmitted records on all Special Permits, the Land Study Bureau's Overall (Master) Productivity Rating of Soils for the lands in question. In addition, the Land Use Commission would appreciate information regarding any Special Permit proposal to subdivide lands that have been rated "A" or "B" under the Land Study Bureau's Soil Classification System.

Should you have any questions on this matter, please feel free to call me at 548-4611. Your kokua on this matter will be greatly appreciated.

Sincerely,

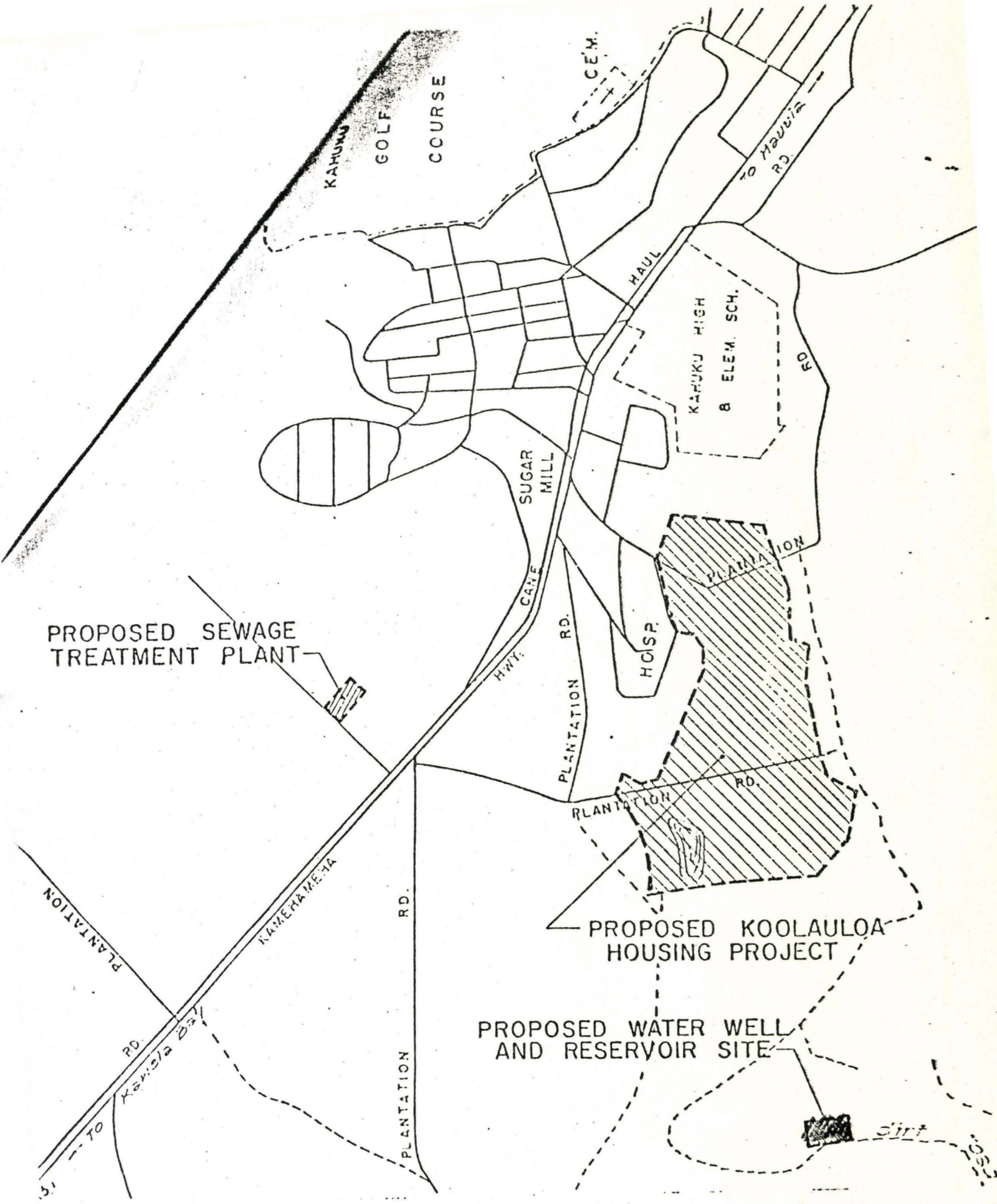

GORDAN Y. FURUTANI
Executive Officer

GYF:yk

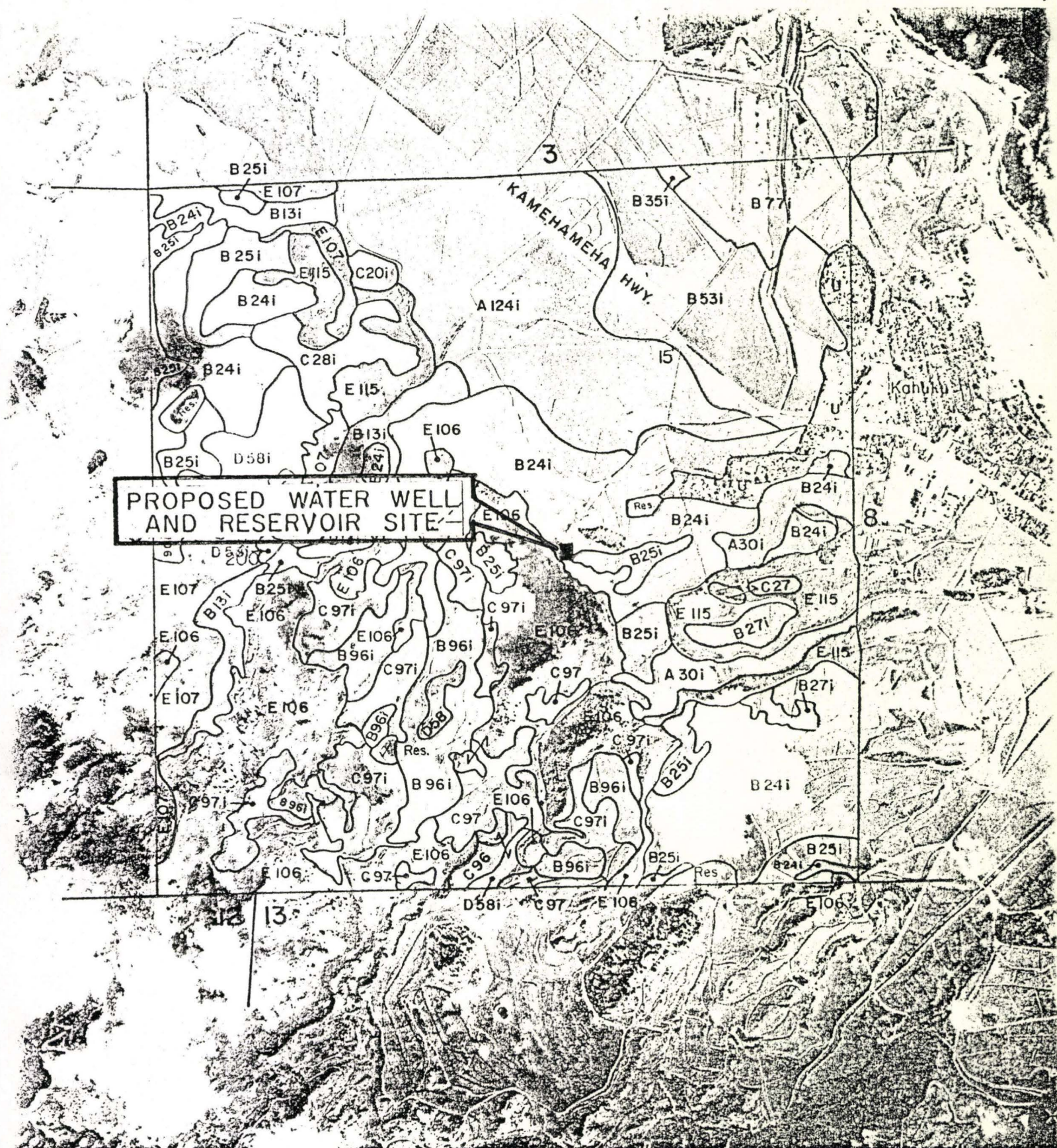
cc: Eugene Connell
George S. Moriguchi

RECEIVED
JAN 17 PM 2:40
C & C HONOLULU

RECEIVED



LOCATION



PROPOSED WATER WELL
AND RESERVOIR SITE

Classification data field mapped 1971-'72

U.S.G.S. Quad. References: Kahuku

CLASSIFICATION SYMBOL

Water Productivity Rating

Land Type, Number and letter "i" if irrigated;
Number only if unirrigated. (See sections of text
where land types are defined and rated by
intended uses.)



Approx. Scale (ft./in.) = $\frac{8,000 - \text{Ground Elevation}}{6}$

Aerial Photographs. C & G. of Honolulu Planning Dept.

LAND STUDY BUREAU • UNIVERSITY OF HAWAII

RECEIVED
BO OF WATER SUPPLY

JAN 8 2 18 PM '79



RECEIVED

79 JAN 15 PM 1:05 EXECUTIVE CHAMBERS
HONOLULU

GEORGE R. ARIYOSHI
GOVERNOR

DEPT. OF LAND
UTILIZATION
& C HONOLULU

January 2, 1979

The Honorable Kazu Hayashida
Director, Board of Water Supply
City and County of Honolulu
630 South Beretania Street
Honolulu, Hawaii 96813

Dear Mr. Hayashida:

Based upon the recommendation of the Office of Environmental Quality Control, I am pleased to accept the Environmental Impact Statement for Kahuku Water Development, Kahuku, Oahu, Hawaii, as satisfactory fulfillment of the requirements of Chapter 343, Hawaii Revised Statutes, and the Executive Order of August 23, 1971. This environmental impact statement will be a useful tool in the process of deciding whether or not the action described therein should or should not be allowed to proceed. My acceptance of the statement is an affirmation of the adequacy of that statement under the applicable laws, and does not constitute an endorsement of the proposed action.

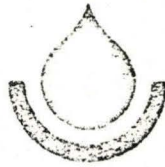
When you make your decision regarding the proposed action itself, I hope you will weigh carefully whether the societal benefits justify the environmental impacts which will likely occur. These impacts are adequately described in the statement, and, together with the comments made by reviewers, will provide you with a useful analysis of alternatives to the proposed action.

With warm personal regards, I remain,

Yours very truly,


George R. Ariyoshi

HONOLULU, HAWAII 96843



EDWARD Y. HIRATA
Manager and Chief Engineer

Pure Water . . . man's greatest need -- use it wisely

Department of Land Utilization

Contact Memorandum

Date February 7, 1978

Project No. 77/SUP-7

SUBJECT: Kahuku Sewer Treatment Plant Proposal for Special Use Permit

CONTACT: Mr. Cedric Takemoto, Department of Public Works, Sewers Division

The soils consultants have just notified Department of Public Works (February 6, 1978) that the test borings at the proposed site of the STP reveal that the area is unsuitable for a ground disposal well. This is a major problem as the STP design calls for an injection well effluent disposal system.

Department of Public Works is studying the situation and possible alternatives. Mr. Takemoto said he would contact me in about one week. I told him that we need to have a pretty specific site before we can go too far on the Special Use Permit. He said this problem would definitely delay the project.


ROGER HARRIS

RH:st

Further contact: Mr. Okuda D.P.W. Sewer Design
Mr. Clarence Tanokawa of Park Engineering, the
consultants, is supposed to inform Jim Miyagi of
DHCD of the problem today 2/7/78

Tues Feb 21, 1978: contacted Mr. Okuda Again. He will
Feb. report current status re: further testing is
being pursued officially to us soon, etc

WED, Feb 22: Mr. Okuda, ex 4323, will call at the
end of the week with status

Thurs Feb 27: Will call back Feb 28

GEORGE R. ARIYOSHI
GOVERNOR



121/78-3
JOHN FARIAS, JR.
CHAIRMAN, BOARD OF AGRICULTURE

YUKIO KITAGAWA
DEPUTY TO THE CHAIRMAN

BOARD MEMBERS:

ERNEST F. MORGADO
MEMBER - AT - LARGE

Sidney Goo
MEMBER - AT - LARGE

SHIZUTO KADOTA
HAWAII MEMBER

STEPHEN O. L. AU
KAUAI MEMBER

FRED M. OGASAWARA
MAUI MEMBER

RECEIVED
12 28 1977 1:50
STATE OF HAWAII
DEPARTMENT OF AGRICULTURE
1428 SO. KING STREET
HONOLULU, HAWAII 96814

December 28, 1977

Mr. William E. Wanket
Deputy Director
Department of Land Utilization
City and County of Honolulu
650 South King Street
Honolulu, HI 96813

Dear Mr. Wanket:

Re: Special Use Permits - Kahuku

1. 77/SUP-7(RH) - Dept. of Public Works, C&C
Sewage Treatment Plant
TMK: 5-6-02: Portion of 1
2. 77/SUP-8(RH) - Board of Water Supply, C&C
Water Well & Reservoir
TMK: 5-6-06: Portion of 6

The Department of Agriculture has reviewed the subject Special Use Permit applications and has no objections or substantive recommendations to offer.

For your information, however, we should note that the sites being proposed for the treatment plant, well, and reservoir are located within the area being proposed for a Kahuku Agricultural Park. The exact boundaries of the park will be determined upon completion of the negotiations currently being conducted by this agency and the Campbell Estate. In the interim, we would appreciate being kept apprised of the status of these projects so that any potential conflicts can be avoided.

We appreciate the opportunity to comment.

Many thanks,

Yukio Kitagawa
JOHN FARIAS, JR.
Chairman, Board of Agriculture

SUMMARY DESCRIPTION

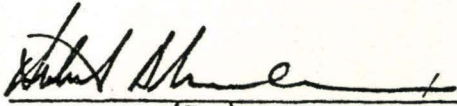
Applicant: Board of Water Supply, City and County of Honolulu
Request: State Special Use Permit to construct and operate a water well and reservoir within the Agricultural District in Kahuku.
Location: Mauka of Kamehameha Highway, behind the Kahuku Hospital.
Tax Map Key: 5-6-06: Portion of 6
Existing Zoning: AG-1 Restricted Agricultural District
Detailed Land Use Map Designation: Agriculture
Area: Approximately 1 Acre
Proposal: Construction and operation of a water well and reservoir by the Board of Water Supply. The primary reason for the water facilities is to serve the City Department of Housing and Community Development's proposed Koolauloa Housing Project which consists of a 300-lot residential subdivision. The water system is also designed to serve ultimately all of the existing domestic water users in Kahuku Town.

BOARD OF WATER SUPPLY
(Department)

Comments:

We have no comments or recommendations on this project.

If you have any questions, please call Lawrence Whang at 548-5221.

 12/23/77
(By) (Date)
Herbert H. Minakami

1412/77-7279

77/SUP-8 (RH)
(Folder No.)

SUMMARY DESCRIPTION

Applicant: Board of Water Supply, City and County of Honolulu

Request: State Special Use Permit to construct and operate a water well and reservoir within the Agricultural District in Kahuku.

Location: Mauka of Kamehameha Highway, behind the Kahuku Hospital.

Tax Map Key: 5-6-06: Portion of 6

Existing Zoning: AG-1 Restricted Agricultural District

Detailed Land Use Map Designation: Agriculture

Area: Approximately 1 Acre

Proposal: Construction and operation of a water well and reservoir by the Board of Water Supply. The primary reason for the water facilities is to serve the City Department of Housing and Community Development's proposed Koolauloa Housing Project which consists of a 300-lot residential subdivision. The water system is also designed to serve ultimately all of the existing domestic water users in Kahuku Town.

Health
(Department)

Comments:

Please be informed that we have no comments or objections in regard to the subject permit request.

Pete K. Goo, DEC 22 1977
(By) (Date)
for SHINJI SONEDA, Chief, Environmental
Protection & Health Services Division

12/12/77-7176

DEPARTMENT OF PARKS AND RECREATION
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813

RECEIVED

FRANK F. FASI
MAYOR



77 10 2:38
YOUNG SUK KO
DIRECTOR

December 14, 1977

MEMORANDUM

TO : WILLIAM E. WANKET, DEPUTY DIRECTOR
DEPARTMENT OF LAND UTILIZATION

ATTENTION: ROGER HARRIS

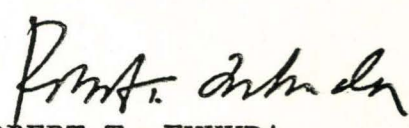
FROM : ROBERT T. FUKUDA, ACTING DIRECTOR

SUBJECT : SPECIAL USE PERMITS - KAHUKU
TMK: 5-6-02: POR. 1 AND 5-6-06: POR. 6
PROJ. REF. NOS. 77/SUP-7 (RH) AND
77/SUP-8 (RH)

We have no objection to the two special use permits to establish the construction and operation of a sewage treatment plant and a water well and reservoir on lands situated in Kahuku.

The location of the two proposed projects would not have any effect on our park or golf course plans in this area.

Should you have any questions, please contact Mr. Jason Yuen at extension 4884.


ROBERT T. FUKUDA
ACTING DIRECTOR

1112/77- 7134

RECEIVED

77/SUP-8 (RH)
(Folder No.)

SUMMARY DESCRIPTION 2 : 30

Applicant: Board of Water Supply, City and County of Honolulu

Request: State Special Use Permit to construct and operate a water well and reservoir within the Agricultural District in Kahuku.

Location: Mauka of Kamehameha Highway, behind the Kahuku Hospital.

Tax Map Key: 5-6-06: Portion of 6

Existing Zoning: AG-1 Restricted Agricultural District

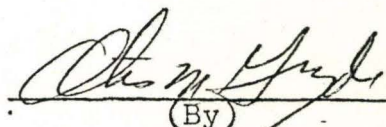
Detailed Land Use Map Designation: Agriculture

Area: Approximately 1 Acre

Proposal: Construction and operation of a water well and reservoir by the Board of Water Supply. The primary reason for the water facilities is to serve the City Department of Housing and Community Development's proposed Koolauloa Housing Project which consists of a 300-lot residential subdivision. The water system is also designed to serve ultimately all of the existing domestic water users in Kahuku Town.

USDA-Soil Conservation Service
(Department)

Comments: A major part of the proposed housing project is on prime ag. land. Much of the sewage treatment site and most of the water well and reservoir site is on prime ag. lands. In cooperation with the West Oahu Soil and Water Conservation District we recommend that the entire project be relocated, perhaps Mauka to avoid using prime ag. lands for other than cropland.

 1/2/3/77
(By) (Date)

CITY AND COUNTY OF HONOLULU
BOARD OF WATER SUPPLY

RECEIVED

'79 JAN 15 PM 1:05

REVISED
ENVIRONMENTAL IMPACT STATEMENT
FOR
KAHUKU WATER DEVELOPMENT
KAHUKU, KOOLAULOA, OAHU, HAWAII

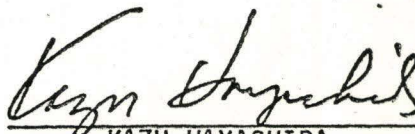
DEPT. OF LAND
UTILIZATION
C & C HONOLULU

TAX MAP KEY: 5-6-06:Portion of Parcel 6
5-6-08:Portion of Parcel 2

THIS ENVIRONMENTAL DOCUMENT IS SUBMITTED
PURSUANT TO CHAPTER 343, HRS

PROPOSING AGENCY: Board of Water Supply
City and County of Honolulu
630 South Beretania Street
Honolulu, Hawaii 96843

RESPONSIBLE OFFICIAL:


KAZU HAYASHIDA
MANAGER & CHIEF ENGINEER

DATE

11/29/78

PREPARED BY: Park Engineering, Inc.
190 South King Street, Suite 2085
Honolulu, Hawaii 96813

ACCEPTING AUTHORITY: Governor, State of Hawaii

SUMMARY

The Kahuku Water Development project is located next to Kahuku Town in the Koolauloa District. The project involves 1) drilling two deepwells, 2) installing two deepwell pumps, 3) constructing a 0.5-million gallon reservoir and control building, 4) constructing an access road, and 5) installing a 12-inch transmission main.

The objectives of the proposed action are to 1) insure adequate water for the City's Koolauloa Housing project and 2) upgrade the present domestic water system. The water project is a major component of the City's housing project, which is intended to provide adequate low-income housing and help relocate families in the existing plantation homes of which the land leases expire in 1983.

The project will alter 3.2 acres of land for the construction of the facilities and related improvements. Approximately 7,400 cubic yards of earth will be excavated and removed. Two deepwells will tap the underground basal water supply and a maximum pumpage of 1.0 million gallons per day can be expected.

The estimated project cost is \$1,200,000 and will be financed by a \$600,000 grant and a \$600,000 loan from Farmer's Home Administration. The land acquisition and construction phase is tentatively planned for Fiscal Year 1978 and project construction will require approximately one year to complete.

The adverse impacts resulting from the proposed project involve the temporary construction related impacts and the alteration of 3.2 acres of land for the facility. However, the benefits derived from the project by the community is felt to outweigh these impacts and in addition appropriate mitigative measures will be employed to minimize these impacts.

Among the alternatives that were considered was a no action alternative; however, this was considered to be unacceptable from a public welfare standpoint. The other alternative dealt with utilizing the existing wells; however because of their age and questionable construction it was also rejected.

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I. DESCRIPTION OF THE PROJECT

A. PROJECT LOCATION

The proposed Kahuku Water Development project is located next to Kahuku Town in the Koolauloa District of Oahu Island, approximately 26 miles north of downtown Honolulu, as shown in Figure 1. The proposed well and reservoir site, and transmission main are shown in Figure 2, Vicinity Map, and except for a portion of transmission main within the State highway right-of-way, the rest of the project is situated on portions of Tax Map Key: 5-6-06:6 and 5-6-08:2.

B. STATEMENT OF OBJECTIVES

The objectives of the proposed action is intended to 1) insure adequate water resources for a proposed Department of Housing and Community Development, City and County of Honolulu, residential development that will replace existing plantation dwellings and provide low-cost housing in the Kahuku area and 2) upgrade the present domestic water system from the standpoint of a more reliable water source and storage facility.

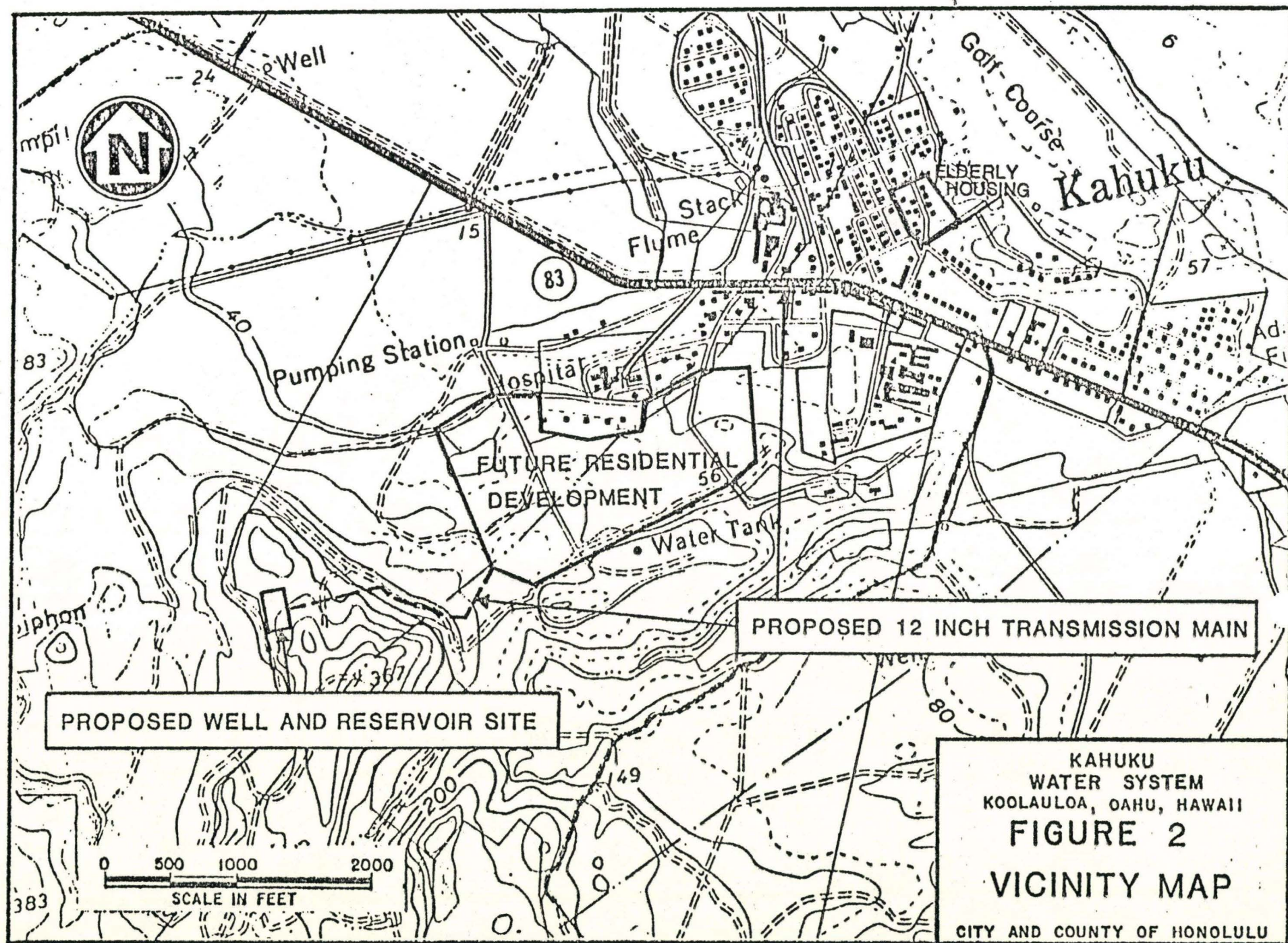
C. TECHNICAL CHARACTERISTICS

The proposed Kahuku Water Development project consists mainly of 1) clearing, grubbing and grading (reservoir site and access road), 2) drilling two deepwells, each approximately 340 feet deep, 3) installation of two 700 gallons per minute (gpm) deepwell pumps with related piping and appurtenances, 4) construction of a 0.5 Million Gallon (MG) reservoir and a single-story control building, 5) construction of an access road to the reservoir site approximately 2,000 linear feet, 6) installation of approximately 4,000 linear feet of 12-inch transmission main, and 7) construction of miscellaneous drainage improvements. A general well and reservoir site plan is shown in Figure 3.

Sitework

The well and reservoir site will be graded to obtain the necessary elevations so that the reservoir may be functionally incorporated into the existing system. Cuts from 0 to approximately 25 feet in height will be accomplished in accordance with applicable ordinances of the

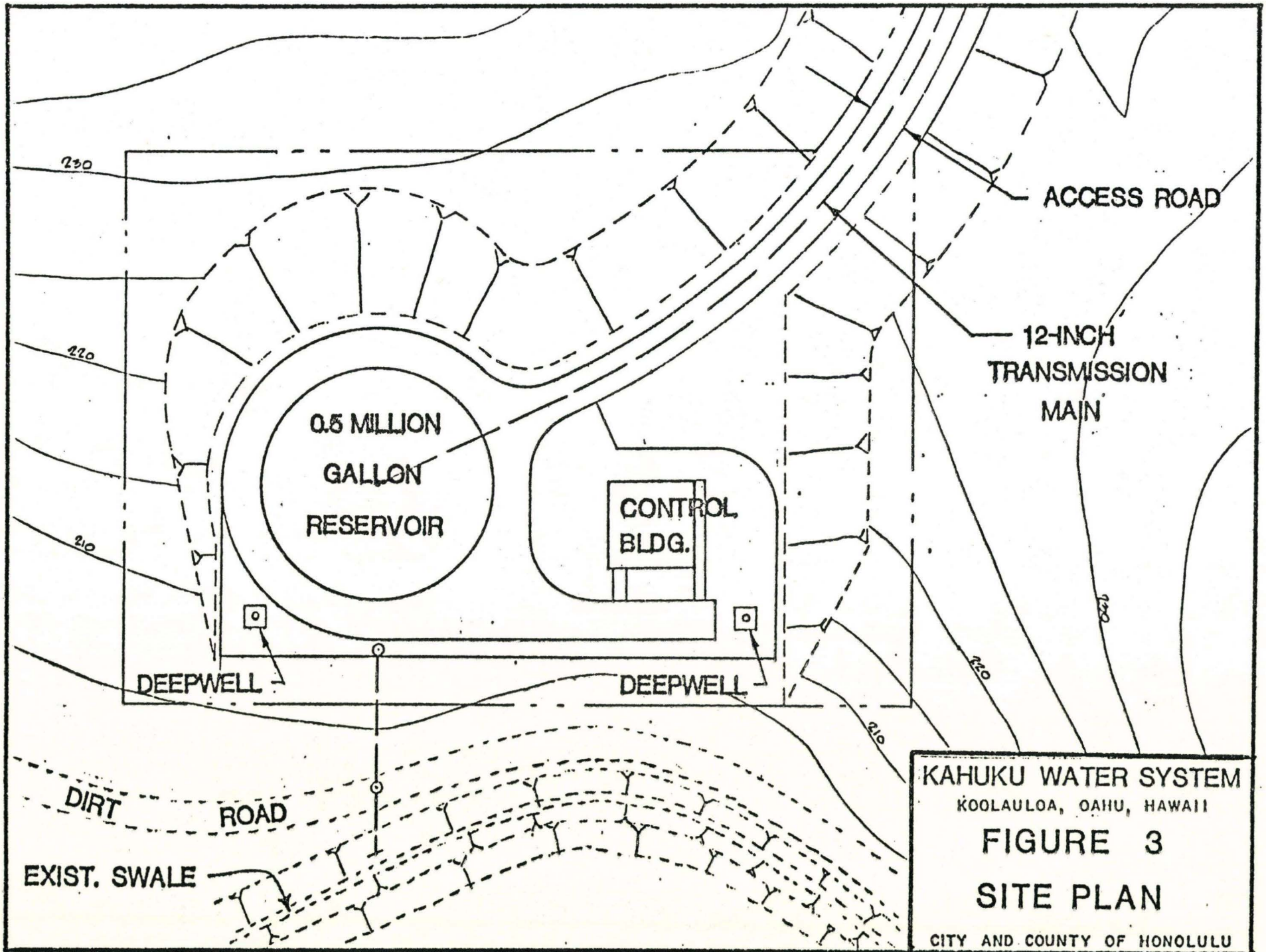
I-3



PROPOSED WELL AND RESERVOIR SITE

PROPOSED 12 INCH TRANSMISSION MAIN

KAHUKU
WATER SYSTEM
KOOLAULOA, OAHU, HAWAII
FIGURE 2
VICINITY MAP
CITY AND COUNTY OF HONOLULU



City and County of Honolulu and recommended design criteria furnished by a soils consultant. Cuts for the access road also vary from 0 to about 25 feet and will also conform to the appropriate regulations.

The area will be grassed and landscaped to minimize the potential for erosion from the exposed slopes and to mitigate any visual impairment as a result of the sitework.

Deepwells and Pumps

Two deepwells will be drilled to a depth of (-)130 feet below mean sea level (msl) and a 12-inch diameter steel casing will be installed to a depth of (-)30 feet below msl. Two 700 gpm deepwell pumps with 75 horsepower motors will be installed, along with related piping, as well as appurtenances to the reservoir and transmission main.

0.5 Million Gallon Reservoir

The reservoir will be cylindrical in shape, of reinforced concrete construction, and approximately 70 feet in diameter with a height of about 21 feet. The concrete walls of the reservoir will remain unpainted, reflecting the Board's recently enacted policy of "minimized maintenance". The floor elevation will be 210 feet (msl) and the overflow elevation will be 228 feet (msl). A 12-foot-wide asphalt concrete road will encircle the reservoir to provide access to the grounds by maintenance vehicles and personnel.

Control Building

The control building is a one-story concrete and masonry building, approximately 28 feet square with a maximum height of 16 feet. The control building will house the chlorinators, telemetry system, motor control center and a water closet. The building's exterior surface will remain unpainted as in the case of the reservoir, but exposed metal surfaces will be painted.

Access Road

The access road will be 12 feet wide, paved, and have a maximum grade of 20 percent. The access road will connect to a City and County road in the proposed residential development.

Transmission Main

The 12-inch transmission main will be installed under the access road and will connect to the proposed residential development's water system. From the residential water system at the Kamehameha Highway entrance, the 12-inch main will branch off and parallel the highway for about 2,000 feet to Kahuku School.

Miscellaneous Drainage Improvements

Storm runoff from the site will be directed overland into an existing swale located along a dirt road on the western side of the reservoir site. Reservoir perimeter subdrains, pump drains, venturi vault drains and overflow drains will be directed to a drain manhole and conveyed to the existing swale through a 12-inch culvert.

D. ECONOMIC CHARACTERISTICS

Use of Public Funds

The estimated project cost is \$1,200,000 and will be financed by a grant and loan from Farmer's Home Administration (FmHA), U.S. Department of Agriculture. The grant will be for \$600,000 and is contingent upon BWS issuing a \$600,000 revenue bond at 5 percent interest per annum to FmHA to satisfy the loan requirement. The water service charge will finance the operation and maintenance of the proposed project.

The State has appropriated \$300,000 for repayment of the \$600,000 loan, while another appropriation for \$400,000 is pending approval.

Phasing and Timing

A tentative schedule shows that the land acquisition and construction phase is planned for Fiscal Year 1978. The project construction will require approximately one year to complete.

E. SOCIAL CHARACTERISTICS

The proposed water project is an important component of the City's proposed Koolauloa Housing project, which is intended to provide adequate low-income housing and replace existing plantation homes, the leases of which will expire in 1983. The proposed housing project will also be the start of a new Kahuku community, which will reflect the character and life style of the people of Kahuku.

Also, the design concept of the project is directed toward upgrading the existing water system and improving service by replacing the existing source and storage facility. The project improvements will provide a more reliable water source and more uniform service pressure during peak demands.

F. ENVIRONMENTAL CHARACTERISTICS

The proposed project will alter 3.2 acres of land for the construction of the facilities and related improvements. Approximately 7,400 cubic yards of earth will be excavated and removed. The two deepwells will tap the underground basal water supply and a maximum pumpage of 1.0 Million Gallons per Day (MGD) can be expected.

II. DESCRIPTION OF ENVIRONMENTAL SETTING

A. REGIONAL DISTRICT

The environment affected by the proposed project includes a major portion of Kahuku Town, a small rural community located in the Koolauloa District on the Island of Oahu, approximately 26 miles north of downtown Honolulu, as shown in Figure 1. This Hawaiian Community evolved from a small sugar plantation settlement to a rural-oriented community encompassing residential, commercial and agricultural land use practices.

History

The Kahuku area, prior to its acquisition by James Campbell in the late 1880's, was used primarily for cattle ranching. However, upon acquiring these lands, Campbell constructed a water supply and distribution system and then leased the land to Kahuku Sugar Company for sugarcane cultivation and sugar processing. The sugar plantation remained in operation for 80 years, until 1971, at which time sugarcane production was halted.

With the closing of the sugar plantation and mill, emphasis was extended to diversified agriculture and tourism. Diversified agriculture consists of feed corn, watermelon, banana, guava and papaya cultivation. In addition, Kahuku Sugar Mill has become a major tourist destination since its conversion to a museum resort complex.

Demography

In 1970, the population of Kahuku Town was 917, which represented a decrease of 25.9 percent since the 1960 census. At the time of the 1970 census, the total housing units numbered 257 (of which 3 were owner-occupied units), the median rent ranged from \$0 - \$40, and employment was centered in the civilian labor force (DPED, 1972).

The City and County of Honolulu General Plan, Statement of Objectives and Policies, adopted in February, 1977, designates the Kahuku-Kahaluu area as rural. In an effort to maintain the Island's rural population, a distribution of approximately 1.9 percent of Oahu's residential population or 17,430 inhabitants is sought for the Kahuku-Kahaluu area in the year 2000.

Land Use

The current land use is shown in Figure 4, while Figure 5 shows the current City and County zoning map. The Detailed Land Use Map and the Development Plan of the Oahu General Plan (OGP, 1964) is shown in Figure 6, and Figure 7 shows the land use designations of the State Land Use Commission (SLUC, 1974).

Climatology

Mean annual rainfall in the area, as shown in Figure 8 is less than 40 inches, and a majority of this rainfall occurs between October and April. The average annual temperature is approximately 75° F., with an annual relative humidity of about 70 percent. The cooling northeast tradewinds, varying from 0 - 14 miles per hour are usually present, thus creating a comfortable climate.

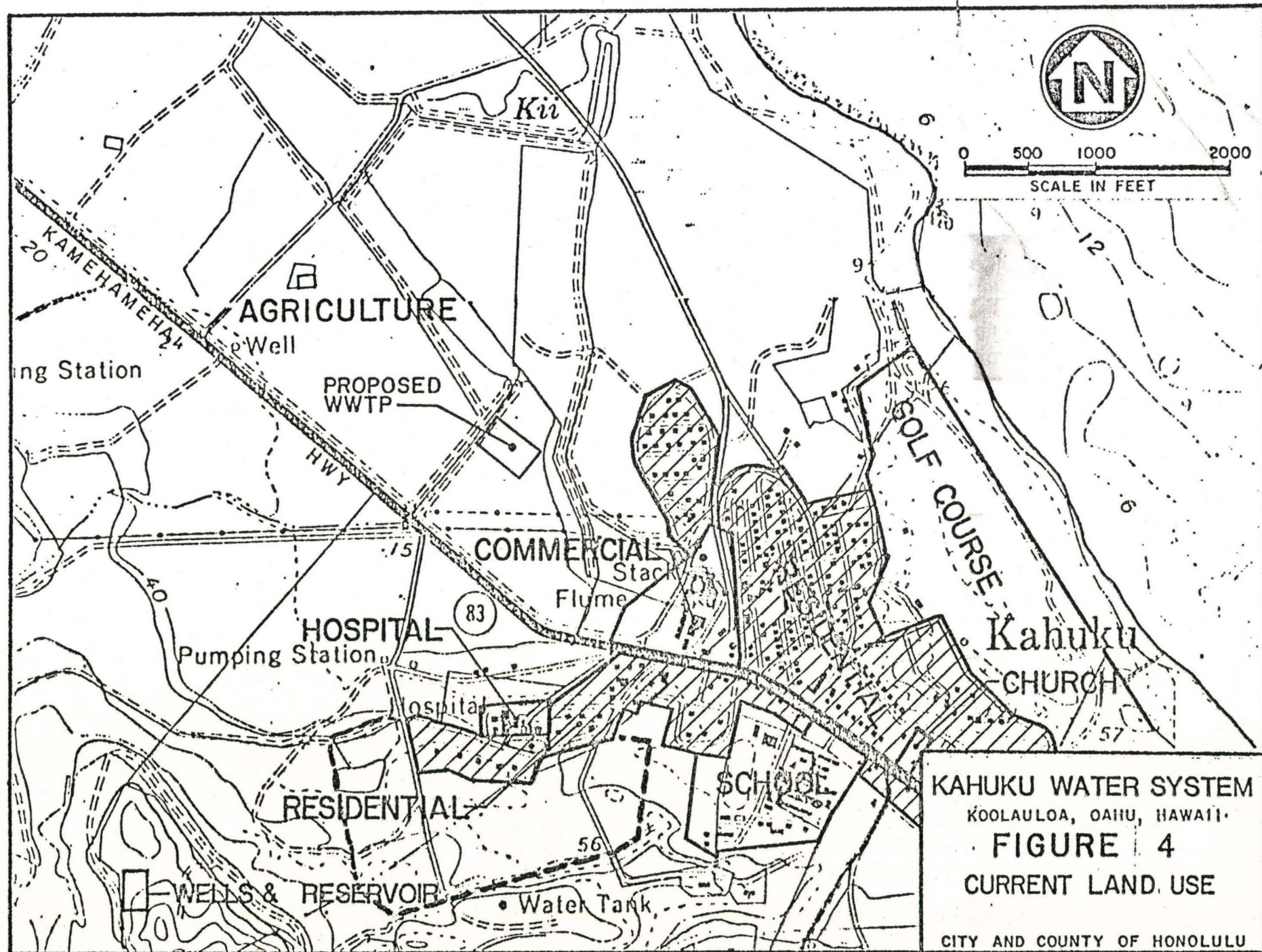
Soils

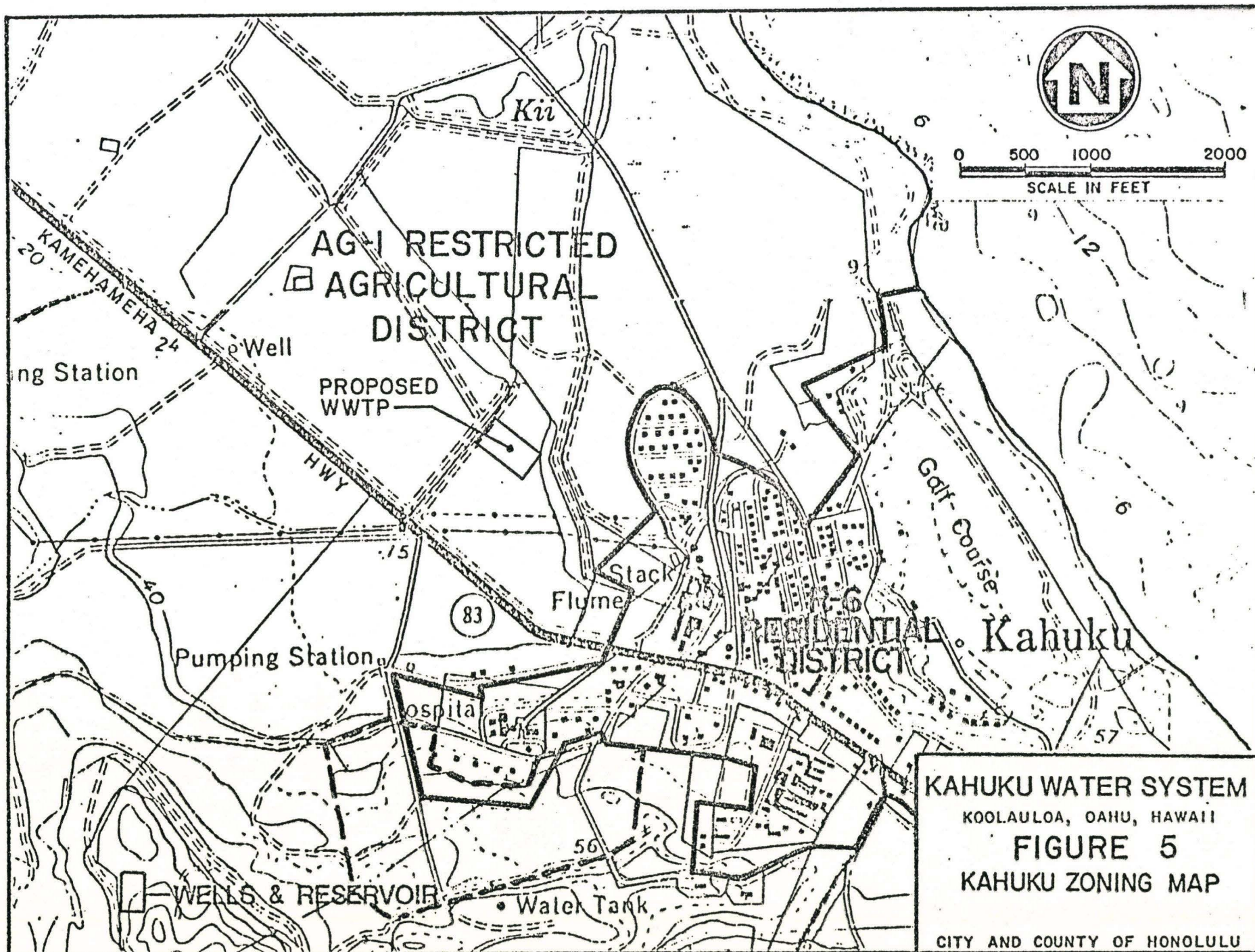
The major soil types found in the Kahuku Town area include Jaucas sand (JaC), Kaloko clay (Kfa), Kawaihapai clay loam (KIA), Lahaina silty clay (LaB & LaC), Mokuleia clay loam (Mt), Pearl Harbor clay (Ph), and Waialua silty clay (WKA), with minor occurrences of beach sand (BS), coral outcrops (CR) and fill lands (Fd). The soil at the well and reservoir site is Paumalu silty clay (PeC), 8-15% slope, and on this soil, runoff is slow to medium and the erosion hazard is slight to moderate (USDA, 1972).

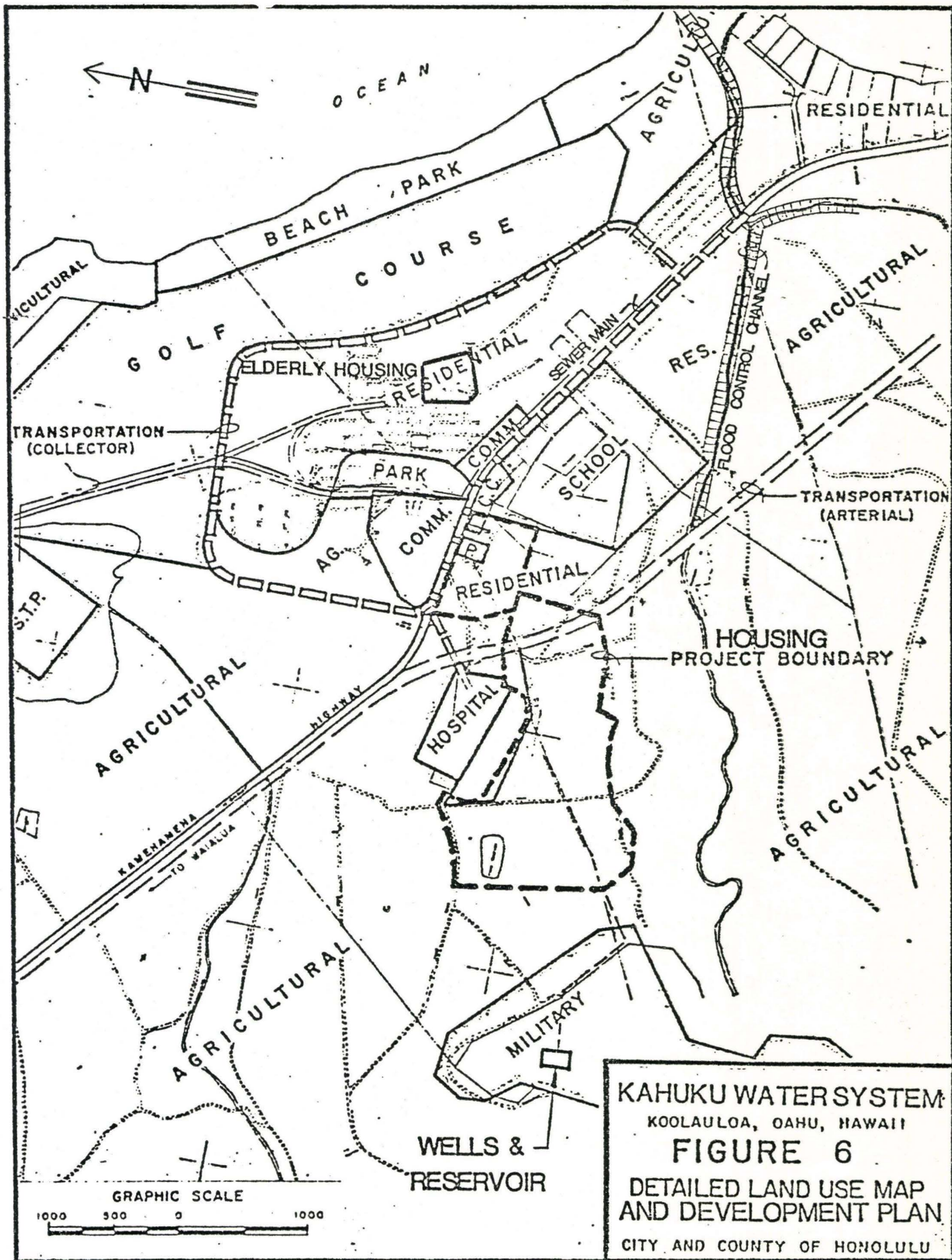
Geohydrology and Water Quality

The geologic features found within the region of Kahuku Town greatly influence the area's hydrologic characteristics. These features include permeable to highly permeable marine and terrestrial sedimentary coastal

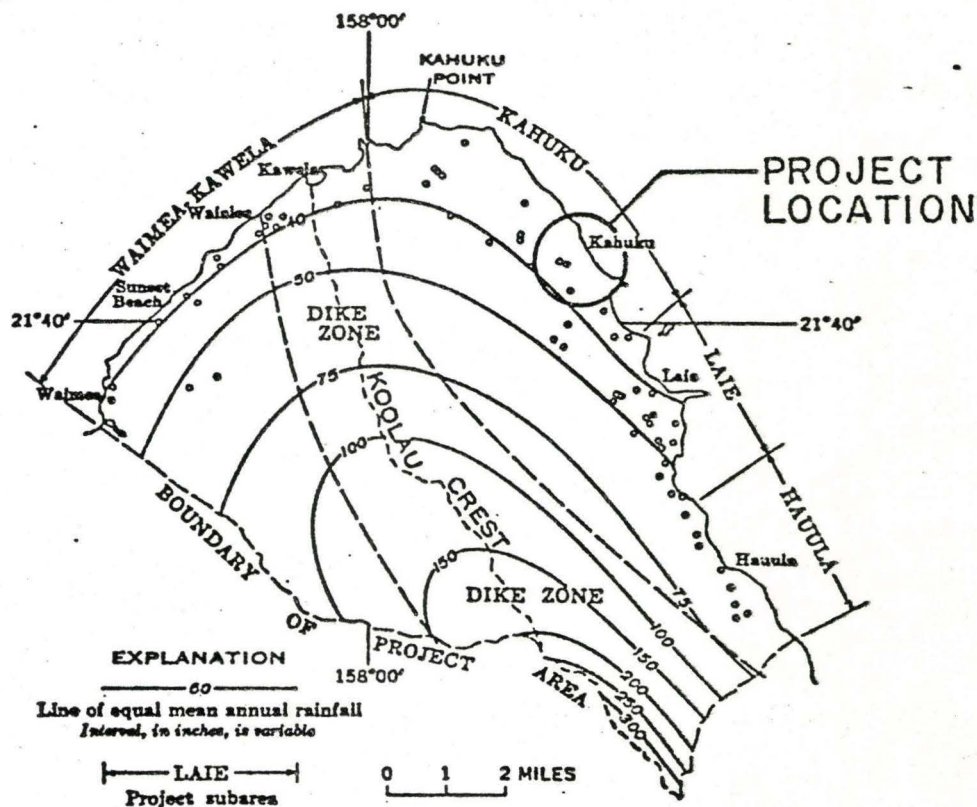
11-3







KAHUKU WATER SYSTEM
KOO LAU LOA, OAHU, HAWAII
FIGURE 7
STATE LAND USE
DESIGNATIONS
CITY AND COUNTY OF HONOLULU



KAHUKU WATER SYSTEM
KOO LAU LOA, OAHU, HAWAII
FIGURE 8
MEAN ANNUAL RAINFALL

SOURCE: "WATER IN THE KAHUKU AREA, OAHU, HAWAII"

CITY AND COUNTY OF HONOLULU

plain deposits (caprock) and valley-filling alluvium, permeable dike-free basaltic lava flows, and lava flows intruded by numerous impermeable dikes. Generally speaking, the permeable basaltic formations allow for considerable recharge at the higher elevations while the caprock tends to retard the flow of basaltic water to the ocean. The dike formations are also important elements in the groundwater hydrology because they provide the mechanism for storage in the form of dike compartments.

Streams in the area are characteristically intermittent in the lower reaches where rainfall is light, but perennial in the dike zone above 1,000 feet due to heavy rainfall, as well as due to discharge from the dike compartments. Stream water infiltrates back into the ground to either reappear on the coastal plain, or to recharge the basal lens. Malaekahana Stream, the nearest major stream to Kahuku Town, exhibits these characteristics.

Groundwater in the Kahuku Town area includes both dike and basal water. Figure 9 locates the area's wells, while Tables 1 and 2 summarize the status and water quality for each.

Groundwater quality in this area has been greatly affected by past pumping practices. These past practices involved a net overdraft situation which contributed to the steady degradation of groundwater in Kahuku. To illustrate, recharge to the dike compartments and basal lens from precipitation has been estimated to be 12 million gallons per day (mgd). However, during the time Kahuku Sugar Mill was in operation, spanning some 40 years, pumpage averaged 22 mgd. This resulted in an overdraft of 10 mgd. When recharge from return irrigation water is considered (estimated to be about 5 mgd), the estimated net overdraft was 5 mgd.

As a result of overdrafting the resource during this 40 year period, chloride levels at a number of wells increased. The chloride content at Well 352 (see Figure 9) rose from 150 mgd to nearly 1,600 mg/l, and at Well 357 from 100 mg/l to 1,600 mg/l. Return irrigation water of poor quality may have compounded the problem of rising chlorides in some areas of cultivation.

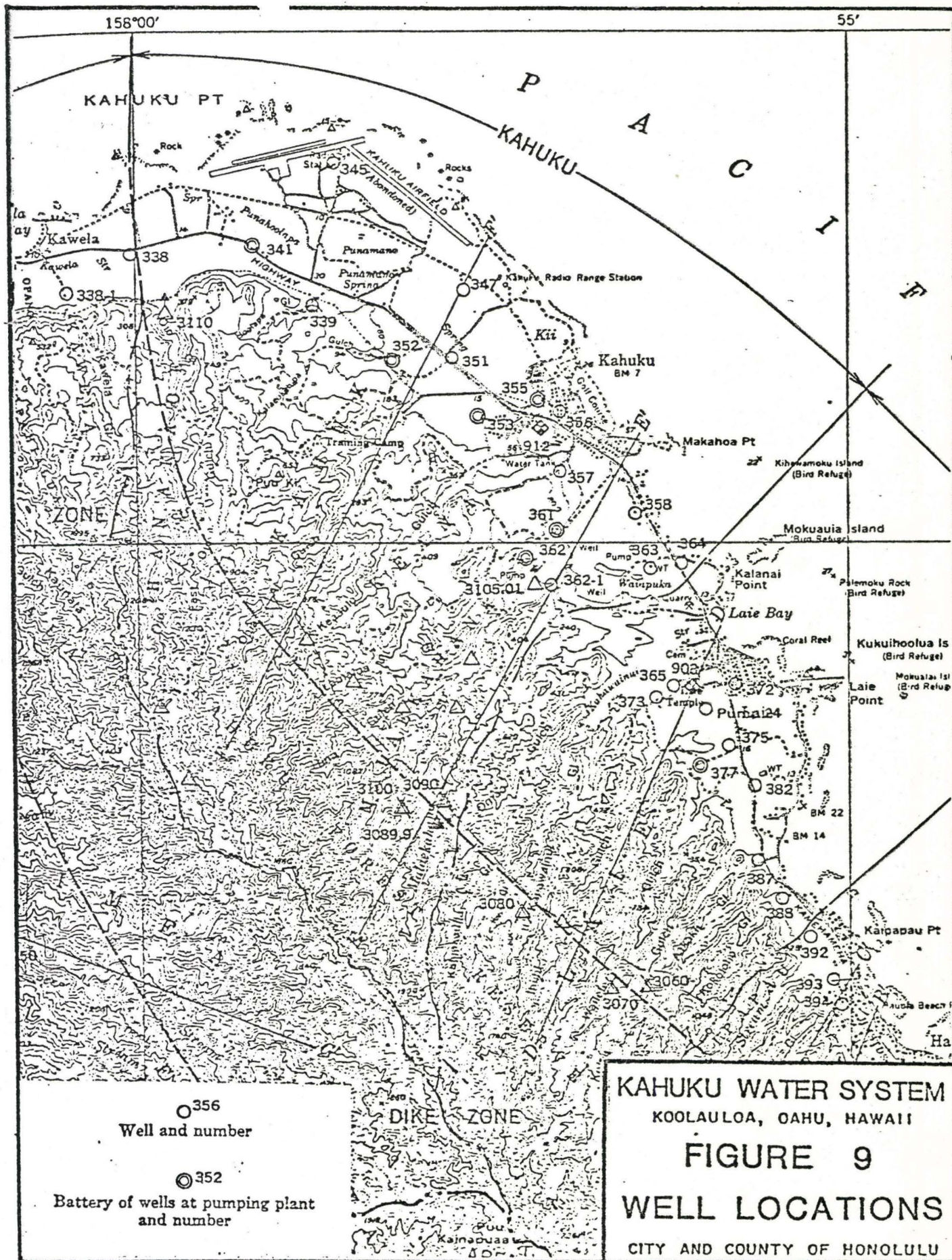


TABLE 1
WELL USAGE DATA

<u>OLD WELL NO.</u>	<u>NEW WELL NO.</u>	<u>WATER QUALITY DATA</u>	<u>PUMPAGE (MGD)</u>	<u>CAPACITY (GPM)</u>	<u>PRESENT DISPOSITION</u>	<u>FUTURE DISPOSITION</u>
338-2	4100-03	1969: 32 ppm Cl ⁻ 55 ppm NO ₃ 48 ppm Alk 55 ppm Hardness	None		No Pump	Will be used by SWS
338-1	4100-02	1940-1955: Av. 150 ppm Cl ⁻ Range: 111-390 ppm Cl ⁻	Unknown	Unknown	Not in use	Kullima may use in future
338	4100-01	1978: 1500 ppm Cl ⁻ after installation of 600 gpm pump, water quality should be better.	Est. 0.3	600	Use for golf course at Kullima Hotel	Same
339 A, B	4158-12, 13	1942-1958: 151-344 ppm Cl ⁻	1977: .039	Unknown	One well (B) is capped, other well supplying water to non-military residents (16 services) near air field. Also delivers water to nudist camp.	Unknown
341 A, B Pump 2	4159-01, 2	Pump A 1959-1964: 138-434 ppm Cl ⁻ Pump B 1962-1963: 356-574 ppm Cl ⁻	Est. 5.0	8,300	One well used by Air Force other is used by farmer.	Unknown
345	4258-04	1942-1959: 243-531 ppm Cl ⁻	None	Unknown	Not in use.	Unknown
348	4157-03	1939-1959: 78-524 ppm Cl ⁻	None	Unknown	Not in use.	Unknown
351	4157-04	1959-1964: 50-710 ppm Cl ⁻	Total: 1.5	1,000	Pump 15 is used by both Army and Lowe, Inc.	Same
352 A-K Pump 5	4158-01-11	1959-1964: 255-1552 ppm Cl ⁻	None	7,200	Not in use.	Unknown
353 A-E Pump 1, 11, 14	4051-01, 02, 03, 13, 14	Pump 1: 1959-1964: 119-266 ppm Cl ⁻ Pump 11 & 14: 1959-1964: 67-353 ppm Cl ⁻	Pump 1: 1.13 Pump 11: 0.95	Pump 1: 4,250 Pump 11: 1,250 Pump 14: 600	Pump 11 & 14 used by Kahuku Housing Corp. for Kahuku residents, hospital, school. Pump 14 stand-by not in use. Pump 1 used by Kahuku Farmers Association to irrigate 250 acres of land.	Pump 11 & 14 Pump 1 - modification expected.
354	4057-03	Unknown	Unknown	Unknown	Free flow into sump. Pump delivers water from sump to cane wash area.	Unknown
355 A-D	4057-04, 09, 11, 12	1957: 1,560 ppm Cl ⁻	Unknown	Unknown	Use for sewage treatment and wash down.	Unknown
356	4057-05	Average: 400 ppm Cl ⁻	None	None	USGS has water level recorder on it.	Same
357 Pump 8	4057-06	1959-1964: 301-1,653 ppm Cl ⁻	Unknown	High Lift: 1300 Low Lift: 1300	Low lift used by T. Nakamura for papayas and by Campbell Estate Nursery. High lift not in use.	Low lift continues use. Nursery will move, water will then be used by Fire Station which will be at Nursery site. High lift will be used by Thomas Yamabe of Kahuku Agricultural Co.
358	4056-01	1939-1959: 74-197 ppm Cl ⁻	350 gpd	Unknown	Use by Kekaulike & Kawananakoa for ranch	Unknown
361 A, B	4057-07, 10	1959-1964: 53-133 ppm Cl ⁻	Pump 12: .40 Pump 12A: 1.5	High Lift: 1250 Low Lift: 1250	Pump 12 (high lift) used by Thomas Yamabe of Kahuku Agricultural Co. Pump 12 A (low lift) used by Brian Smith for prawn farm.	Same
362 A-F Pump 3 & 17	3957-01-06	1959-1964: 39-241 ppm Cl ⁻	None	Pump 3: 6400 Pump 17: 1740	Not in use.	Unknown
362-1 Pump 6	3957-07	2175: 50 ppm Cl ⁻ Ave. .818 NO ₃	1977: .130	Pump 6: 1300	Used by MRJ Ranch	Unknown
363 Pump 7	3956-01	1959-1964: 100-331 ppm Cl ⁻	1977: .025	1300	Milackahana Domestic System 50 meter connections. No MRJ Ranch use in last 2 years	Unknown

TABLE 2
WATER QUALITY DATA

WELL NO.	DATE	SI02	CA	MG	NA	K	HCO3	CO3	SO4	CL	F	NO3	SOLIDS DET	SOLIDS CALC	HARD CA, MG	HARD NONC	ALK CARB	COND	PH	TEMP C	LAB
3956-01	02/23/68	34	46	35	50	5.4	63	0	19	220	0.0	1.5	640	441	261	209	52		7.6		3
	09/04/68	40	55	47	50	2.8	63	0	24	242	0.6	0.4		496	330	279	52		7.8	25.0	7
	10/31/68	42	51	35	51	2.9	60	0	23	230	0.0	1.1		468	272	225	49		7.5	25.0	7
	01/30/69	45	48	39	44	2.5	65	0	24	238	0.3	1.4		444	282	227	53		7.2	22.0	7
	05/01/69	42	51	35	53	3.3	65	0	23	209	0.0	0.9		450	270	217	53		7.5	22.0	7
	08/12/69	59	53	33	45	4.1	64	0	23	200	0.0	1.8		452	266	220	52		7.7	22.0	7
	11/13/69	31	48	37	48	3.0	64	0	22	214	0.2	1.4		438	270	218	52		7.8	22.5	7
	01/20/70	42	40	29	44	3.2	66	0	21	255	0.2	2.8		442	270	215	54		7.7	22.0	7
	07/30/71	26	55	38	51	2.9	58	0	24	228	0.2	0.8		452	285	238	48	883	6.8		1
3957-07	02/06/69	61	14	12	51	1.0	106	0	18	58	0.9	5.0		273	88	2	87		7.4	25.0	7
	05/01/69	41	14	11	40	1.2	86	0	12	57	0.1	3.4		243	80		70		7.4	22.5	7
	08/12/69	96	16	15	39	1.1	36	0	19	61	0.1	4.2		294	106	31	70		7.4	23.6	7
	11/13/69	40	15	16	45	1.2	35	0	29	68	0.7	4.8		265	102	31	72		7.6	23.0	7
	01/20/70	47	19	12	41	1.6	102	0	13	56	0.4	4.4		246	97	13	84		7.5	23.0	7
	07/30/71	52	13	11	37	1.2	56	0	11	52	0.2	3.6		223	78	7	71	341	7.1		1
	04/12/72	53	12	9.7	44	1.3	97	0	11	52	0.1	3.7		235	70	0	61	350	7.7	22.1	1
4056-01	09/04/68	40	32	28	46	2.6	68	0	19	155	0.6	1.2		370	194	138	56		7.9	21.5	7
	10/31/68	42	34	21	47	3.1	58	0	17	148	0.1	2.1		351	170	118	56		7.4	21.5	7
	01/30/69	47	27	14	40	2.4	72	0	16	123	0.3	1.6		312	145	87	50		6.7	22.0	7
	05/01/69	42	30	26	42	3.2	70	0	18	140	0.1	1.2		338	134	125	57		7.7	21.5	7
	08/12/69	52	23	29	40	3.1	72	0	28	141	0.1	0.0		368	200	143	59		7.7	22.0	7
	11/13/69	30	34	26	41	3.0	73	0	11	150	0.2	1.7		332	194	136	57		7.8	21.8	7
	01/20/70	41	40	22	40	3.0	58	0	19	150	0.2	2.8		353	190	135	56		7.7	22.0	7
	07/30/71	39	34	24	47	3.0	57	0	17	152	0.2	0.9		350	184	129	55	642	6.9		1
4057-05	09/04/68	3.0	78	50	48	3.4	26	0	1.0	455	0.2	0.0		707	400	378	21		8.0	26.0	7
	10/31/68	2.5	76	41	56	4.0	25	0	0.0	452	0.0	1.1		706	440	410	20		6.9	26.0	7
	01/30/69	1.5	76	75	84	3.4	27	0	1.0	428	0.2	0.0		682	500	477	22		6.5	21.0	7
	05/01/69	2.0	71	64	92	4.0	22	0	1.0	425	0.0	0.0		678	442	423	18		8.2	23.0	7
	08/12/69	2.5	70	51	96	3.7	22	0	0.5	408	0.0	3.2		649	384	365	18		7.9	25.0	7
	11/13/69	1.0	69	55	100	4.0	24	0	11	418	0.1	0.4		671	400	380	19		8.2	22.5	7
	01/20/70	2.5	90	41	82	3.8	24	0	3.0	407	0.2	0.0		645	394	374	19		7.6	22.0	7
4357-06	02/06/69	9.5	55	67	45	2.5	46	0	30	343	0.5	0.0		645	490	452	37		7.3	25.0	7
	05/01/69	45	25	277	165	4.0	63	0	85	1030	0.0	1.2		1680	1200	1150	37		7.5	22.0	7
4100-01	09/04/68	49	19	19	48	2.5	64	0	17	118	0.5	1.4		309	126	73	52		7.8	25.0	7
	01/30/69	45	19	20	43	2.6	66	0	17	118	0.6	2.0		301	132	78	54		7.3	22.0	7
	05/01/69	52	17	16	45	2.8	66	0	15	97	0.1	1.7		281	110	56	54		7.7	22.0	7
	09/12/69	77	17	16	50	2.8	66	0	21	99	0.5	1.8		319	110	54	54		7.6	22.0	7
	11/13/69	36	18	27	43	2.7	66	0	25	104	0.2	2.1		311	132	103	54		7.8	22.5	7
	07/29/71	46	116	107	265	8.0	79	0	113	802	0.1	0.0		1490	730	666	65	2840	6.8		1
	08/27/71	54	144	153	452	11	68	0	179	1300	0.1	2.8		2340	985	934	56	4310	6.7		1
4100-02	09/21/68	52	12	20	46	1.3	64	0	17	92	0.5	2.3		276	114	60	92		7.3	23.0	7
	10/31/68	51	15	15	51	1.7	68	0	16	98	0.3	1.8		284	100	43	56		7.2	23.0	7
	05/01/69	54	15	17	49	1.6	66	0	13	94	0.0	1.5		283	136	52	94		7.2	22.0	7
	06/12/69	77	15	13	44	1.9	66	0	20	84	0.0	1.5		291	92	37	54		7.4	22.5	7
	11/13/69	36	23	25	55	1.8	64	0	17	134	0.5	2.4		337	160	91	69		7.1	22.0	7
	01/20/70	50	18	15	50	1.6	70	0	18	98	0.1	3.4		291	106	49	57		7.2	22.0	7
4101-03	09/04/68	45	10	8.5	27	1.4	61	0	7.0	43	0.4	1.6		174	60	10	50		6.9	22.0	7
	10/31/68	51	10	8.5	26	1.5	62	0	7.2	43	0.1	2.9		180	60	9	50		6.0	21.5	7
4157-03	09/04/68	1.0	56	17	35	1.2	10	0	1.0	208	0.5	0.0		327	210	202	8		8.0	26.0	7
4157-04	09/04/68	52	59	44	58	1.8	76	0	25	255	0.5	3.7		538	328	266	62		7.4	21.5	7
	10/31/68	51	54	33	60	2.2	78	0	23	220	0.2	4.1		486	370	207	63		7.2	21.5	7
	02/06/69	47	54	39	63	1.8	110	0	26	208	0.6	0.0		493	296	206	90		7.1	24.0	7
	08/12/69	72	56	34	60	4.3	91	0	34	218	0.0	4.3		525	290	210	66		7.4	21.5	7
	11/13/69	32	53	37	73	2.3	96	0	41	224	1.0	7.1		518	286	207	79		6.8	23.5	7
	01/20/70	49	66	23	54	2.0	102	0	22	198	0.3	10		476	260	175	84		7.7	23.0	7
	08/27/71	54	53	33	60	2.0	36	0	22	222	0.1	4.2		492	268	197	71	901	6.9		1
4158-12	06/12/56	44	47	52	93		85	0	34	340	0.0	4.0	1010	655	332	262	70		6.9		3
	09/04/68	54	52	52	96	1.2	93	0	27	342	0.6	5.5		676	342	276	88		7.3	23.0	7
	10/31/68	54	54	62	132	2.6	84	0	28	342	0.1	6.6		692	390	321	69		7.2	23.5	7
	01/30/69	61	52	55	86	2.4	86	0	30	333	0.5	5.8		682	410	340	70		6.5	22.5	7
	05/01/69	56	52	53	120	2.9	12	0	27	350	0.4	5.4		710	348	290	67		7.4	22.5	7
	08/12/69	87	52	54	96	4.2	84	0	41	328	0.1	1.4		706	352	280	69		7.4	22.5	7
	11/13/69	40	52	60	95	2.7	86	0	50	322	0.2	5.6		672	376	300	70		7.2	22.5	7
	01/20/70	50	65	53	92	2.6	56	0	25	323	0.2	8.8		665	380	310	70		7.4	22.0	7
	07/29/71	49	55	53	37	2.6	84	0	25	332	0.1	3.3		658	355	286	69	1260	7.0		1
4159-01	07/29/71	49	57	56	99	3.2	78	0	29	350	0.1	5.0		686	373	309	64	1320	6.7		1
4256-04	06/12/56	32	44	61	112		56	0	37	480	0.0	0.4	1390	843	484	438	46		7.0		3
	07/29/71	50	116	76	117	4.6	56	0	41	550	0.1	1.2		983	603	537	46	1930	6.7		1
	03/30/72	48	121	74	130	4.3	60	0	43	570	0.1	0.0		1020	607	558	49	1960	7.4	22.5	1

SOURCE: "Chemical Quality of Groundwater in Hawaii"

Since the end of 1971, pumpage has declined drastically due to the demise of sugar in the area. Although diversified agriculture has utilized many of the Kahuku Plantation sources since 1972, draft has nevertheless still been reduced by approximately 66 percent over pre-1971 levels. A best estimate for draft at the present time is 7 mgd, of which slightly less than 1 mgd is domestic. Present head levels are in the vicinity of 12 feet (msl).

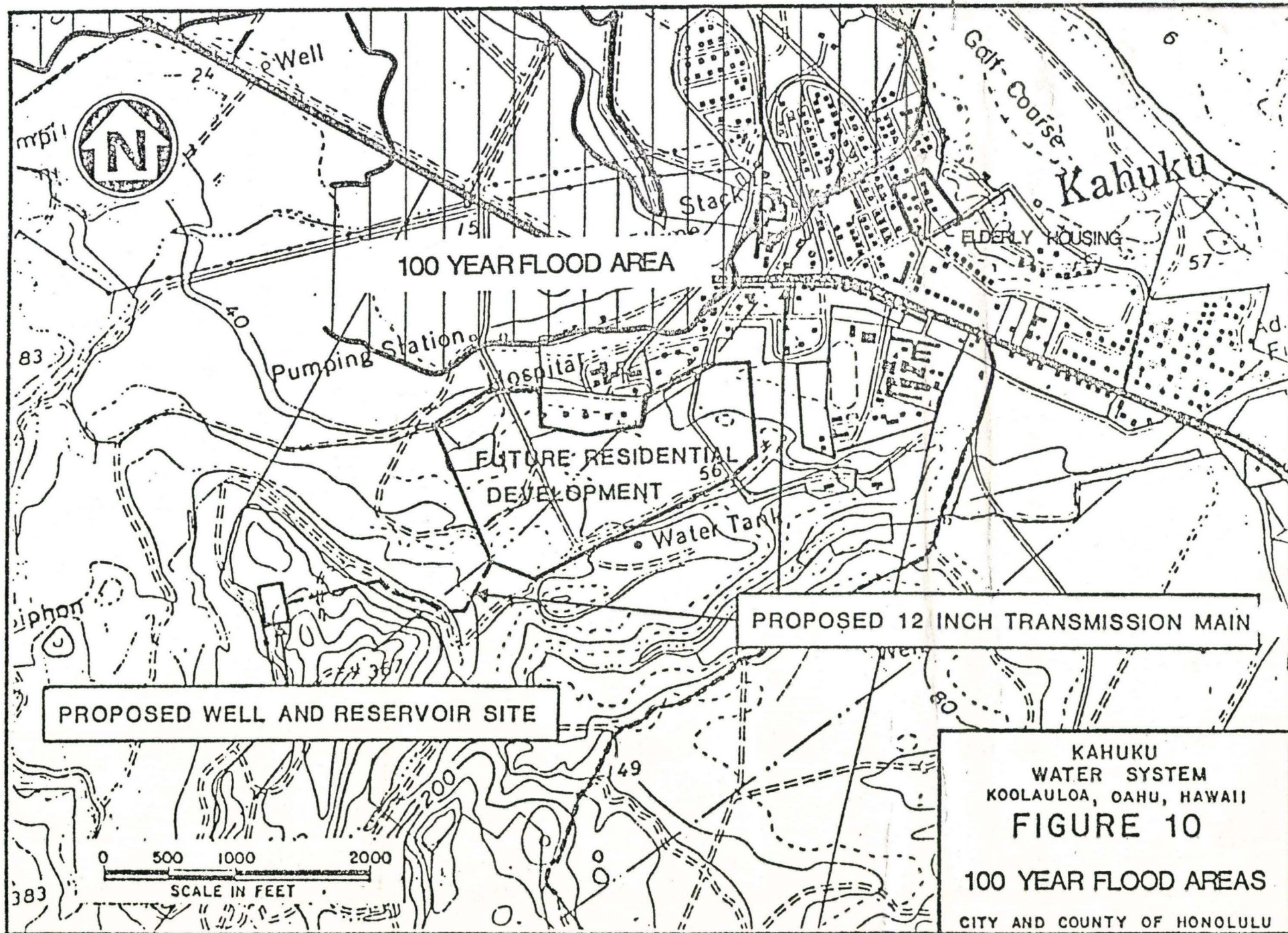
This reduction in pumpage has resulted in a general improvement in water quality as evidenced by Department of Health data from the domestic source (Well 353, Pump 11) serving the Kahuku community.

<u>Date</u>	<u>Chloride Content, mg/l</u>	<u>Total Dissolved Solids, mg/l</u>
9-25-72	120	480
1-16-73	130	388
1975	117	314

Future Board of Water Supply Water projects include installation of pump and pumping stations at the Opana Well (Well No. 338-2) and possible development of water in Malaekahana Valley and/or between Opana and Malaekahana. As described previously, water quality in the Kahuku area has been subject to great fluctuation due to response to plantation pumping. It is important that future water development recognizes this condition and should not exceed the recoverable portion of the 12 mgd recharge in the area. In addition, water development should not be concentrated geographically, rather it should be spread out over a greater area. Finally, caution must be exercised in design inasmuch as some of the existing sources have wells which are too deep and pump poor quality water and induce upconing by sea water.

Flooding

The Kahuku coastal plain is susceptible to flooding in its lowlying and swampy areas. The Flood Insurance Rate Map, City and County of Honolulu (#15,0001-0005A), delineates the 100-Year Flood Area as shown in Figure 10. Tsunamis, commonly known as tidal waves, have caused



KAHUKU
WATER SYSTEM
KOOLAULOA, OAHU, HAWAII
FIGURE 10
100 YEAR FLOOD AREAS
CITY AND COUNTY OF HONOLULU



extensive flooding and damage along the coast. Past tsunamis, generated by strong earthquakes near the Aleutian Islands, caused runups to about the 9 foot elevation with 500 feet of inland flooding.

Other Projects

There are several projects in the development stage within Kahuku Town. The Kahuku Support Housing and the Kahuku Elderly Housing, by the Department of Housing and Community Development, are two of the projects. Another is the Department of Public Works, Kahuku Sewer Improvement Project, which consists of a collection system, wastewater treatment facility and disposal system. This system will replace the present method of wastewater disposal by cesspool.

The Kahuku Ambulance, Fire and Police Station project will be located on a four-acre parcel next to Kahuku High School. The project consists of a new district police station, a fire station complex, emergency ambulance facility and a helicopter landing pad.

The Fish and Wildlife Service, U.S. Department of the Interior is developing a bird refuge at Kii Pond, the boundary of which is shown in Figure 11.

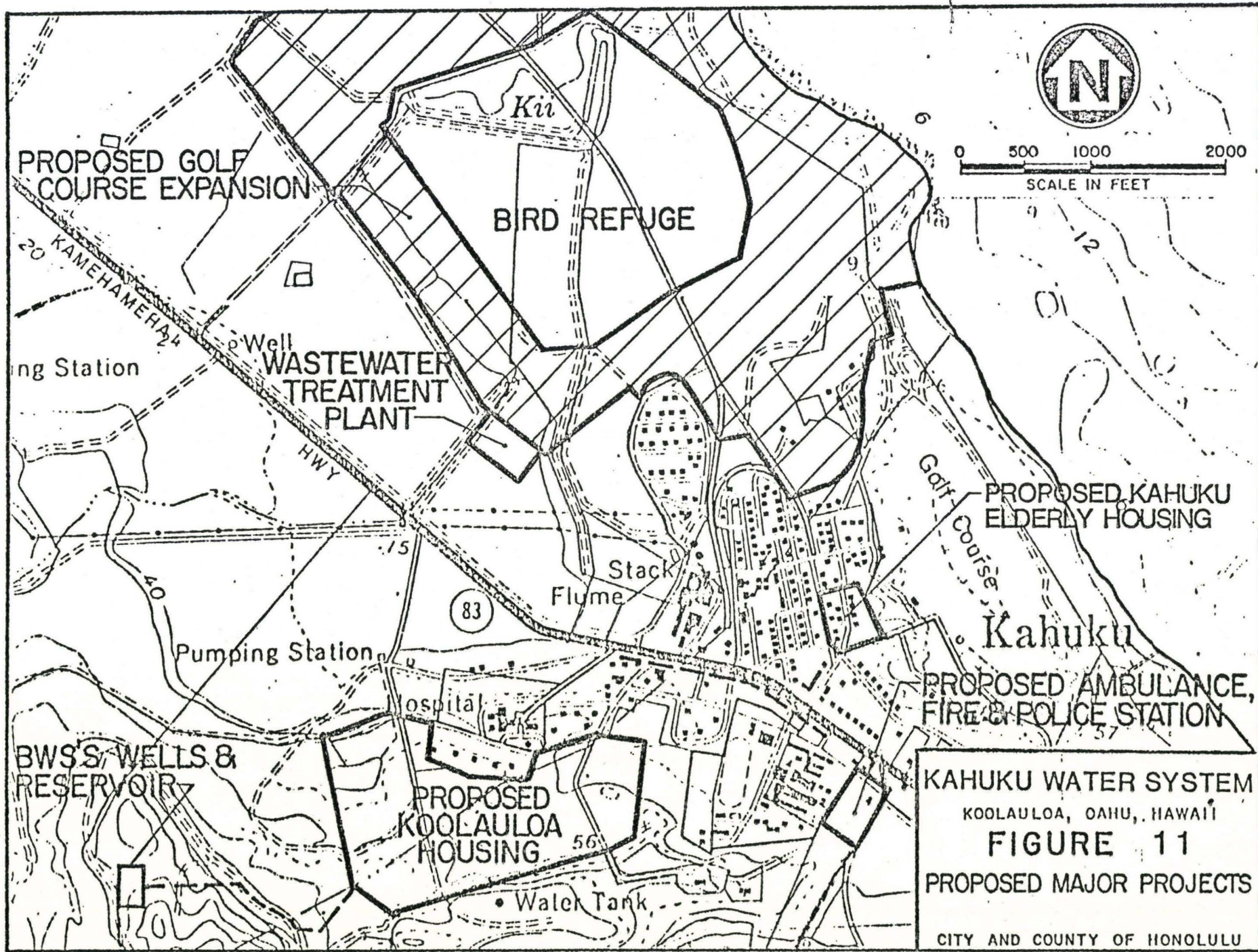
B. IMMEDIATE PROJECT AREA

Topography and Drainage

The proposed well and reservoir site is situated on the saddle portion between two knolls. Slopes from the knolls are generally between 15 and 20 percent, but may be as much as 40 percent in some areas. The surrounding lower land areas are fairly level with slopes between 6 and 8 percent.

The drainage pattern in the project area has been shaped by past agricultural activities. Presently, storm runoff from the project area flows overland into an existing swale which is part of a system of swales and ditches that were used in the past.

II-15



Historic and Archeological Sites

The Historic Sites Division of the Department of Land and Natural Resources shows no record of any historic sites within the project area. Inasmuch as most of the project area was under extensive sugarcane cultivation prior to 1971, it is very doubtful that any historical or archeological artifacts exist within the project boundary today. However, if during construction any artifacts are uncovered, the Historic Sites Division will be notified.

Soils

The on-site soils are classified by the U.S. Soil Conservation Service as being Paumalu-Badland Complex, Pz, - 10 to 70 per cent slopes, rapid runoff, and severe erosion; and Lahaina silty clay, LaB, 3 to 7 per cent slopes, well drained, moderate permeability, slow runoff and slight erosion hazard.

Flora and Fauna

A plant life survey was conducted within the project site by a registered landscape architect and the following flora was identified:

<u>Common Name</u>	<u>Scientific Name</u>
Guava	Psidium Guajava
Christmas Berry	Schinus Terebinthifolius
Swollen Finger Grass	Chloris Inflata
Koa Haole	Leucaena Leucocephala
Scarlet-Fruited Passion Flower	Passiflora Foetida
Creeping Rose or 'Ulei	Osteomeles Anthyllidifolia
Sugarcane	Saccharum officinarum

Animal life found in the area (Koolauloa Housing Project and Sewer Treatment Plant, November 30, 1977) are:

<u>Common Name</u>	<u>Scientific Name</u>
Mongoose	<i>Herpestes auropunctatus</i>
Rats	<i>Rattus exulans</i>
House Mice	<i>Mus musculus</i>
Feral Cats	<i>Felis catus</i>
Pigs	<i>Sus scrofa</i>
Golden Plovers	<i>Plurialis dominica fulva</i>
Cardinals	<i>Cardinalis cardinalis</i>
Barred Doves	<i>Geopelia striata striata</i>
Spotted Doves	<i>Streptopelia chinensis</i> <i>chinensis</i>
Mynahs	<i>Acridotheres tristis</i>
Ricebirds	<i>Lonchura punctulata</i>
House Sparrow	<i>Passer domesticus</i>
White Eyes (Mejiros)	<i>Zosterops japonica japonica</i>

No rare or endangered species have been reported in the project area. However, about 6,000 feet seaward of the project site, the Kii Pond bird refuge has attracted the Hawaiian Stilt, Coot and Gallinule, all of which are considered endangered species.

Existing Facilities

The existing water system, which serves the Kahuku area, was formerly owned and operated by the Kahuku Plantation Company until the plantation ceased operations in 1971. Subsequently, former employees of the plantation formed the Kahuku Housing Cooperative to maintain water service to the Kahuku area.

The source of supply consists of two artesian wells within a battery of wells known as Wells 353A-C, located at the Kahuku Plantation Plant One building. The wells and pumps are near the landward edge of the coastal plain in a below-ground pit which makes the source potentially susceptible to contamination from flooding.

Pump 14 was installed in 1926 and was rated at 600 gallons per minute (gpm). Pump 14 is presently not in use and is kept as a standby. Pump 11 was installed in 1937 and was rated at 1,250 gpm. Pump 11 presently supplies the total pumping requirements of Kahuku Housing Cooperative.

The existing well casings are about 50 years old and may be near the end of their life. Size of the well casings are 8 inches for one well and 12 inches for the remainder. These well casings probably do not have sanitary seals since most of the well casings were installed prior to this common sanitary practice.

Water is stored in a 250,000-gallon capacity reinforced concrete reservoir located on a knoll, 1,800 feet from the Wells. The main supply lines from the reservoir are in private roads and the service lines wander through private property "every which way". Most of the pipelines were installed during the turn of the century and no accurate records of their locations have been kept. Also, the plantation housing system is so thoroughly integrated with the sugar mills system that a clear separation between the two systems does not exist.

Land Use and Ownership

The reservoir and well site is zoned agricultural and portions of the transmission main are on lands zoned residential or within the state highway right-of-way. The existing land uses include diversified farming and residential habitation with some vacant areas.

Except for the portion of transmission main within the State highway right-of-way, the reservoir and well site and access road are situated on land presently owned by the James Campbell Trust Estate. The reservoir and well site will be conveyed to the Board of Water Supply in fee by the Campbell Estate, together with the necessary easements for access, water pipeline, drainage and utilities.

III. RELATIONSHIP OF PROPOSED ACTION
TO LAND USE PLANS, POLICIES
AND CONTROLS
FOR THE AFFECTED AREA

The proposed Kahuku Water Development project does not conflict with any approved or proposed, State or County land use plans, policies and controls.

The proposed water facility is an allowable landuse in the AG-1 Restricted Agricultural District of the Kahuku Zoning Map, Figure 5, and the Military District of the Detailed Land Use Map (DLUM), Figure 6. The proposed facility is also an allowable land use in the Agriculture District of the State Land Use Designations, Figure 7; however, a Special Use permit must be obtained.

Preliminary studies on the City's "Development Plans" of the Kahuku area will begin in the second half of 1978. The new water facility will be incorporated into the plan at that time.

IV. PROBABLE IMPACT OF THE PROPOSED ACTION ON THE ENVIRONMENT

A. SHORT TERM (CONSTRUCTION)

During construction, some dust, noise and traffic will be generated.

Dust

Dust will be created during the construction period, primarily from activities such as clearing, grading, excavation and backfilling. This could cause minor disturbances to residents in the proximity of the site. Such an impact would be temporary, and no long-term air quality impairment should occur.

The contractor will be required to conform to dust control measures incorporated into the contract documents to minimize dust.

Noise

Construction noise will be limited to normal construction hours. Reservoir site construction noise is not expected to interfere with classroom activities at Kahuku High and Elementary School or Kahuku Hospital, approximately 0.9 miles and 0.5 miles, respectively, from the reservoir site where the heavy construction work will occur. The closest points of the transmission main installation are approximately 300 feet from the hospital and 200 feet from the school. However, since the noise of the transmission main installation is transitory in nature, the impact of the noise is not expected to be significant.

Traffic

An increase in traffic due to workmen and material deliveries can be expected, however, the rise will be temporary.

Traffic on Kamehameha Highway will be affected by installation of the transmission main. The contractor shall comply with State and Federal regulations concerning public safety and governing construction along streets and highways.

Drainage

Testing of the pumps will generate about 700 gallons of water which will be discharged toward an existing ditch adjacent to the site. Since the water is potable and the quantity is small, no adverse effects are expected from this temporary discharge.

Site drainage will be by overland flow toward an existing ditch near the well site.

B. LONG TERM

Land Transformation

The reservoir will be constructed to blend with the surroundings. Landscaping will be implemented. Due to topography and the distance from future improvements, the reservoir will have limited visibility from Kamehameha Highway.

Grading and Excess Material Disposal

Grading and the excess material disposal site shall conform to the City and County of Honolulu Grading Ordinance.

Noise

The pump motors will generate some noise. However, since the closest homes will be about 1,400 feet away, the noise impact to existing homes should be negligible.

The sound pressure level (SPL), three feet from the pump motor is approximately 71 dbA (Westinghouse MAC Motor Manual). From the pump motors to the property line, a minimum reduction of 17 decibels can be expected without utilizing motor mutes, lowering the SPL at the property line below the allowable maximum noise levels in agricultural districts. However, motor mutes will be installed, if it is found that normal attenuation is not sufficient after operation has begun.

Drainage

Pump operations will generate small quantities of water. During start up, pumps will discharge 700 gallons per minute for approximately one (1) minute into the existing drainage ditch at the rear of the site.

High water level alarms will be provided for the reservoir. When the water level in the reservoir reaches a predetermined level, an alarm will be triggered in the Beretania Pumping Station. Pumping units can be shut down by remote control from the Beretania Station. Overflow water will flow through the overflow line into the ditch at the rear of the site. However, this would only occur when the "normal level" controls malfunction.

Draining the reservoir will be through the effluent line. A blow off line, connected to an underground drainage system, will be provided in the proposed subdivision. This function is a rare manual operation performed under BWS control and is only necessary when contamination has occurred or a washdown is required.

The water from these operations is potable and no adverse affects on the environment is expected. Discharge velocities will be less than City and County Drainage Standards for unlined channels. The vicinity of the outlet will be rip-rapped to protect the area from erosion.

Traffic

Permanent on-site maintenance personnel are not required to monitor or maintain the pumps or reservoir.

Periodic maintenance will be required but no significant increase in traffic can be attributed to the installation.

Ground Water Quality

There should be minimal impact to the ground water quality since the new source is replacing the existing domestic wells, and subsequently the pumpage will remain about the same. However, the private wells used for irrigation in the surrounding area could affect groundwater quality through excessive pumpage. The Board of Water Supply would control the operation of these private wells under Chapter III of their Rules and Regulations.

Sewerage

Wastewater generated at the reservoir and well site will be collected in a concrete sewage vault and removed on an as needed basis. Since the site will not be permanently manned, wastewater quantities will be small (about 30 gallons per week).

Impact on BWS System

Planned improvements, for this project, are compatible with Board of Water Supply planning objectives. The Kahuku Water System can be integrated at a later date with the existing BWS water system network, thereby improving water service reliability.

Social and Economic Impact

The degree to which the project will affect the growth rate and lifestyle of the area is reflected in the City's Koolauloa Housing Development.

Secondary Impacts

As previously mentioned, the water project will supply the water needs of the proposed Koolauloa Housing project. The impacts of this housing project have been evaluated in the "Environmental Impact Statement for the Koolauloa Housing Project and Sewer Treatment Plant, Kahuku, Oahu." The reader is hereby referred to this document for impacts relating to the housing project.

V. PROBABLE ADVERSE ENVIRONMENTAL EFFECTS
WHICH CANNOT BE AVOIDED

In the short-term, the primary adverse impacts that will result from the proposed project are those associated with the construction activities. Temporary air pollution from dust, possible erosion hazard, noise pollution from construction equipment, and traffic congestion from water pipe placement will no doubt result.

In the long-term, potential primary adverse impacts are those associated with the operation of the facility, including 1) increased energy requirements for pumping, and 2) noise from mechanical devices which are typical of most deepwell pumping facilities.

VI. ALTERNATIVES TO THE PROPOSED PROJECT

A. NO ACTION

A no action alternative was considered, but discarded as a viable alternative since this action would not fulfill the need for this project.

B. UTILIZE EXISTING WELLS AND CONSTRUCT NEW TRANSMISSION MAIN

The alternative to the proposed wells are to utilize the existing wells. These wells, as previously mentioned, are located at the landward edge of the coastal plain. Location of the pumps in a below ground pit makes the source potentially susceptible to contamination by flooding. Furthermore, the cesspools of some homes located in areas infiltrating water to the basal groundwater body may be sources of contaminants although no known incidences have occurred thus far.

Drilled 37 to 50 years ago, the older well casings may be near the end of their life. Size of the casings are 8 inches for one well and 12 inches for the remainder. Further reduction of casing diameters would restrict the quantity of water available to pumps to less than 0.3 mgd for the smaller casing and to about 0.5 mgd for the larger casing. Thus, use of these old wells may not meet the combined requirements of the new homes, the present homes, and large scale irrigation of diversified crops.

Other wells west of Well 353 are presently in use for irrigation and for supply of domestic water to military installations. However, almost all wells in the Kahuku area are 40 years old when practices for sanitary seals on casings were probably not observed. Their age, plus questionable construction argues against incorporation into a modern system.

The proposed wells would be located away from present housing and would be better protected by modern construction from entry of contaminants through old leaky casings or along the annulus, or by flooding of the pump room.

VII. RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES
AND LONG-TERM PRODUCTIVITY

The proposed Kahuku Water Development project will result in the long-term loss of 3.2 acres of land, in favor of improved, and also long-term, health protection and community development for Kahuku Town. From a practical standpoint, the proposed action may foreclose future options for use of the land which is presently vacant, however, only at the expense of reducing long-term risks to public health and building the foundation for revitalizing the Kahuku community.

VIII. MITIGATIVE MEASURES

Short-term impacts associated with construction activity are expected. The surrounding area will be subjected to some dust, erosion, noise and traffic generated by construction.

Dust will be generated during excavation and embankment construction. Water, as needed, will be sprayed to abate the dust, and exposed areas will be grassed as soon as practicable.

The proposed project site will be subjected to erosion hazard during construction. To minimize the potential adverse impact on water quality, the contractor shall be required to adhere to the Soil Erosion Standards and Guidelines of the City and County of Honolulu. In addition, soil retention should be improved since the project site will be landscaped.

Noise from construction equipment will be audible during construction. The usual noise control procedures of construction, such as limiting operations to normal working hours will be utilized.

Existing roadways will remain open to local traffic during construction. Traffic control devices to safeguard public traffic will be provided and used in conformity with the "Rules and Regulations Governing the use of Traffic Control Devices on or Adjacent to Public Streets and Highways" adopted by the State Highway Safety Coordinator.

Air pollution from motor exhausts of construction equipment is not expected to materially affect air quality. For a project of this nature, the number of equipment operating at any one time is small.

Long-term impacts associated with the normal operation of the water facility are expected. Pumps, motors and other equipment will generate noise, but provisions will be included in the design to reduce the noise levels to the limits specified in Chapter 44B of the State Public Health Regulations.

IX. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS
OF RESOURCES

The proposed Kahuku Water Development Project will irreversibly commit land, labor, material and energy resources required for its design, construction and operation.

Approximately 3.2 acres of agricultural land will be lost to the water facility site.

Labor involved in the construction and operation of this system will be essentially irreversible and irretrievable. Materials such as concrete, cast iron, reinforcing steel, etc. required for construction, will be for all practical purposes irreversibly and irretrievably committed.

Also committed would be the energy resource needed for the operation of the pump and appurtenances, estimated at 34,000 kilo watt hours per month.

X. AGENCIES AND ORGANIZATIONS CONSULTED

City and County of Honolulu

Department of Housing and Community Development

Department of Public Works

Division of Refuse Collection and Disposal

State of Hawaii

Department of Planning and Economic Development

Department of Health

Department of Land and Natural Resources

Federal

Farmers Home Administration, Department of Agriculture

U. S. Fish and Wildlife Service, Department of Interior

Private Organizations

Kahuku Housing Corporation

Kahuku Community Association

/ Campbell Estate

XI. LIST OF NECESSARY APPROVALS

Permits will be required from the following agencies:

1. A permit for grading, excavation and fills will be required pursuant to Ordinance No. 3968 (1972) and 4538 (1975), Chapter 23, Revised Ordinance of Honolulu, 1969 as amended. The contractor will obtain said permit from the Department of Public Works.
2. A Conditional Use Permit for Construction Activities under Chapter 44B, Community Noise Control for Oahu, of the Public Health Regulations may be required. The contractor should obtain said permit from the Department of Health.
3. A Special Use Permit will be required pursuant to the State Land Use District Regulations of the State Land Use Commission.
4. A Construction Permit will be required from the Land Transportation Facilities Division of the State Department of Transportation.

BIBLIOGRAPHY

1. City and County of Honolulu, "General Plan, Statement of Objectives and Policies", Resolution No. 238, January 18, 1977.
2. Department of General Planning, "Detailed Land Use Map of the Oahu General Plan", City and County of Honolulu, 1964.
3. Department of Land and Natural Resources, Division of Water and Land Development, "Kahuku Flood Hazard Area, Kahuku, Oahu, Hawaii", prepared in cooperation with the Department of the Army, Honolulu District, Corps of Engineers, June 1971.
4. Department of Planning and Economic Development, Hawaii Urban Planning Information Center, "Community Profiles for Hawaii", State of Hawaii, February 1973.
5. Department of Planning and Economic Development, Land Use Commission, "Land Use District Boundaries", State of Hawaii, December 20, 1974.
6. Department of Public Works, "Koolauloa Housing Project and Sewer Treatment Plant, Kahuku, Oahu," City and County of Honolulu, November 30, 1977.
7. Honolulu Board of Water Supply, "Oahu Water Plan", City and County of Honolulu, July 31, 1975.
8. Real Estate Data, Inc., "Real Estate Atlas of the State of Hawaii, Geographical Ownership", Volume 2, Tenth Edition, 1977.
9. Sunn, Low, Tom & Hara, Inc., Engineering Sciences, Inc., and Dillingham Corporation, "Water Quality Program for Oahu with Special Emphasis on Waste Disposal", prepared for Department of Public Works, City and County of Honolulu, February 1972.

10. Takasaki, K. J. and Santos Valenciano, "Water in the Kahuku Area, Oahu, Hawaii", U.S.G.S. Water Supply Paper 1874, 1969.
11. U. S. Department of Agriculture, "Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii", Soil Conservation Service in conjunction with the University of Hawaii Agricultural Experiment Station, August 1972.
12. U. S. Geological Survey, "Chemical Quality of Groundwater in Hawaii", prepared in cooperation with the Department of Land and Natural Resources, State of Hawaii, May 1973.
13. Wilson, Okamoto & Associates, Inc., "Environmental Impact Statement, Kahuku Ambulance, Fire, and Police Station, Kahuku, Oahu", prepared for Building Department, City and County of Honolulu, February 1977.

A P P E N D I X

COMMENTS AND REPLIES TO THE EIS

UNITED STATES DEPARTMENT OF AGRICULTURE
Soil Conservation Service
P. O. Box 50004, Honolulu, HI 96850

RECEIVED
PERSONNEL OFFICE

JUL 6 1 29 PM '73
July 5, 1978

July 17, 1978

Mr. Richard L. O'Connell *RO*
Director, Office of Environmental
Quality Control
550 Halekaunila St., Room 301
Honolulu, HI 96813

Dear Mr. O'Connell:

Subject: Kahuku Water Development, Kahuku, Oahu

We reviewed the subject environmental impact statement and have no comments to offer.

Thank you for the opportunity to review this document.

Sincerely,

Jack P. Kanalz
State Conservationist

cc: Board of Water Supply
City & County of Honolulu
630 South Beretania Street
Honolulu, HI 96813

Mr. Jack P. Kanalz
State Conservationist
Soil Conservation Service
U.S. Department of Agriculture
P.O. Box 50004
Honolulu, Hawaii 96850

Dear Mr. Kanalz:

Your letter of July 5, 1978 relating to the
Environmental Impact Statement for Kahuku
Water Development, Kahuku, Oahu, Hawaii

Thank you for your response regarding the subject
Environmental Impact Statement. Your letter will be
appended to the final EIS.

Very truly yours,

E. Y. Hirata

FOR EDWARD Y. HIRATA
Manager and Chief Engineer

cc: Office of Environmental Quality Control

RECEIVED
BO OF WATER SUPPLY

JUN 27 2 11 PM '78

Phone: 808-546-7510

16475

JUN 22 1978

July 17, 1978

State of Hawaii
Office of Environmental Quality Control
550 Halekuanila Street
Room 301
Honolulu, Hawaii 96813

Dear Sir:

This office has completed a review of the Kahuku Water Development Environmental Impact Statement.

It has been determined that the project does not affect any Coast Guard mission areas directly and as such the Coast Guard has no comment on the proposed project and Environmental Impact Statement.

Thank you for the opportunity to comment.

Sincerely,

J. V. CAFFREY
Captain, U. S. Coast Guard
Chief of Staff
Fourteenth Coast Guard District

Copy to:
Commandant (C-WEP)
EPA Washington
C&C Honolulu, Board of Water Supply

J. V. Caffrey
Captain, U.S. Coast Guard
Commander, 14th Coast Guard District
Prince Kalamansole Federal Building
300 Ala Moana Blvd., Ninth Floor
Honolulu, Hawaii 96850

Dear Captain Caffrey:

Your Letter of June 22, 1978 Relating to the
Environmental Impact Statement for Kahuku
Water Development, Kahuku, Oahu, Hawaii

Thank you for your response regarding the subject
Environmental Impact Statement. Your letter will be
appended to the final EIS.

Very truly yours,

E. J. Ratt

for EDWARD Y. HIRATA
Manager and Chief Engineer

cc: Office of Environmental Quality Control

RECEIVED
DD OF WATER SUPPLY
DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 15TH AIR BASE WING (PACAF)
HICKAM AIR FORCE BASE, HAWAII 96853

5 JUL 1973



ATTN: DEEC (Mr. Nakashima, 449-1831) *[Signature]*

SUBJECT: Environmental Impact Statement (EIS) for Kahuku Water Development Project, Kahuku, Koolauloa, Oahu, Hawaii

TO: Office of Environmental Quality Control
550 Halekiauila Street Room 301
Honolulu, Hawaii 96813.

1. This office has reviewed the subject EIS and has no comment to render relative to the proposed project.

2. We greatly appreciate your cooperative efforts in keeping the Air Force apprised of your project and thank you for the opportunity to review the document.

[Signature]
ROBERT Q. K. CHING
Chief, Engineering, Construction
and Environmental Planning Div
Directorate of Civil Engineering

1 Atch
EIS

Cy to: Board of Water Supply w/o Atch
City and County of Honolulu
630 South Street
Honolulu, Hawaii 96813

Cy to: Board of Water Supply

July 17, 1973

Mr. Robert Q. K. Ching
Chief, Engineering, Construction
and Environmental Planning Division
Directorate of Civil Engineering
Department of the Air Force
Headquarters 15th Air Base Wing (PACAF)
Hickam Air Force Base
Honolulu, Hawaii 96853

Dear Mr. Ching:

Your Letter of June 5, 1973 Relating to the
Environmental Impact Statement for Kahuku
Water Development, Kahuku, Oahu, Hawaii.

Thank you for your response regarding the subject
Environmental Impact Statement. Your letter will be
appended to the final EIS.

Very truly yours,

[Signature]

FOR EDWARD Y. HIRATA
Manager and Chief Engineer

cc: Office of Environmental Quality Control



DEPARTMENT OF THE ARMY
PACIFIC OCEAN DIVISION, CORPS OF ENGINEERS
BUILDING 230 WATER SUPPLY
FT. SHAFTER, HAWAII 96858

JUL 12 1 11 PM '78

PODED-IV

11 July 1978

Mr. Edward Y. Hirata
Manager and Chief Engineer
Board of Water Supply
City and County of Hawaii
630 South Beretania
Honolulu, Hawaii 96813

Dear Mr. Hirata:

We have reviewed the Environmental Impact Statement (EIS) for Kahuku Water Development, Kahuku, Koolauloa, Oahu, Hawaii, which was forwarded to us on 5 June 1978 by the Environmental Quality Commission, Office of Environmental Quality Control.

The project does not affect any U.S. Army Corps of Engineers projects. However, we are concerned with the withdrawal of water affecting the wetland areas of Kii Wildlife Refuge, and the EIS should evaluate possible impacts on wetlands and endangered species. We suspect that the proposed water withdrawal rates could be lower than withdrawal rates during the operation of Kahuku Sugar Mill. We suggest that a comparison of withdrawal rates be made in the final environmental statement as a method of addressing the affect of the project on groundwater resources and the Kii Wildlife Refuge.

We also suggest direct consultation with the State Historic Preservation Officer to determine if an archaeological reconnaissance survey should be conducted in areas to be directly affected by the project.

According to the existing Flood Insurance Rate Map (Incl 1) and Flood Boundary and Floodway Map, the western portion of the proposed 12-inch transmission line along Kamehameha Highway lies within the 100-year flood hazard area, contrary to the information provided in the environmental statement.

PODED-PV
Mr. Edward Y. Hirata

10 July 1978

We thank you for the opportunity of participating in the environmental impact statement review process.

Sincerely yours,

1 Incl
As stated

KISUK CHEUNG
Chief, Engineering Division

Copy Furnished:
Office of Environmental
Quality Control
550 Halekauwila Street, Rm 301
Honolulu, Hawaii 96813

July 25, 1978

Mr. Kisuk Cheung
Chief, Engineering Division
Pacific Ocean Division, Corps of Engineers
Department of the Army
Building 230
Fort Shafter, Hawaii 96858

Dear Mr. Cheung:

Your Letter of July 11, 1978 Relating to the
Environmental Impact Statement for Kahuku
Water Development, Kahuku, Oahu, Hawaii

This is in response to your comments on the Environmental Impact Statement. The proposed project is not anticipated to have any significant adverse effects on the wetland areas of Kii Wildlife Refuge. Comments received from the Fish and Wildlife Service of the U.S. Dept. of Interior on the Environmental Impact Statement also state that the project will have minimal effects on fish and wildlife resources.

Our estimates of the proposed water withdrawal is 7 million gallons per day (mgd). Kahuku Sugar Mill pumped in excess of 20 mgd at times (see page II-8 of EIS). Therefore we do not anticipate any adverse effect on the wetlands.

The State Historic Preservation Officer has assured us that the project will have no effect upon any known historical or archeological site on or likely to be eligible for inclusion on the Hawaii and/or National Registers of Historic Places.

Your corrections to our Flood Prone Area Map will be incorporated into the final Environmental Impact Statement. The portion of the proposed 12-inch transmission main which lies within the 100-year flood hazard area will not be adversely affected by this condition.

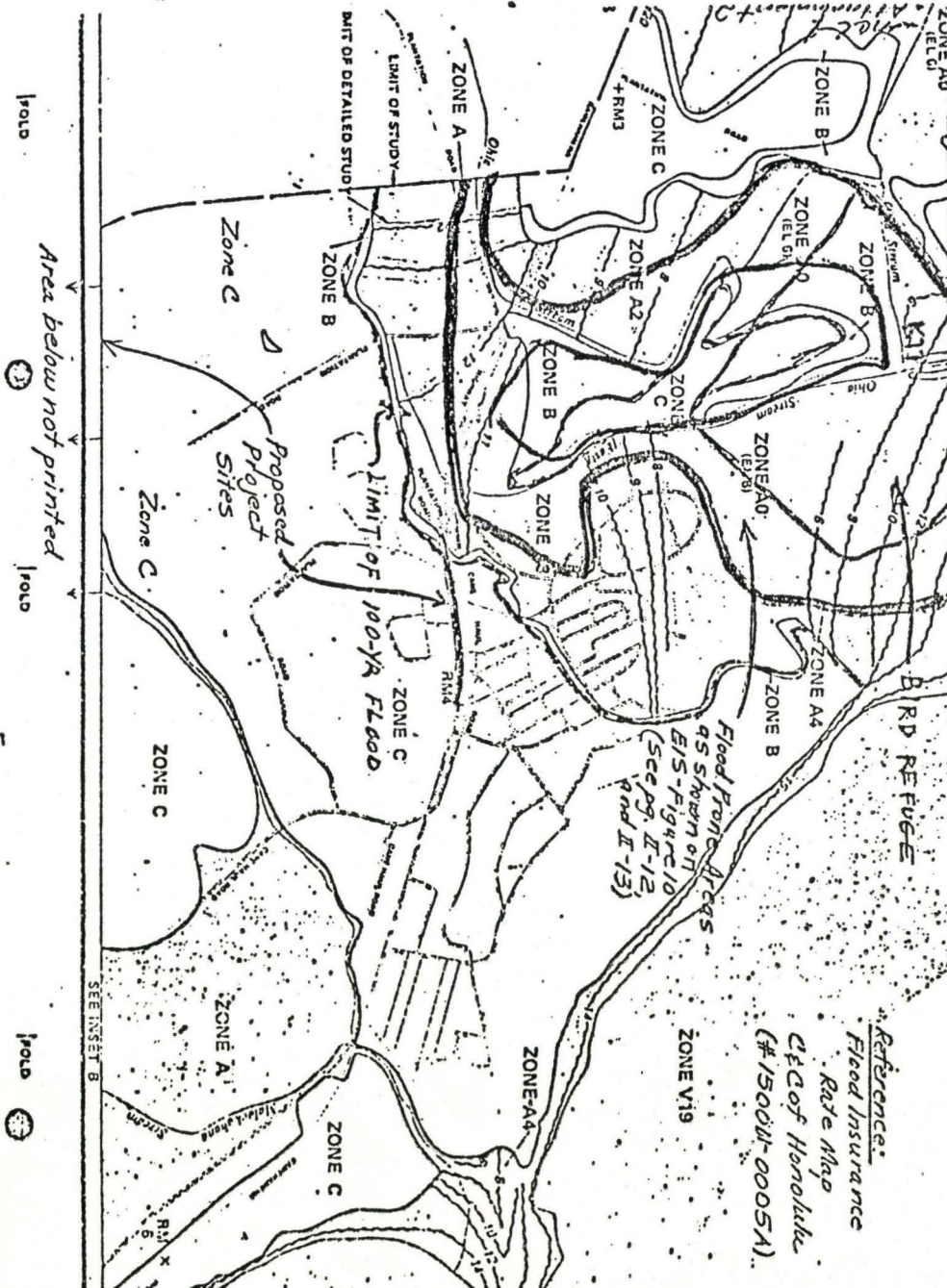
If there are any further questions on this matter, please call Lawrence Whang at 548-5221.

Very truly yours,

E. Rathbun

cc: Office of
Environmental
Quality Control

Mr. EDWARD Y. HIRATA
Manager and Chief Engineer





C. Whaley
United States Department of the Interior
RECEIVED
DD OF WATER SUPPLY
JUL 15 1978

FISH AND WILDLIFE SERVICE
300 ALA MOANA BOULEVARD
P.O. BOX 50167
HONOLULU, HAWAII 96850
Division of Ecological Services
Room 5302

ES

June 29, 1978

June 13, 1978

Office of Environmental Quality Control
550 Halekauwila Street, Room 301
Honolulu, Hawaii 96813

Re: EIS for Kahuku Water
Development, Kahuku
Oahu

Dear Sir:

We have reviewed the referenced EIS and find that it will have minimal effects on fish and wildlife resources. Therefore, we have no further comment to make on the project. We would appreciate the opportunity to re-evaluate this project if future changes occur in its design or method of operation.

We appreciate the opportunity to comment on this EIS.

Sincerely yours,

Maurice H. Taylor
Maurice H. Taylor
Field Supervisor

cc: HA
Board of Water Supply
HDF&G
NMFS

Mr. Maurice H. Taylor, Field Supervisor
Division of Ecological Service, Room 5302
Fish and Wildlife Service
United States Department of the Interior
P.O. Box 50167
Honolulu, Hawaii 96850

Dear Mr. Taylor:

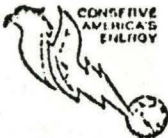
Your Letter of June 13, 1978 Relating to the
Environmental Impact Statement for Kahuku
Water Development, Kahuku, Oahu, Hawaii

Thank you for your comments regarding the subject EIS. We will inform you if there are any future changes in the design or method of operation in order to give you an opportunity to re-evaluate the project.

Very truly yours,

E. Y. Hirata
FOR EDWARD Y. HIRATA
Manager and Chief Engineer

cc: Office of Environmental Quality Control



Save Energy and You Serve America!

HEADQUARTERS
FOURTEENTH NAVAL DISTRICT
BOX 110
PEARL HARBOR, HAWAII 96860

RECEIVED
DD OF WATER SUPPLY
JUN 11 3 11 PM '78
002A:EMD:mf
Ser 1191
12 JUN 1978

June 29, 1978

Environmental Quality Commission
Office of the Governor
State of Hawaii
550 Halekauwila Street, Room 301
Honolulu, Hawaii 96813

Gentlemen:

Kahuku Water Development
Environmental Impact Statement

The Environmental Impact Statement for the Kahuku Water
Development in Kahuku, Oahu forwarded by your letter of
5 June 1978 has been reviewed, and the Navy has no comments.
As requested, the subject EIS is returned.
Thank you for the opportunity to review the EIS.

Sincerely,

L. H. RUFF
CAPTAIN, CEC, USN
DISTRICT CIVIL ENGINEER
BY DIRECTION OF THE COMMANDANT

Encl

Copy to: (w/o encl)
OEQC
Board of Water Supply

L. H. Ruff
Captain, CEC, USN
District Civil Engineer
Headquarters Fourteenth Naval District
P.O. Box 110
Pearl Harbor, Hawaii 96860

Dear Captain Ruff:

Your Letter of June 12, 1978 Relating to the
Environmental Impact Statement for Kahuku
Water Development, Kahuku, Oahu, Hawaii

Thank you for your response regarding the subject
Environmental Impact Statement.

Very truly yours,

E. Y. Hirata

FOR EDWARD Y. HIRATA
Manager and Chief Engineer

cc: Office of Environmental Quality Control



University of Hawaii at Manoa

Environmental Center
Crawford 317 • 2550 Campus Road
Honolulu, Hawaii 96822
Telephone (808) 918-7361

Office of the Director

July 10, 1978

RE:0253

Mr. Richard L. O'Connell
Office of Environmental Quality Control
550 Halekauwila Street
Honolulu, Hawaii 96813

Dear Mr. O'Connell:

Draft Environmental Impact Statement for the Kahuku Water Development Kahuku, Oahu

The Environmental Center has reviewed the above cited EIS with the assistance of Donald Bell, Finance Department; Larry Olson, Archaeology Department; Paul Ekern and Stephen Lau, Water Resources Research Center; Margaret Kimmerer and Barbara Vogt, Pacific Urban Studies Planning Program; and Jacquelin Miller and Doak Cox, Environmental Center.

The brief EIS filed by the Board of Water Supply for a water development project in Kahuku covers most of the significant impacts of the proposed project. There are several areas, however, in which our reviewers would like more clarification.

Soils (p. 11-2)

The statement "all soils are similar with respect to runoff...permeability" is misleading. Jaumea sand and Pearl Harbor clay do not display the same permeability characteristics, for example.

Geohydrology and Water Quality (pp. 11-2 to 11-12)

Since the artificial recharge from irrigation water is estimated to be 5 mgd, is there any information available on nitrate levels in the water supply?

The greatest environmental concerns associated with a groundwater development of the kind proposed apply to the relation between the average total draft from the aquifer and the sustainable yield of the aquifer. According to the EIS (p. 11-8) there was a net overdraft of 5 mgd from the basal groundwater aquifer at Kahuku during the period when the Kahuku Sugar Company was in operation. This overdraft appears to have been calculated as the difference between the average total draft (22 mgd) and the sum of the average natural recharge (12 mgd) and the average artificial recharge (return irrigation = 5 mgd). The present average draft is estimated as 7 mgd (p. 11-12). The EIS indicates that the

Richard L. O'Connell

- 2 -

July 10, 1978

maximum draft of the new wells will be 1 mgd (p. 1-7), but does not indicate what the average draft will be, either from the new wells alone or in total from the aquifer.

We understand that the new wells are intended simply to replace present wells which are unsatisfactory. If so, the draft from the new wells will not be entirely an addition to the total draft, but this is not clear from the EIS. We note that the proposed new well development is a component of the City's Koolaulon Housing project (p. 1-7). From the EIS on that project (November 1977) we note that the average water demand of the housing project will be only about 0.1 mgd. The EIS should state the actual increase in average draft that will result from the proposed water development.

The EIS does not indicate whether there is still significant artificial recharge to the aquifer, or if so how large it is on the average. It appears to recognize (p. 11-12) that the average total future draft should not exceed the sustainable yield and that the sustainable yield is less than the average recharge. (What it actually states is that "Future water development...should not exceed the recoverable portion of the 12 mgd recharge in the area.") It also appears to recognize that the sustainable yield will depend upon the pattern of development in its statement that "water development should not be concentrated geographically, rather it should be spread out over a greater area." It does not appear to recognize the relationship between permissible excesses of total draft over recharge and the storage in the aquifer. Most importantly it fails to present any estimate of the sustainable yield of the aquifer or of the range of uncertainty in such an estimate.

The failure to relate the total draft from the aquifer after the proposed BWS development (and the total draft after other developments anticipated (p. 11-12)) to the sustainable yield is a deficiency in the EIS, although from our understanding of the magnitude of the quantities involved there is no significant danger of overdraft resulting from the proposed development.

Archaeology (p. 11-16)

Although the Historic Sites Division of the Department of Land and Natural Resources does not show any record of historic sites within the project area, it is still possible for sites to exist which have not been previously recorded. The earliest site in all of the Hawaiian Islands is located on the windward side of Oahu. Site and road excavations may possibly expose prehistoric or early historic occupation or cultural levels which would not normally be identified by construction personnel, such as midden deposits, buried agricultural terraces, and pavements, to name a few. For this reason we recommend that an archaeological survey be conducted prior to construction or that a qualified archaeologist be present for monitoring during the initial land cutting phases of construction.

Social and Economic Impacts (p. 11-4)

Based on the figure given in the DEIS, the proposed water development would apparently serve a population of approximately seven times the expected population of 1,370. A brief summary of the potential social and economic impacts, both primary and secondary, previously cited in the Koolaulon Housing EIS should be included in the

Richard L. O'Connell

- 3 -

July 10, 1978

final EIS of this project. What is the relationship, for example, between this project and the future resort-condominium developments of the Kuilima and Malaekahana Valley areas?

Yours truly,

Doak C. Cox
Doak C. Cox
Director

DCC/ek

cc: ✓ Board of Water Supply
Donald Bell
Larry Olson
Paul Ekern
Stephen Lau
Margaret Kimminger
Barbara Vogt
Jacquelin Miller

August 11, 1978

Mr. Doak C. Cox
Director
Environmental Center
University of Hawaii at Manoa
2550 Campus Road
Honolulu, Hawaii 96922

Dear Mr. Cox:

Your letter of July 10, 1978 relating to the Environmental Impact Statement for the Kahuku Water Development, Kahuku, Oahu.

In response to your comments on the EIS, we have the following:

Soils

We agree that the statement "all soils are similar with respect to runoff...permeability" is misleading and we shall delete it from the EIS.

Geohydrology and Water Quality

Table 2, pages II-11, has a listing of nitrate and other water quality data for wells in the Kahuku area.

The average total draft should remain essentially the same, provided that the other users in the area do not increase their use. As reported in the EIS, the average expected demand from the Koolauloa Housing Project is 0.1 mgd. The demand for the proposed Kahuku Elderly Housing project is estimated at 0.03 mgd. Even if these amounts represent additional draft, the total draft would be about 7.2. The primary purpose of the proposed water development project is to transfer the source of domestic water to a more dependable and safe one. The growth stimulating effects from the two future federally funded housing projects are considered secondary impacts to the project.

Future Opans Wells is expected to have two wells each at 1.25 mgd. This figure added to the present draft will

Mr. Donk C. Cox

2

August 11, 1978

be 0.25 mgd, which is less than the recharge figure of 12 mgd for that area.

Archaeology

The State Historic Preservation Officer has reviewed the EIS and the construction plans and has assured us that the proposed project will have no effect upon any known archaeological site on or likely to be eligible for inclusion on the Hawaii or National Registers of Historic Places. However, as a precaution, we will instruct our construction inspectors to observe for any unusual subterranean formations. If any materials of historic value are encountered during the course of construction, we will contact the State Department of Land and Natural Resources for appropriate action.

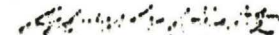
Social and Economic Impacts

Since this project is designed to operate with only one 700 gpm pump, it is not anticipated to promote any significant growth in the area beyond the proposed Koolauloa Housing and Kahuku Elderly Housing projects. Any new developments in the area will be required to provide their own water source.

There are no relationships between this project and the future Kailua and Malaekahana Valley developments. Kailua will obtain its water from our Waihee-Wailua system which includes the Opua Wells. Malaekahana Valley would have to develop its own source of supply.

If you have any further questions on this matter, please call Lawrence Wang at 540-5221.

Very truly yours,



EDWARD Y. HIRATA
Manager and Chief Engineer

cc: Environmental Quality Commission

GEORGE R. ARIOYOSH
GOVERNOR



STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
OFFICE OF THE GOVERNOR
350 HALEKUAHUA ST.
ROOM 301
HONOLULU, HAWAII 96813

July 13, 1978

Mr. Edward Hirata, Director
Board of Water Supply
City and County of Honolulu
630 South Beretania Street
Honolulu, HI 96813

Dear Mr. Hirata:

SUBJECT: ENVIRONMENTAL IMPACT STATEMENT FOR KAHUKU WATER
DEVELOPMENT, KAHUKU, KOOLAULOA, OAHU, HAWAII

We have reviewed the subject document and offer the following
comments for your consideration:

1. Page I-1

The EIS indicates that the proposed action is intended to insure adequate water resources for a 300-unit housing project by the City and County of Honolulu's Department of Housing and Community Development. We note that an EIS was prepared and accepted on this housing project. Since the water project is directly related to the housing project, we question why the water resources were not covered in the previous EIS since there should be only one EIS for the housing project which included the water project. According to section 1:12 c. of the EIS Regulations, it states,

A group of proposed actions shall be treated as a single action when: (1) the component actions phases or increments of a larger total undertaking; (2) an individual project is a necessary precedent for a larger project; (3) an individual project represents a commitment to a larger project; or (4) the actions in question are essentially the same and a single Statement will adequately address the impacts of any single action.

For future water projects of this type, a single comprehensive environmental impact statement should be considered. Reduced costs and time should result.

RECEIVED
DD OF WATER SUPPLY
JUL 17 1 10 PM '78
RICHARD L. O'CONNELL
DIRECTOR
TELEPHONE NO.
548-6915

Mr. Edward Hirata
Page 2
July 13, 1978

2. Page I-6

Since federal funding is involved with the proposed project, how will the National Environmental Policy Act of 1969 be met?

3. Page II-8

The EIS refers to some streams in the area. They should be identified. How will the pumping affect stream flows? If the volume of flow is reduced by the proposed action, there should be discussion as to the impact on agricultural production, water quality, aquatic life, etc.

4. There needs to be discussion of the amount of water that will be pumped and the maximum capacity of the system. What is the existing and future water demand? Why are two deepwells being drilled for 300 units? Besides Koolauloa housing project, who will use water from this project? Will some of the water be used to supply the Inaon Development and Prudential Insurance Company's Kuilima Resort Community? In order to fully analyze the EIS, a discussion is warranted.

5. Page III-1

This statement, "To the extent that the project will insure adequate water for a City housing project and provide an improved water system for the existing and future residences, the project can be said to conform with the approved land use plans for the area," needs elaboration. What does "approved land use plans" imply? How much future development will be project supply? What is the ultimate population that the proposed action will serve? Is this ultimate development consistent with land use plans?

6. Page VII-1

The topic short-term uses vs. long-term productivity should be expanded. Throughout the EIS, there is no consideration given to the growth stimulating character of the project. Does the project fulfill only the present water demand or does this project encourage growth for the "rural area"? What trade offs and benefits will result? What is the long-term effect?

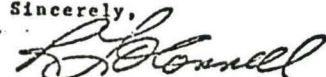
Mr. Edward Hirata
Page 3
July 13, 1978

7. Because there has been little information presented beyond water demand and its service population, we recommend that the EIS be revised to reflect additional data and information so as to permit a complete analysis.

The EIS Regulations state that responses to comment should be made within fourteen days after the end of the comment period. However, we will exercise the discretion provided by the regulations and will consider responses made after the prescribed fourteen day response period.

We thank you for the opportunity to review this document. We trust that these comments will be helpful to you in preparing the revised EIS.

Sincerely,



Richard L. O'Connell
Director

Attachment

August 9, 1978

Mr. Richard L. O'Connell, Director
Office of Environmental Quality Control
State of Hawaii
550 Halekauwila Street, Room 301
Honolulu, Hawaii 96813

Dear Mr. O'Connell:

Your Letter of July 13, 1978 Relating to
Environmental Impact Statement for Kahuku
Water Development, Kahuku, Koolauloa, Oahu

In answer to your comments on the environmental document
we offer the following:

Comment #1 (Page I-1):

The EIS indicates that the proposed action is intended to insure adequate water resources for a 300-unit housing project by the City and County of Honolulu's Department of Housing and Community Development. We note that an EIS was prepared and accepted on this housing project. Since the water project is directly related to the housing project, we question why the water resources were not covered in the previous EIS since there should be only one EIS for the housing project which included the water project. According to section 1:12 c. of the EIS Regulations, it states,

A group of proposed actions shall be treated as a single action when: (1) the component actions phases or increments of a larger total undertaking; (2) an individual project is a necessary precedent for a larger project; (3) an individual project represents a commitment to a larger project; or (4) the actions in question are essentially the same and a single Statement will adequately address the impacts of any single action.

For future water projects of this type, a single comprehensive environmental impact statement should be considered. Reduced costs and time should result.

Mr. Richard L. O'Connell

August 9, 1978
Page 2

Response #1:

The Koolauloa Housing Project is dependent upon our building the new Kahuku water system as the existing system is considered inadequate in meeting the proposed water requirement for the proposed housing development. In addition, the existing system does not meet Safe Drinking Water Standards. In regard to Section 1:12 c of the EIS Regulations, the actions are not essentially the same. The EIS for the housing project is for one specific development within the community while the water development is for both the housing project and existing development within Kahuku Town.

During the early 1970's the department was considering accepting the Kahuku water system. Studies made at that time indicated that the entire water system was in poor condition and would require considerable cost to upgrade the system before the department would accept it. At the request of the Kahuku Housing Corporation, the department applied for a loan with the Farmers Home Administration in 1975 to install a new domestic water source and storage facility that would meet our Water System Standards and the recently implemented Safe Drinking Water Act. The Kahuku Housing Corporation could not apply for the loan since only community development projects sponsored by a governmental agency can. In the meantime the City's Department of Housing and Community Development prepared an EIS on their proposed housing project. The EIS did not incorporate the water development project because the water project was not proposed solely for their development.

Comment #2 (Page I-6):

Since federal funding is involved with the proposed project, how will the National Environmental Policy Act of 1969 be met?

Response #2:

Farmers Home Administration has been asked what requirements they may have in respect to NEPA. On receipt of their reply, we will address your question in a following letter.

Mr. Richard L. O'Connell

August 9, 1978
Page 3

Comment #3 (Page II-8):

The EIS refers to some streams in the area. They should be identified. How will the pumping affect stream flows? If the volume of flow is reduced by the proposed action, there should be discussion as to the impact on agricultural production, water quality, aquatic life, etc.

Response #3:

There are only two major streams in the area which are Malackahana and Oio Streams. These two streams are perennial in their upper reaches at elevations 400 feet or greater due to the high amounts of rainfall and discharge from dike compartments.

Pumping will not have any effect on stream flows above the 400 foot elevation. The effects on the lower stream reaches are considered negligible due to the intermittent nature of the flows.

Total pumpage by all water users has the effect of lowering the regional head which would affect an unknown amount of spring discharge. As long as the total pumpage does not exceed the estimated 12 mgd flux in the area, we do not anticipate any adverse effects to water quality.

Agricultural production will not be affected as the proposed well is not anticipated to affect the draft or water quality from the existing, active wells.

No aquatic life will be affected. Also, the Kii Wildlife Preserve which is located down gradient from the proposed project is not anticipated to be adversely affected. We have not had any adverse comments in regard to this matter from the State Department of Land and Natural Resources or U.S. Fish and Wildlife Service. Also, there are no known reports of significant affects to the Kii Wildlife Preserve when Kahuku Sugar Mill was pumping as much as 20 mgd prior to its ceasing operations in 1971.

Comment #4:

There needs to be discussion on the amount of water that will be pumped and the maximum capacity of the system. What is the existing and future water demand? Why are two

deepwells being drilled for 300 units? Besides Koolauloa housing project, who will use water from this project? Will some of the water be used to supply the Inscon Development and Prudential Insurance Company's Kuilima Resort Community? In order to fully analyze the FIS, a discussion is warranted.

Response #4:

Two 1-mgd wells are being proposed. Although the installed capacity will be 2 mgd, both wells will be alternately pumped with either well acting as a back-up source in case of a well shut-down. The new wells are to serve Kahuku community in addition to the 300-unit housing development.

Existing water demand for the whole Kahuku Town area is about 7 mgd with 1 mgd for domestic use and the remaining 6 mgd for agricultural use.

Water from the new facility will serve the Kahuku Housing Corporation, the Koolauloa Housing Project, and the Kahuku Elderly Housing Project. The proposed system is not designed to serve any other future developments.

All existing water demands from the Kuilima Resort Community are from our existing Waialeale-Waialua water system. Any other resort development in the area will be required to install their own water system, including source.

Comment #5 (Page III-1):

This statement, "To the extent that the project will insure adequate water for a City housing project and provide an improved water system for the existing and future residences, the project can be said to conform with the approved land use plans for the area," needs elaboration. What does "approved land use plans" imply? How much future development will the project supply? What is the ultimate population that the proposed action will serve? Is this ultimate development consistent with land use plans?

Response #5:

The phrase "to conform with the approved land use plans for the area" is used in a general sense to mean that the project

is designed to support the urban uses of Kahuku Town. However, the last sentence of the first paragraph on Page III-1 is confusing and will be deleted from the final document.

In addition to meeting the existing water demands, the proposed water development project is designed to meet the water demands of the Koolauloa Housing Project and the Kahuku Elderly Housing. A total of 414 units are projected for the two residential developments. Besides these two developments, the proposed water system will be able to support between 50 to 70 additional residential units.

It is estimated that the ultimate population that can be supported by our proposed project is 2500 people and is consistent with existing land use plans.

Comment #6 (Page VII-1):

The topic short-term uses vs. long-term productivity should be expanded. Throughout the FIS, there is no consideration given to the growth stimulating character of the project. Does the project fulfill only the present water demand or does this project encourage growth for the "rural area"? What trade offs and benefits will result? What is the long-term effect?

Response #6:

The proposed water development project is designed only to meet the existing water demands of the Kahuku Housing Corporation and the projected demands of the Koolauloa Housing Project and the Kahuku Elderly Housing projects. The project is not designed to accommodate demands from any future developments in the area.

The only trade-off is the loss of 3.2 acres of land that could be used for agriculture. However, the benefits are:

1. A source that will be reliable in delivering water,
2. Water of good quality that will meet the recently implemented Safe Drinking Water Act,
3. Allow for the construction of low-income housing for residents whose leases on their plantation homes will expire in 1983,

Mr. Richard L. O'Connell

August 9, 1978
Page 6

September 15, 1978

4. Allow for the construction of low-rent homes for the elderly,
5. Double the storage capacity of the existing system for more uniform system pressure during peak demand periods, and
6. Adequate fire protection facilities will be provided for the two residential developments meeting our Water System Standards.

The long-term effect is to provide continuous water service meeting the Safe Drinking Water standards to Kahuku Town and the two proposed housing projects.

Comment #7:

Because there has been little information presented beyond water demand and its service population, we recommend that the EIS be revised to reflect additional data and information so as to permit a complete analysis.

Response #7:

The intent of the proposed project is to replace the existing water source with a newer, more reliable one. The only significant consequence of the project is the secondary impact of the Koolauloa Housing and Kahuku Elderly Housing projects being able to be built. We will be revising the environmental document to address all the concerns on the project and appending all comments and responses.

Thank you for your comments and we hope that our responses adequately answered the concerns you had regarding this project.

If you have any further questions on this matter, please call Lawrence Whang at 548-5221.

Very truly yours,

EDWARD Y. HIRATA
Manager and Chief Engineer

Mr. Richard L. O'Connell
Director
Office of Environmental Quality Control
State of Hawaii
550 Halekauwila Street
Room 301
Honolulu, Hawaii 96813

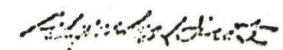
Dear Mr. O'Connell:

Follow Up to Our Letter of August 9, 1978
Relating to Environmental Impact Statement
for Kahuku Water Development, Kahuku,
Koolauloa, Oahu

The Farmers Home Administration has informed us that our loan was approved on the basis that we met all the requirements of NEPA.

If there are any further questions on this matter, please call Lawrence Whang at 548-5221.

Very truly yours,


EDWARD Y. HIRATA
Manager and Chief Engineer

L. Wang

RECEIVED
DD OF WATER SUPPLY

JUN 22 2 53 PM '78

UNIVERSITY OF HAWAII

Water Resources Research Center

6/26/78

July 19, 1978

Office of the Director

June 13, 1978

Office of Environmental Quality Control
550 Halekuanuila St.
Room 301
Honolulu, Hawaii 96813

Gentlemen:

Subject: Kahuku Water Development EIS

The EIS is not explicit on how water service will be improved for present residents now served by the Kahuku Housing Cooperative-- is the expected change in terms of quantity, quality, reliability of service, increased fire protection, etc.

The needs for regional water supply resource management are expressed (p. II-12, 3 E), however, it is not clear how this control will be accomplished. If it is not, then the historical overdraft situation may reoccur.

Some information should be provided on the well design, regional head, drawdown, etc.

Yours very truly,

Reginald H. F. Young
Reginald H. F. Young
Asst. Director, WRRRC

RHFFY:jmn

cc: Env. Ctr.
Board of Water Supply

Dr. Reginald H. F. Young
Assistant Director
Water Resources Research Center
University of Hawaii
2540 Dole Street
Honolulu, Hawaii 96822

Dear Dr. Young:

Your Letter of June 13, 1978 Relating to
The Kahuku Water Development EIS

In response to your comments on the EIS, we have the following clarifications.

The proposed project will improve water service to the present residents now served by the Kahuku Housing Cooperative in the following aspects:

(a) Quantity

The capacity of each of the two new pumps is 700 gallons per minute and the system is designed to operate with only one pump at a time. One pump will be maintained as a "back-up." Although this is less than the existing 1,250 gpm capacity, the new pump will be able to meet the present domestic water needs of the community including the proposed housing projects. The existing system will be retained for agricultural use.

(b) Quality

Water from the proposed system will meet all State and Federal Safe Drinking Water Requirements. The existing system does not meet these requirements.

Dr. Reginald H. P. Young 2

July 19, 1973

(c) Reliability of Service

The existing pumps and well casings are old and near the end of their useful lives. The new system with the back-up pump will provide a more reliable source.

(d) Fire Protection

The proposed water system will provide the required fire flows for the Koolauloa Housing Project and the Kahuku Elderly Housing. Although the new system will be connected to the existing distribution system, fire protection for the existing community will be limited to the carrying capacity of the existing mains.

A program for regional water supply resource management may be controlled through our well permits process and the proposed State "Ground Water Use Regulations."

Information on well design are:

Well No. 1, Ground Elevation = 211 feet
Casing Length = 241 "
Open Hole = 100 "
Total Depth = 341 "

Well No. 2, Ground Elevation = 209 feet
Casing Length = 239 "
Open Hole = 100 "
Total Depth = 339 "

Regional head is approximately 12 foot Mean Sea Level as mentioned on page II-12 of the RIS.

Drawdown data for Kahuku Wells are not available and would not be reliable since drawdown varies from well to well. Drawdown at our Opana Well, located three miles toward Sunset Beach was 5.5 feet at 800 gpm.

Dr. Reginald H. P. Young 3

July 19, 1973

If there are any further questions on this matter, please call Lawrence Whang at 540-5221.

Very truly yours,

E. Y. Hirata

FOR EDWARD Y. HIRATA
Manager and Chief Engineer

cc: Office of Environmental Quality Control



STATE OF HAWAII
DEPARTMENT OF EDUCATION
P. O. BOX 2360
HONOLULU, HAWAII 96804

CHAPUIS CLARK
SUPERINTENDENT
RECEIVED
DD OF WATER SUPPLY
JUN 21 2 35 PM '78

July 17, 1978

June 15, 1978

Environmental Quality Commission
Office of the Governor
550 Halekuanila Street
Honolulu, Hawaii 96813

Gentlemen:

SUBJECT: Kahuku Water Development
LOCATION: Kahuku, Oahu
CLASSIFICATION: Agency Action

The Department of Education has no objection to the proposed
Kahuku Water Development project.

Yours very truly,

Koichi H. Tokushige
KOICHI H. TOKUSHIGE
Assistant Superintendent

KMT:WO:j1

cc ✓ Board of Water Supply
DAGS
Windward Oahu District

Mr. Koichi H. Tokushige
Assistant Superintendent
Department of Education
State of Hawaii
P.O. Box 2360
Honolulu, Hawaii 96804

Dear Mr. Tokushige:

Your Letter of June 15, 1978 Relating to the
Environmental Impact Statement for Kahuku
Water Development, Kahuku, Oahu, Hawaii

Thank you for your response regarding the subject
Environmental Impact Statement. Your letter will be
appended to the final EIS.

Very truly yours,

E. Y. Hirata

MR. EDWARD Y. HIRATA
Manager and Chief Engineer

cc: Office of Environmental Quality Control

AN EQUAL OPPORTUNITY EMPLOYER

GEORGE N. ANIYOSHI
GOVERNOR OF HAWAII

RECEIVED
DD OF WATER SUPPLY

Jul 11 12 30 PM '78



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

P. O. BOX 621
HONOLULU, HAWAII 96809

July 5, 1978

CHRISTOPHER COLL. J. CHAIRMAN
BOARD OF LAND & NATURAL RESOURCES

EDGAR A. HAMASU
DEPUTY TO THE CHAIRMAN

DIVISIONS:
CONVEYANCES
FISH AND GAME
FORESTRY
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

July 18, 1978

Office of Environmental Quality Control
550 Halekauwila Street
Room 301
Honolulu, Hawaii 96813

Dear Sir:

Subject: Kahuku Water Development, EIS
Kahuku, Koolauloa, Oahu Island

The proposed undertaking will have no effect upon any known historic or archaeological site on or likely to be eligible for inclusion on the Hawaii and/or National Registers of Historic Places. This office has no reservations for the project to proceed.

In the event that any unanticipated sites or remains are encountered, please inform the applicant to contact this office.

Sincerely yours,

Jane L. Silverman
Jane L. Silverman
Historic Preservation Officer
State of Hawaii

cc: Board of Water Supply
Att: Edward Hirata

Ms. Jane L. Silverman
Historic Preservation Officer
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Dear Ms. Silverman:

Your Letter of July 5, 1978 Relating to the
Environmental Impact Statement for Kahuku
Water Development, Kahuku, Oahu, Hawaii

Thank you for your comments regarding the subject Environmental Impact Statement. We will inform your office if any historical or archeological sites or remains are encountered.

Very truly yours,

E. Y. Hirata

FOR EDWARD Y. HIRATA
Manager and Chief Engineer

cc: Office of Environmental Quality Control



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P. O. BOX 621
HONOLULU, HAWAII 96809

W. Y. THOMPSON, Chairman
~~BOARD OF LAND AND NATURAL RESOURCES~~

EDGAR A. HAMASU
DEPUTY TO THE CHAIRMAN

DIVISIONS:
CONVEYANCES
FISH AND GAME
FORESTRY
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

July 5, 1978

Honorable George R. Ariyoshi
Governor of Hawaii
550 Halekauwila Street
Honolulu, Hawaii

Dear Sir:

We have reviewed the EIS for Kahuku Water Development.

On the basis that mitigative measures indicated on page VIII-1 will be implemented, we feel the EIS can be accepted.

Very truly yours,

W. Y. Thompson
W. Y. THOMPSON
Chairman of the Board

July 26, 1978

Mr. W. Y. Thompson
Chairman of the Board
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Thompson:

Your Letter of July 5, 1978 Relating to the Environmental Impact Statement for Kahuku Water Development, Kahuku, Oahu, Hawaii

Thank you for your response regarding the subject Environmental Impact Statement. Your letter will be appended to the final EIS.

Very truly yours,

E. Y. Hirata
EDWARD Y. HIRATA
Manager and Chief Engineer

cc: Office of Environmental Quality Control

GEORGE R. ANIYOSHI
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF AGRICULTURE
1428 SO. KING STREET
HONOLULU, HAWAII 96814

RECEIVED
DC OF WATER SUPPLY
JOHN FARIAS, JR.
CHAIRMAN, BOARD OF AGRICULTURE
VUKIO KITAGAWA
DEPUTY TO THE CHAIRMAN

July 26, 1978

July 17, 1978

MEMORANDUM

To: Office of Environmental Quality Control
550 Halekauwila Street, Honolulu

Subject: EIS for Kahuku Water Development
Kahuku, Oahu, Hawaii

The Department of Agriculture has no comments to offer
on the subject environmental impact statement.

We appreciate the opportunity to comment.

JOHN FARIAS, JR.
Chairman, Board of Agriculture

cc: Board of Water Supply ✓

Mr. John Farias, Jr.
Chairman, Board of Agriculture
Department of Agriculture
State of Hawaii
1428 So. King Street
Honolulu, Hawaii 96814

Dear Mr. Farias:

Your Letter of July 17, 1978 Relating to the
Environmental Impact Statement for Kahuku
Water Development, Kahuku, Oahu, Hawaii

Thank you for your response regarding the subject
Environmental Impact Statement. Your letter will be
appended to the final EIS.

Very truly yours,

E. Y. Hirata

EDWARD Y. HIRATA
Manager and Chief Engineer

cc: Office of Environmental Quality Control



STATE OF HAWAII
DEPARTMENT OF SOCIAL SERVICES AND HOUSING
HAWAII HOUSING AUTHORITY
P. O. BOX 17907
HONOLULU, HAWAII 96817

June 14, 1978

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JUN 19 4 31 PM '78
FRANKLIN Y. K. SUNN
EXECUTIVE DIRECTOR
WILLIAM A. HALL
ASSISTANT EXEC. DIRECTOR

IN REPLY REFER

TO:

MEMORANDUM

TO: Environmental Quality Commission *WKS*
FROM: Franklin Y. K. Sunn, Executive Director
SUBJECT: Environmental Impact Statement Review
Title: Kahuku Water Development
Location: Kahuku, Oahu
Classification: Agency Action

2 The Hawaii Housing Authority has reviewed the E.I.S. for the subject project and can offer no comments relative to the proposed action.

Thank you for allowing us to comment on this matter.

FRANKLIN Y. K. SUNN
Original Signed

FRANKLIN Y. K. SUNN
Executive Director

Attachment

cc: DSH
Board of Water Supply

June 29, 1978

Mr. Franklin Y. K. Sunn
Executive Director
Hawaii Housing Authority
State Department of Social
Services & Housing
P.O. Box 17907
Honolulu, Hawaii 96817

Dear Mr. Sunn:

Your Letter of June 14, 1978 Relating to the Environmental Impact Statement for Kahuku Water Development, Kahuku, Oahu, Hawaii

Thank you for your response regarding the subject Environmental Impact Statement.

Very truly yours,

Edward Y. Hirata
EDWARD Y. HIRATA
Manager and Chief Engineer

cc: Office of Environmental Quality Control

GEORGE H. ARMYEN
CHIEF OF STAFF



STATE OF HAWAII
DEPARTMENT OF DEFENSE
OFFICE OF THE ADJUTANT GENERAL
FORT RUGER - HONOLULU - HAWAII 96816
3949 DIAMOND HEAD ROAD, HONOLULU, HAWAII 96816

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VALENTINE A. SIEFERMAN
MAJOR GENERAL
ADJUTANT GENERAL

6/21/78

June 29, 1978

HIENG

08 JUN 1978

Board of Water Supply
City and County of Honolulu
630 South Beretania Street
Honolulu, Hawaii 96813

Gentlemen:

Kahuku Water Development
Kahuku, Oahu

We have received a copy of the "Kahuku Water Development, Kahuku, Oahu"
Environmental Impact Statement, and have no comments to offer at this
time.

Yours truly,

Wayne R. Tomoyasu
WAYNE R. TOMOYASU
Captain, CE, HARRG
Contr & Engr Officer

Capt. Wayne R. Tomoyasu
Contr. & Engr. Officer
Officer of Adjutant General
Department of Defense
3949 Diamond Head Road
Honolulu, Hawaii 96816

Dear Capt. Tomoyasu:

Your Letter of June 8, 1978 Relating to the
Environmental Impact Statement for Kahuku
Water Development, Kahuku, Oahu, Hawaii

Thank you for your response regarding the subject
Environmental Impact Statement.

Very truly yours,

Edward Y. Hirata
FOR EDWARD Y. HIRATA
Manager and Chief Engineer

cc: Office of Environmental Quality Control

L. Heng
P. Heng

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June 29, 1978

June 16, 1978

STP 0.4911

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Office of Environmental
Quality Control
550 Halekauwila St., Room 301
Honolulu, Hawaii 96813

Gentlemen:

Subject: Kahuku Water Development - EIS
Kahuku, Oahu

24
Thank you very much for giving us the opportunity to
review and comment on the above-captioned Statement. We
have no comments to offer which can improve the document.

Very truly yours,

R. Higashionna
R. Higashionna

ALK:jk

cc: LT-P
Board of Water Supply.

Mr. Ryokichi Higashionna, Director
Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Mr. Higashionna:

Your Letter of June 16, 1978 Relating to the
Environmental Impact Statement for Kahuku
Water Development, Kahuku, Oahu, Hawaii

Thank you for your response regarding the subject
Environmental Impact Statement.

Very truly yours,

E. Y. Hirata
FOR EDWARD Y. HIRATA
Manager and Chief Engineer

cc: Office of Environmental Quality Control

Dr

GEORGE N. ANIYOSHI
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. Box 3378
HONOLULU, HAWAII 96801

June 20, 1978

JUN 22 11 02 AM '78

GEORGE A. L. YUEN
DIRECTOR OF HEALTH
Audrey W. Maritz, M.D., M.P.H.
Deputy Director of Health
Henry N. Thompson, M.A.
Deputy Director of Health
James S. Kumagai, Ph.D., P.E.
Deputy Director of Health

In reply, please refer to
File: E1515 - 88

6/22/78

MEMORANDUM

To: Mr. Edward Y. Hirata, Manager & Chief Engineer
Board of Water Supply, City & County of Honolulu

From: Deputy Director for Environmental Health

Subject: Environmental Impact Statement (EIS) for Kahuku Water Development,
Kahuku, Koolauloa, Oahu, Hawaii

Thank you for allowing us to review and comment on the subject EIS. On the basis that the project will comply with all applicable Public Health Regulations, please be informed that we have no objections to this project.

Please be advised that pursuant to Public Health Regulations, Chapter 49, Potable Water Systems, Department of Health, State of Hawaii, approval by the Director of Health is required prior to the system being used as a new source of raw water.

We realize that the statements are general in nature due to preliminary plans being the sole source of discussion. We, therefore, reserve the right to impose future environmental restrictions on the project at the time final plans are submitted to this office for review.

John P. O'Shea
for JAMES S. KUMAGAI, Ph.D.

cc: Environmental Quality Commission
Office of Environmental Quality Control

June 29, 1978

James S. Kumagai, Ph.D.
Deputy Director for Environmental Health
Department of Health
P.O. Box 3378
Honolulu, Hawaii 96801

Dear Dr. Kumagai:

Your Letter of June 20, 1978 Relating to the
Environmental Impact Statement (EIS) for
Kahuku Water Development, Kahuku, Oahu, Hawaii

Thank you for your comments regarding the subject EIS. We shall comply to all the provisions of the State Public Health Regulations, Chapter 49, Potable Water Systems, before initiating the use of this new raw water source.

Very truly yours,

Ed Y. Hirata

for EDWARD Y. HIRATA
Manager and Chief Engineer

cc: Office of Environmental Quality Control

DEPARTMENT OF GENERAL PLANNING
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813



RECEIVED
BO OF WATER SUPPLY

JUN 29 11 11 AM '78
NICHOLSON BUNAW
CHIEF PLANNING OFFICER

DGP6/70-2058 (CT)

June 29, 1978

Mr. Edward Y. Hirata
Manager and Chief Engineer
Board of Water Supply
City and County of Honolulu
Honolulu, Hawaii

Dear Mr. Hirata:

Environmental Impact Statement for Kahuku
Water Development, Dated June 5, 1978
Comments Requested June 5, 1978

We offer the following comments.

Relationship to Other Plans

Section II shows the proposed wells and reservoir area in relation to existing land use, zoning, detailed land use map (future land use), and State land use designations (Figures 4 through 7). This section should also note the existence of a Development Plan for the area adopted by Council as Ordinance 2952, March 16, 1967. This has possible legal implications for the water development project.

Relationship to Development Plan

In our clearinghouse review of the proposed housing project, we indicated

"... the location of the water system itself, when finally determined, must be identified ... on the Development Plan for the area as required by the Charter of the City and County of Honolulu." (Letter from Chief Planning Officer to Mr. Shigenitsu, President, Kahuku Housing Corporation, Inc., June 6, 1974. See attachment.)

The requirement still applies. For amendment procedures, please contact Ian McDougall, Phone 523-4485.

Mr. Edward Y. Hirata
Page 2

Relationship to Other Systems and Projects

Figure 11 (p. II-15) shows the proposed wells and reservoir site to other proposed projects. The proposed Ambulance, Fire and Police Station site is identified; but another City-sponsored housing project, the Kahuku Elderly Housing Project (64 units), is not shown. The EIS should show how water service to these projects will be provided. The Board of Water Supply should consider extension of the proposed water main to the proposed Ambulance, Fire and Police Station site as part of this proposal. Whether providing water service to the elderly housing project can be accomplished through the existing private water system or a separate Board of Water Supply water line should be discussed.

Proposed Agricultural Park

The proposed wells and reservoir site is adjacent to a site previously considered by the State for an agricultural park at Kahuku. Whether or not development of the agricultural park will have an impact on the wells should be indicated.

Impact on Community Development

The EIS indicates that two 700 gallons per minute pumps will be installed as part of this proposal (Technical Characteristics, p. I-1). The EIS should indicate what population or how many households can be serviced after the project is completed, and this should be related to estimates of the existing population and households in the area. In simple terms, the EIS should indicate how much additional population can be served by the project. We are interested in the future growth implications of the project.

Construction Impacts

Construction impacts on school activities can be mitigated if construction activities fronting the schools can be scheduled during the summer, when the schools are not in session. We have indicated that consideration should be given to extension of the water main to the Ambulance, Fire and Police Station site as part of this project. This would reduce the possible impact of construction activities on the schools.

Soils

Major soil types in the Kahuku area as well as the project area are discussed (pp. II-2 and II-16). A map showing soil types would indicate how the wells and reservoir site might be affected.

Mr. Edward Y. Hirata
Page 3

The soils map from the Department of Housing and Community Development's EIS for the Koolauloa Housing Project, together with the Soil Conservation Service descriptions of the Paumalu series, is attached.

Thank you for affording us an opportunity of reviewing this impact statement.

Sincerely,


RAMON DURAN
Chief Planning Officer

RD:fmt

Attachments (2)

cc: OEQC
DLU

DGP5/74-1120 (LP)

June 6, 1974

Mr. Harry Shigenitsu, President
Kahuku Housing Corporation, Inc.
P. O. Box 273
Kahuku, Hawaii 96731

Attention: Mr. John Primacio, Jr., Manager
Kahuku Housing

Dear Mr. Shigenitsu:

Clearinghouse Review of Water Well, Reservoir, and
Trunk Main, Kahuku Town Project--State Clearinghouse
Identifier No. CH-43-0

The above project, for which notification of intent to apply for Federal assistance was received, was reviewed in accordance with procedures established by the Area-wide Clearinghouse pursuant to the provisions of Office of Management and Budget Circular No. A-95.

The following agencies were provided the opportunity to review and comment on the project and to consult with you if they desired:

State

Department of Agriculture
Department of Health
Department of Land and Natural Resources
Department of Education

City

Fire Department
Department of Public Works
Department of Recreation
Board of Water Supply

Other

Kahuku Hospital

Mr. Harry Shigemitsu, President
June 6, 1974
Page 2

Attached, hereto, are the comments of those agencies responding. Please note that the comments of the Board of Water Supply and the Department of Agriculture may be of particular interest to you.

The project is consistent with one of the broad goals of the General Plan which calls for the establishment of "an adequate system of utilities" in order to "develop a wholesome, convenient and attractive living environment." However, the location of the water system itself, when finally determined, must be identified on the General Plan and the Development Plan for the area as required by the Charter of the City and County of Honolulu. Procedures for amending the General Plan are explicit and can be obtained from the Department of General Planning.

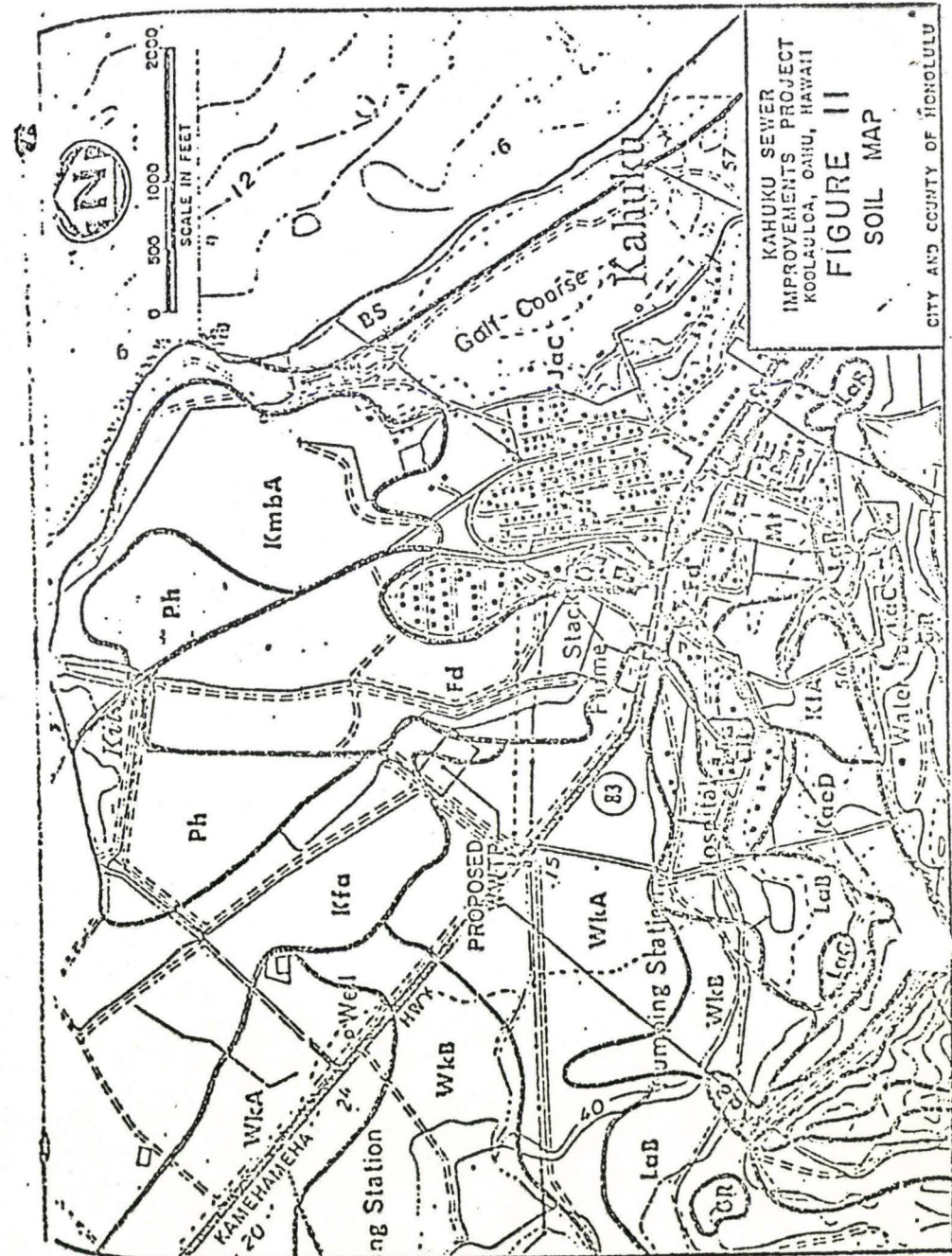
On the basis of the above comments and the agency reviews submitted, the Arcwide Clearinghouse has no objections to the proposed project provided that the plan for water system when finalized is included on the Development Plan for the area.

A copy of this letter and the attached comments should accompany your application when it is submitted to the funding agency. The application should be identified by State Clearinghouse Identifier No. CU-43-0.

Sincerely,

Donald A. Clegg
for ROBERT R. WAY
Chief Planning Officer

RW:ak
Atts.



11-2

Pec Pec PZ PZ

Papua Series

This series consists of well-drained soils on uplands on the island of Oahu. These soils formed in colluvium and residuum derived from basalt. They are moderately sloping to very steep. Elevations range from nearly sea level to 500 feet. The annual rainfall amounts to 30 to 45 inches, most of which occurs between November and April. The mean annual soil temperature is 73° F. Papua soils are geographically associated with Alaola and Kokolahi soils, near Kailua.

These soils are used for pasture. The natural vegetation consists of guava, Java plum, lili, koa hiale, Christmas berry, lantana, songgrass, and ricegrass.

Papua clay, 35 to 70 percent slopes (PYF).—This soil has convex, very steep slopes. Included in mapping were small areas of Alaola soils and small, eroded spots. Also included were small, stony areas and basalt outcrops near the ridgetops.

In a representative profile the surface layer is very dark brown clay about 12 inches thick. The next layers are dark reddish-brown and dark reddish-gray clay that has prismatic structure. They extend to a depth of about 21 inches. Below this is clay to silty clay loam that has a variegated color pattern of grays, browns, and yellows. Soft, weathered rock is at a depth of about 40 inches. The clays in this soil are very sticky and very plastic, and they crack widely when dry. The soil is slightly acid throughout the profile.

Permeability is slow. Runoff is rapid, and the erosion hazard is severe. The available water capacity is about 1.4 inches per foot of soil. Roots penetrate to a depth of 40 inches or more.

Representative profile: Island of Oahu, lat. 21°22'01" N. and long. 157°41'11" W.

Ap—0 to 12 inches, very dark brown (10YR 2/2) clay, some dark brown (7.5YR 4/2) material mixed by clumping, very dark gray (10YR 3/1) when dry; moderate, very fine and fine, granular much in upper 1/2 inch to 1 inch and strong, fine, subangular blocky structure below; hard, firm, very sticky and very plastic; abundant fine and medium roots; common, fine and very fine, tubular pores; few wormholes and small roots; common, fine, dark gray, slightly weathered rock fragments; common shiny specks; slight effervescence with hydrogen peroxide; slightly acid; clear, smooth boundary. 6 to 11 inches thick.

AC—12 to 19 inches, dark reddish-brown (5YR 3/2), moist and dry, clay; moderate, coarse, prismatic structure; hard, firm, very sticky and very plastic; abundant fine and medium roots; many, very fine, tubular pores and few, fine, tubular pores; common wormholes and worm casts that are thickly coated with very dark gray gelatinous material; few, fine, angular rock fragments; slight effervescence with hydrogen peroxide; slightly acid; clear, smooth boundary. 8 to 9 inches thick.

C1—19 to 21 inches, dark reddish gray (5YR 4/2), moist and dry, clay; weak, coarse, prismatic structure; hard, very firm, very sticky and very plastic; abundant fine and medium roots; common, very fine and fine, tubular pores; root channels lined with very dark gray material; common prominent slickensides; few fine rock fragments; slight effervescence with hydrogen peroxide; slightly acid; abrupt, wavy boundary. 1 to 8 inches thick.

C2—21 to 28 inches, variegated color pattern of grayish brown (10YR 5/2) and dark grayish-brown (10YR 4/2) clay; strong, coarse, prismatic structure; extremely

hard, firm, very sticky and very plastic; abundant fine and medium roots; common fine and medium pores; pebbles coated with shiny specks; many thick, deeply grooved slickensides; slightly acid; abrupt, wavy boundary. 2 to 10 inches thick.

C3—28 to 40 inches, mixture of brown (10YR 5/3), dark yellowish brown (10YR 4/4), and dark grayish-brown (10YR 4/2) silty clay loam; max-lev; slightly hard, friable, slightly sticky and slightly plastic; plentiful fine and medium roots; common, fine, tubular pores; few, fine, highly weathered rock fragments; slightly acid.

C1—40 inches, slightly to moderately weathered basalt.

The depth to bedrock is more than 40 inches. The amount of stones in the profile ranges from 5 to 10 percent. The A horizon ranges from 5YR to 10YR in hue and from 2 to 3 in value when moist. The AC and C horizons range from 10YR to 5YR in hue.

This soil is used for pasture. (Capability classification VIIc, nonirrigated; pasture group 3; woodland group 1)

Papua clay, 6 to 20 percent slopes (PYD).—On this soil, runoff is slow to medium and the erosion hazard is slight to moderate. Workability is difficult.

This soil is used for pasture. (Capability classification IVc, nonirrigated; pasture group 3; woodland group 1)

Papua clay, 20 to 35 percent slopes (PYE).—On this soil, runoff is medium to rapid and the erosion hazard is moderate to severe. Workability is difficult.

This soil is used for pasture. (Capability classification VIc, nonirrigated; pasture group 3; woodland group 1)

Paumotu Series

This series consists of well-drained silty clay soils on uplands in the northern part of Oahu. These soils developed in old alluvium and colluvium derived from basic igneous rock. They are gently sloping to very steep. Elevations range from 700 to 1,000 feet. The annual rainfall amounts to 50 to 70 inches and is well distributed throughout the year. The mean annual soil temperature is 71° F. Paumotu soils are geographically associated with Kemoo soils, near Kahuku.

These soils are used for pasture and sugarcane. The natural vegetation consists of guava, waiwi, Christmas berry, ricegrass, and carpetgrass.

Paumotu silty clay, 15 to 25 percent slopes (PeD).—This soil occurs as small, irregularly shaped areas. Included in mapping were small, eroded areas.

In a representative profile the surface layer and the subsoil are dark reddish-brown silty clay that has subangular and angular blocky structure. The surface layer is about 9 inches thick, and the subsoil is 30 to more than 60 inches thick. The substratum is highly weathered gravel. The soil is very strongly acid in the surface layer and strongly acid to medium acid in the subsoil.

Permeability is moderately rapid. Runoff is medium, and the erosion hazard is moderate. The available water capacity is about 1.3 inches per foot of soil. In places roots penetrate to a depth of 5 feet or more. Workability is difficult because of the slope.

Representative profile: Island of Oahu, lat. 21°40'15" N. and long. 158°01'02" W.

A1—0 to 8 inches, dark reddish-brown (5YR 3/2) silty clay, reddish brown (5YR 4/2) when dry; strong, fine, subangular blocky structure; hard, firm, sticky and plastic; abundant fine and medium roots; many, very fine and fine, interstitial and tubular pores; few highly weathered pebbles; very strongly acid; abrupt, smooth boundary. 8 to 12 inches thick.

A2—8 to 17 inches, dark reddish-brown (5YR 3/1) silty clay, reddish brown (5YR 4/1) when dry; moderate, fine, subangular blocky structure; hard, firm, sticky and plastic; abundant fine roots; common, fine and very fine, tubular pores; few highly weathered pebbles; common black stains; strongly acid; clear, smooth boundary. 5 to 9 inches thick.

A3—17 to 23 inches, dark reddish-brown (5YR 3/4) silty clay, reddish brown (5YR 4/4) when dry; moderate, very fine and fine, angular and subangular blocky structure; hard, firm, sticky and plastic; few very fine roots; common, very fine, tubular pores; common black stains; thin, continuous clay films on pebbles and in pores; few highly weathered pebbles; medium acid; gradual, smooth boundary. 10 to 16 inches thick.

A4—23 to 45 inches, dark reddish-brown (5YR 3/4) silty clay, reddish brown (5YR 4/1) when dry; strong, fine, blocky structure; few fine roots; few, fine, tubular pores; thin, continuous, dark-red (2.5YR 3/6) clay films on pebbles and in pores; common highly weathered pebbles; medium acid; clear, wavy boundary. 12 to 15 inches thick.

A5—45 to 70 inches, dark reddish-brown (5YR 3/1) silty clay, reddish brown (5YR 4/1) when dry; strong, fine, blocky structure; few, fine, tubular pores; thin, continuous, dark-red (2.5YR 3/6) clay films on pebbles and in pores; 30 to 50 percent highly weathered gravel; medium acid; clear, wavy boundary.

The depth to highly weathered gravel ranges from 30 to more than 60 inches. The B horizon ranges from 3 to 4 in value when moist and from 4 to 6 in chroma, moist or dry. Effervescence with hydrogen peroxide ranges from none to moderate in the A horizon.

This soil is used for pasture and sugarcane. (Capability classification IVc, irrigated or nonirrigated; pasture group 5; woodland group 7)

Paumotu silty clay, 3 to 8 percent slopes (PeB).—On this soil, runoff is slow and the erosion hazard is slight. Workability is easy.

This soil is used for sugarcane and pasture. (Capability classification IIc, irrigated or nonirrigated; pasture group 5; woodland group 7)

Paumotu silty clay, 8 to 15 percent slopes (PeC).—On this soil, runoff is slow to medium and the erosion hazard is slight to moderate. Workability is slightly difficult.

This soil is used for sugarcane and pasture. (Capability classification IIIc, irrigated or nonirrigated; pasture group 5; woodland group 7)

Paumotu silty clay, 25 to 40 percent slopes (PeE).—On this soil, runoff is medium to rapid and the erosion hazard is moderate to severe.

This soil is used for pasture and sugarcane. (Capability classification VIc, irrigated or nonirrigated; pasture group 5; woodland group 7)

Paumotu silty clay, 40 to 70 percent slopes (PeF).—On this soil, runoff is rapid and the erosion hazard is severe.

This soil is used for pasture. (Capability classification VIIc, nonirrigated; pasture group 5; woodland group 1)

Paumotu-Badland complex (PZ).—In this complex Paumotu soils make up 40 to 80 percent of the acreage. The slope is 10 to 70 percent.

The Paumotu soils are similar to Paumotu silty clay, 15 to 25 percent slopes, except for the slope. Runoff is medium to rapid, and the erosion hazard is moderate to severe.

Badland consists of nearly barren land that has remained after the Paumotu soils were removed by wind and water erosion. Runoff is rapid, and the erosion hazard is very severe. About 80 percent of the Badland part occurs in the direction of the trade winds. Rock outcrop, Stony land, Stony steep land, and Rock land were included in mapping, and they make up as much as 25 percent of the area.

This complex is used for pasture and military purposes. (Paumotu part is in capability classification VIIc, nonirrigated; pasture group 5; woodland group 7. Badland part is in capability classification VIIc, nonirrigated)

Pauwela Series

This series consists of well-drained soils on uplands in the island of Maui. These soils developed in a basalt weathered from basic igneous rock. They are gently sloping to moderately steep. Elevations range from 150 to 1,500 feet. The annual rainfall amounts to 70 to 120 inches; it is well distributed throughout the year. The mean annual soil temperature is 70° F. Pauwela soils are geographically associated with Haiku and Kailua soils.

These soils are used for pasture and water supply. Small acreages are used for pineapple and woodland. The natural vegetation consists of californiagrass, guava, and ricegrass.

Pauwela clay, 3 to 7 percent slopes (PB).—This soil is on smooth uplands. Included in mapping were small areas of Haiku and Kailua soils.

In a representative profile the surface layer is dark grayish-brown clay about 12 inches thick. The subsoil, about 21 inches thick, is dark reddish-brown clay that has angular blocky and subangular blocky structure. The substratum is soft, weathered basic igneous rock. The soil is very strongly acid to extremely acid in the surface layer and subsoil.

Permeability is moderately rapid. Runoff is slow, and the erosion hazard is slight. The available water capacity is about 1.3 inches per foot of soil. In places roots penetrate to a depth of 3 feet or more.

Representative profile: Island of Maui, lat. 20°55'26" N. and long. 156°16'21" W.

A1—0 to 6 inches, dark grayish-brown (2.5Y 4/2) grayish brown (2.5Y 5/2) when dry; moderate, subangular blocky structure; hard, firm, sticky and plastic; abundant very fine and fine roots; many fine pores; common sand-size aggregates that are resistant to crushing; many, very fine, glistering specks; high bulk density; few yellowish-red (5YR 4/6) particles from the upper part of the B horizon mixed in by plowing; slight effervescence with hydrogen peroxide; very strongly acid; clear, wavy boundary. 4 to 7 inches thick.

A2—6 to 12 inches, dark grayish brown (2.5Y 4/2) clay, grayish brown (2.5Y 5/2) when dry; moderate, fine, subangular blocky structure; hard, firm, sticky and plastic; abundant very fine and fine roots; many fine pores; common sand-size aggregates that are resistant to crushing; many, very fine, glistering specks; high bulk density; few yellowish-red (5YR 4/6) particles from the upper part of the B horizon mixed in by plowing; slight effervescence with hydrogen

August 15, 1978

TO: MR. RAMON DURAN
CHIEF PLANNING OFFICER
DEPARTMENT OF GENERAL PLANNING

FROM: EDWARD Y. HIRATA

SUBJECT: YOUR LETTER OF JUNE 29, 1978 COMMENTING ON OUR
ENVIRONMENTAL IMPACT STATEMENT FOR KAHUKU WATER
DEVELOPMENT

The following responses are made on your comments:

"Relationship to Other Plans"

We will note the existence of the Kahuku-Kawela Bay-Pupukea Development Plan adopted by the Council as Ordinance 2952, March 16, 1967, in the paragraph "Land Use", page II-2.

"Relationship to Development Plan"

As per Tyrone T. Kusao's conversation with you (memorandum attached), no amendment of the Development Plan will be required.

"Relationship to Other Systems and Projects"

The Kahuku Elderly Housing Project which is located makai of Kamehameha Highway will be shown on Figure 11. This project will be served by the new water system and will be installing 735 linear feet of 8-inch water main from Kamehameha Highway to their site. The proposed Ambulance, Fire, and Police Station will likewise have to install their own water main to their proposed site.

"Proposed Agricultural Park"

Should a State agricultural park be developed in Kahuku, the State Department of Agriculture has proposed to install its own water system, including source.

Mr. Ramon Duran

August 15, 1978
Page 2

"Impact on Community Development"

In addition to meeting the existing demands of Kahuku Housing Corporation, the proposed water development project is designed to meet the water demands of the Koolauloa Housing Project and the Kahuku Elderly Housing. A total of 414 units are projected for the two residential developments. Besides these two developments, the proposed water system will be able to support between 50 to 70 additional residential units.

Any future developments in the area will be required to develop their own sources of supply.

"Construction Impacts"

Construction of the proposed water system will have minimal impact on the area. The pipeline work along the main highway will be done in increments with little disruption to vehicular and pedestrian traffic.

"Soils"

Your transmitted soils map and Soil Conservation Service descriptions of the Paumalu series will be incorporated in the EIS.

If you have any further questions on this matter, please call Lawrence Whang at 540-5221.

Edward Y. Hirata
EDWARD Y. HIRATA
Manager and Chief Engineer

Enc.

cc: Richard L. O'Connell
Director, OEQC (with enc.)

DEPARTMENT OF LAND UTILIZATION
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813



June 19, 1978

RECEIVED
BOARD OF WATER SUPPLY

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GEORGE S. MORISUCHI
DIRECTOR

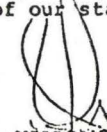
78/EC-5 (SE)
LU6/78-3059

MEMO TO MR. EDWARD HIRATA
Page 2

4. Reference: Page II-14.

Comment: The proposed Agricultural Park at Kahuku is a noticeable omission from the list of "other projects." Should the AG Park be implemented, it would become a major user of groundwater resources in the area. The potential impact of this project should be addressed in the EIS.

Should you have any questions regarding the above comments, please contact Mr. Scott Ezer of our staff at 523-4256.


WILLIAM E. WANKET
Acting Director

WEW:s1

cc: OEQC

MEMORANDUM

TO : MR. EDWARD HIRATA, MANAGER & CHIEF ENGINEER
BOARD OF WATER SUPPLY

FROM : WILLIAM E. WANKET, ACTING DIRECTOR

SUBJECT : ENVIRONMENTAL IMPACT STATEMENT
KAHUKU WATER DEVELOPMENT
KAHUKU, KOOLAULOA, OAHU, HAWAII

We have reviewed the above and offer the following comments and questions:

1. Reference: Page I-7.

Comment: Where will the 7,400 cubic yards of earth to be excavated and removed from the site be disposed?

2. Reference: Pages II-8 to II-12.

What is the use breakdown of the 6 mgd non-domestic water which is presently being pumped?

3. Reference: Page IV-4.

Comment: Reference is made to the EIS for the Koolauloa Housing Project for impacts which relate to this project. On page IV-2 of this document, it is mentioned that the proposed new water system will be used to irrigate the Kahuku Golf Course. If this is the case, why is water which has domestic use capability being put to a use which does not require water of such high purity? Why can't the golf course be irrigated with water of inferior quality from other wells? Has the possibility of recycling secondary sewage effluent for irrigation purposes been investigated?

July 17, 1978

MR. GEORGE MORIGUCHI

July 17, 1978
Page 2

TO: MR. GEORGE MORIGUCHI, DIRECTOR
DEPARTMENT OF LAND UTILIZATION

FROM: EDWARD Y. HIRATA

SUBJECT: YOUR MEMORANDUM OF JUNE 19, 1978 RELATING TO
ENVIRONMENTAL IMPACT STATEMENT FOR KAHUKU
WATER DEVELOPMENT, KOOLAULOA, OAHU

In response to your comments:

1. Comment: "Where will the 7,400 cubic yards of earth to be excavated and removed from the site be disposed?"
- Answer: The disposal site of the excavated material will be the responsibility of the contractor. The disposal site will be determined when the contractor obtains his grading permit from the City's Department of Public Works.
2. Comment: "What is the use breakdown of the 6 mgd non-domestic water which is presently being pumped?"
- Answer: One mgd is for domestic use and the remaining 5 mgd is for agricultural uses.
3. Comment: "Reference is made to the EIS for the Koolauloa Housing Project for impacts which relate to this project. On page IV-2 of this document, it is mentioned that the proposed new water system will be used to irrigate the Kahuku Golf Course. If this is the case, why is water which has domestic use capability being put to a use which does not require water of such high purity? Why can't the golf course be irrigated with water of inferior quality from other wells? Has the possibility of recycling secondary sewage effluent for irrigation purposes been investigated?"

Answer: Our department supports recycling of wastewater for irrigation purposes as long as the wastewater will not be detrimental to potable water resources. In the case of the golf course, water is presently provided by the Kahuku Housing Corporation (KHC). When water is provided to KHC, their existing distribution system will remain to serve the golf course (estimated water demand of 6,000 gallons per day).

The Kahuku Sewer Improvement Project EIS, page I-5, states that "the effluent will then be used for irrigation of the proposed expansion to the golf course." "Ultimately, golf course irrigation will be practiced," page IV-2. At that time, the potable water piping would have to be isolated from the irrigation system.

4. Comment: "The proposed Agricultural Park at Kahuku is a noticeable omission from the list of 'other projects.' Should the AG Park be implemented, it would become a major user of groundwater resources in the area. The potential impact of this project should be addressed in the EIS."

Answer: In our discussions with the State Department of Agriculture, the AG Park will provide its own water system, utilizing several of the existing wells formerly used for sugarcane irrigation.

On page II-12, we did mention that total draft (existing and future) should not exceed 12 mgd. This leaves an excess of 5 mgd. that still may be developed in the area.

We hope we have satisfactorily answered your concerns. If you have any further questions on this matter, please call Lawrence Whang at 548-5221.

Very truly yours,

Ed. Hirata
FOR EDWARD Y. HIRATA
Manager and Chief Engineer

cc: Park Engineering
Office of Environmental Quality Control
(copy of DLU letter dated June 19, 1978)

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813
PHONE 523-4161



July 28, 1978

FRANK P. FASI
MAYOR

RICHARD K. SHARPLESS
MANAGING DIRECTOR

RECEIVED
DD OF WATER SUPPLY
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TYRONE T. KUSAO
DIRECTOR

I. HARRY ENDO
DEPUTY DIRECTOR

KAHUKU WATER DEVELOP

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813
PHONE 523-4161



June 15, 1978

FRANK P. FASI
MAYOR

RICHARD K. SHARPLESS
MANAGING DIRECTOR

TYRONE T. KUSAO
DIRECTOR

I. HARRY ENDO
DEPUTY DIRECTOR

TO: Mr. Edward Y. Hirata
Manager and Chief Engineer

FROM: Tyrone T. Kusao
Department of Housing and Community Development

SUBJECT: Proposed water well site in relation to Development Plan
Koolauloa Housing Project

In my recent conversation with Ron Duran, he informed me that because of the proximity of the proposed water well site in relation to the subject project, the Department of General Planning would be willing to consider the well as part of the housing project. As such, according to Ron, no further action is necessary to include the well site in the Development Plan.

T. Kusao

TYRONE T. KUSAO
Director

MEMO TO: Environmental Quality Commission
State of Hawaii

FROM: Department of Housing & Community Development

SUBJECT: Review/Comments on Kahuku Water
Development Project

Thank you for the opportunity to review the environmental impact statement for the subject undertaking.

As you are aware, the Department of Housing & Community Development has a stake in the planned 300-lot residential subdivision. Of special interest is the comments on pages II - 17/18 as follows:

"The wells and pumps (of the existing water system) are ...in a below ground pit which makes the source potentially susceptible to contamination from flooding.

"The existing well casings are about 50 years old and may be near the end of their life.


"Water is stored in a 250,000 gallon capacity reinforced concrete reservoir... Most of the pipelines were installed during the turn of the century and no accurate records of their locations have been kept."

June 15, 1978

July 26, 1978

The department's goal is to provide adequate housing for the low- and moderate-income groups at the lowest possible price. This proposed housing project will require a new water system, replacing the existing source, from the standpoint of a more reliable water source and storage facility.

We support the proposed action in the environmental impact statement.


TYRONE T. KUSAO
Director

Mr. Tyrone T. Kusao
Director
Department of Housing and Community Development
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Kusao:

Your Letter of June 15, 1978 Relating to the
Environmental Impact Statement for Kahuku
Water Development, Kahuku, Oahu, Hawaii

Thank you for your response regarding the subject
Environmental Impact Statement. Your letter will be
appended to the final EIS.

Very truly yours,



EDWARD Y. HIRATA
for Manager and Chief Engineer

cc: Office of Environmental Quality Control

SP79-341/Board of Water Supply (OAHU)

RECEIVED
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July 3, 1978

PD 78-489

June 20, 1978

Office of Environmental Quality Control
550 Halekauwila Street, Room 301
Honolulu, Hawaii 96813

Gentlemen:

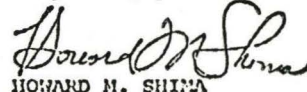
Subject: Kahuku Water Development

35 This is in response to your June 5, 1978 letter and submittal
of an Environmental Impact Statement document for the subject project.

We concur with the objectives and believe the document has
basis for the determination.

Thank you for the opportunity to review this matter.

Very truly yours,


HOWARD M. SHIMA

Director and Building Superintendent

AF:jo

cc: J. Harada
Board of Water Supply

TO: MR. HOWARD M. SHIMA
DIRECTOR AND BUILDING SUPERINTENDENT
BUILDING DEPARTMENT

FROM: EDWARD Y. HIRATA

SUBJECT: YOUR LETTER OF JUNE 20, 1978 REGARDING THE
ENVIRONMENTAL IMPACT STATEMENT FOR KAHUKU
WATER DEVELOPMENT, KAHUKU, OAHU, HAWAII

Thank you for your comments regarding the subject
Environmental Impact Statement.


EDWARD Y. HIRATA

cc: Office of Environmental Quality Control

On

U.S. DEPARTMENT OF THE INTERIOR
JUN 13 5 44 AM '78
6/29/78

June 29, 1978

ENV 78-183

June 14, 1978

Office of Environmental Quality Control
State of Hawaii
550 Halekuanila Street, Room 301
Honolulu, Hawaii 96813

Gentlemen:

Subject: EIS for the Proposed Kahuku Water
Development, Kahuku, Oahu, Hawaii

We have reviewed the subject EIS and have the following comments.

1. Construction plans for the proposed project should be coordinated with the Divisions of Engineering and Wastewater Management.
2. The latest revision to the grading ordinance (page XII-1) is Ordinance Number 4539, approved December 31, 1975.

Very truly yours,

WALLACE MIYAHARA
Director and Chief Engineer

cc: Board of Water Supply

TO: MR. WALLACE MIYAHARA
DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

FROM: EDWARD Y. HIRATA

SUBJECT: YOUR LETTER OF JUNE 14, 1978 RELATING TO THE
ENVIRONMENTAL IMPACT STATEMENT FOR KAHUKU
WATER DEVELOPMENT, KAHUKU, OAHU, HAWAII

Thank you for your comments regarding the subject EIS.

Construction plans for the proposed project will be coordinated with the Divisions of Engineering and Wastewater Management.

The latest revision to the grading ordinance will be incorporated into the final EIS.

E. Y. Hirata
FOR EDWARD Y. HIRATA
Manager and Chief Engineer

cc: Office of Environmental Quality Control

9h

DEPARTMENT OF PARKS AND RECREATION
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813



June 14, 1978

RECEIVED
DD OF WATER SUPPLY

JUN 15 1 16 PM '78

ROBERT T. FUKUDA
DIRECTOR

June 29, 1978

FRANK F. FASI
MAKER

Office of Environmental Quality Commission
Office of the Governor
550 Halekiauila Street, Room 301
Honolulu, Hawaii 96813

Gentlemen:

SUBJECT: KAHUKU WATER DEVELOPMENT PROJECT
ENVIRONMENTAL IMPACT STATEMENT
(KAHUKU DISTRICT PARK AND GOLF COURSE)

A review of the Environmental Impact Statement for the Kahuku
Water Development Project has been made and is acceptable
from our point of view.

Sincerely,

Robert T. Fukuda
ROBERT T. FUKUDA, DIRECTOR

cc: Office of Environmental Quality Control
Board of Water Supply

TO: MR. ROBERT T. FUKUDA, DIRECTOR
DEPARTMENT OF PARKS AND RECREATION

FROM: EDWARD Y. HIRATA

SUBJECT: YOUR LETTER OF JUNE 14, 1978 RELATING TO THE
ENVIRONMENTAL IMPACT STATEMENT FOR KAHUKU
WATER DEVELOPMENT, KAHUKU, OAHU, HAWAII

Thank you for your response regarding the subject
Environmental Impact Statement.

Edward Y. Hirata
FOR EDWARD Y. HIRATA
Manager and Chief Engineer

cc: Office of Environmental Quality Control

DEPARTMENT OF TRANSPORTATION SERVICES
CITY AND COUNTY OF HONOLULU
HONOLULU MUNICIPAL BUILDING
650 SOUTH KING STREET
HONOLULU, HAWAII 96813

BWS

RECEIVED
DD OF WATER SUPPLY
JUN 21 11:00 AM '78
DIRECTOR
TE6/78-2349

June 29, 1978



JUN 26 1978

6/22/78

TO: MR. KAZU HAYASHIDA, DIRECTOR
DEPARTMENT OF TRANSPORTATION SERVICES

FROM: EDWARD Y. HIRATA

SUBJECT: YOUR LETTER OF JUNE 20, 1978 RELATING TO THE
ENVIRONMENTAL IMPACT STATEMENT FOR KAHUKU
WATER DEVELOPMENT, KAHUKU, OAHU, HAWAII

Thank you for your response regarding the subject
Environmental Impact Statement.

E. Y. Hirata

FOR EDWARD Y. HIRATA
Manager and Chief Engineer

cc: Office of Environmental Quality Control

Environmental Quality Commission
550 Halekuanuila St., Room 301
Honolulu, Hawaii 96813

Gentlemen:

Environmental Impact Statement for the Kahuku
Water Development Project
Kahuku, Koolauloa, Oahu, Hawaii

We have no comments on the subject Environmental Impact
Statement.

Very truly yours,

Kazu Hayashida
[for] KAZU HAYASHIDA
Director

cc: OEQC
BWS



RECEIVED
BO OF WATER SUPPLY
AUG 31 2 16 PM '78

August 29, 1978

COMMENTS TO BWS KAHUKU WATER DEVELOPMENT

George Hudes

1. Data supporting the need for the new wells is insufficient.

- a) It appears that maximum demand for the new City & County housing project will be approximately 200,000 g.p.d. The existing wells, even with recasing, can deliver 800,000 g.p.d. In other words, a surplus of domestic water seems available utilizing existing facilities.
- b) If there are bacteriological conditions in the water from the existing wells which make it undesirable or in violation of drinking water standards, these conditions should be specified.
- c) It is not clear whether all the residents of Kahuku Village will be relocated and served by the proposed system.
- d) Has contamination through flooding of the existing system ever occurred in the past?
- e) How likely is cesspool water infiltration, given past experience and new sewage treatment facility plans?

2. Data indicating integration of this project with projected population, water and agricultural industry development for Koolauloa is lacking.

- a) Projected population increase (above existing pop.) for the project area (Kahaluu-Kahuku) till the year 2000 is 2,110 based on the E-2 1978 revision. If we add up expected population increases in the Kahaluu-Kahuku area from other ongoing and proposed developments (eg. Hukuloa Unit C, Trousdale, Heeia Meadows, Waikane) this Kahuku

page 2
Comments to BWS Kahuku Water Development
August 29, 1978

Support Housing Project will result in surpassing the population projections for the year 2000 for this area by the early 1980's. Is the BWS basing its water development program on E-2 revised projections or on some more arbitrary case by case basis?

- b) Page IV-4, para. 4 states "the project will aid in the orderly and controlled growth of the Kahuku area" after the Kahuku Support Project. This indicates an exacerbation of the population growth rate problem indicated in the previous paragraph.
- c) How does this project relate to the two well field planned by the BWS for the Kahuku area in the 1975 Oahu Water Plan (each field 2.5 mgd = total 5 mgd)?
- d) Possible future conflict between agricultural and domestic water supplies is already implied on page IV-4, para. 1. The presently planned water development will bring area water development up to near capacity.
 - 6 mgd - present agriculture use
 - 2 mgd - capacity of this project
 - 1 mgd - for 12,000 acres of ag land not presently cultivatedtotal 9 mgd = safe yield of 75% of the area recharge of 12 mgd. Does the BWS maintain any plans for future additional water development in the Kahuku area? The BWS has primary service commitments and financial dependence on the urban sector. These facts indicate that maintaining the agricultural economic base and lifestyle of the area might be best assured thru over-all water supply development for the Kahuku area by the State Department of Agriculture.
- e) Even though the job of the BWS is to supply water when requested and not conduct over-all area planning per se, area planning coordination is necessary to prevent future area overdraft and adverse effects on water supply for certain economic sectors. For example, lack of over-all planning has already resulted in overdraft problems in the Pearl Basin, Honolulu and Funaluu areas. Because of uncertainties regarding groundwater rights, the BWS does not have clear authority to limit future private water development which might result in area overdraft. And where overdraft is likely or occurs, invocation of Ch. 177 (HRS) presently mandates domestic water supply priorities.

Given the fact that it appears the year 2000 projected population for the Kahaluu-Kahuku area will most likely be reached in the early 1980's, given BWS refusals to stand in the way of additional urban development even where substantial overdraft already occurs (eg. Gentry-Waipio and Mililani Town Expansion), and considering the greater costs attendant to piece-meal area water development (coordination of water quality & need, centralized water delivery design in terms of pipe capacity, pressures, etc.) we feel the Kahuku water development should be a part of a more thoroughly developed and coherent Kahaluu-Kahuku plan. This might mean waiting for completion of the Oahu General Plan Revision.

The Kahaluu-Kahuku area is about the last Oahu area where truly integrated water development and use planning seems possible. This opportunity should be utilized.



George M. Hudes

October 13, 1978

Mr. George Hudes
Life of the Land
Room 209
404 Piikoi Street
Honolulu, Hawaii 96814

Dear Mr. Hudes:

Your Letter of August 29, 1978 Commenting on
Our Environmental Impact Statement for Kahuku
Water Development

In response to your comments on the environmental document,
we offer the following:

Comment #1a

"The existing wells, even with recasing, can deliver 800,000 gpd. In other words, a surplus of domestic water seems available utilizing existing facilities."

Response

Development of the proposed wells will not create a surplus of domestic water. Water from the existing wells will be diverted for agricultural purposes. The new wells will in turn serve the existing Kahuku Corp. and the proposed low income housing project.

Comment #1b

"If there are bacteriological conditions in the water from the existing wells which make it undesirable or in violation of drinking water standards, these conditions should be specified."

Response

Frequent occurrence of high coliform counts from samples taken by the State Department of Health from the existing system indicate that the water does not meet the Safe Drinking

Mr. George Hudes

October 13, 1978
Page 2

Water Standards. The existing system does not have any permanent disinfection equipment installed to mitigate the coliform problem.

Comment #1c

"It is not clear whether all the residents of Kahuku Village will be relocated and served by the proposed system."

Response

The EIS for the Koolauloa Housing Project states in the Description of Action that "the basic intent is to relocate the families in existing Kahuku Plantation homes and to meet low-income housing market in the Koolauloa District. Kahuku Village land leases expire in 1983". Water from the new source will serve the Kahuku Housing Corp. (Kahuku Village), the proposed Koolauloa Housing Project and the proposed Kahuku Elderly Housing Project.

Comment #1d

"Has contamination through flooding of the existing system ever occurred in the past?"

Response

The State Department of Health has no record of floods affecting the quality of the water in the existing system.

Comment #1e

"How likely is cesspool water infiltration, given past experience and new sewage treatment facility plans?"

Response

Contamination of groundwater resources in the area is very unlikely because of the great distance between the new water source and sources of pollution including the sewage facility. The favorable caprock formations are also a mitigating factor in preventing pollution of groundwater resources.

Mr. George Hudes

October 13, 1978
Page 3

Comment #2a

"Projected population increase (above existing pop.) for the project area (Kahaluu-Kahuku) till the year 2000 is 2,110 based on the E-2 revision. If we add up expected population increases in the Kahaluu-Kahuku area from other ongoing and proposed developments (eg. Mokulua Unit C, Trousdale, Mc Meadows, Waikane) this Kahuku Support Housing Project will result in surpassing the population projections for the year 2000 for this area by the early 1980's. Is the BWS basing its water development program on E-2 revised projections or on some more arbitrary case by case basis?"

Response

Our long range projections are based on the revised E-2 projections.

Comment #2b

"Page IV-4, para. 4 states 'the project will aid in the orderly and controlled growth of the Kahuku area' after the Kahuku Support Project. This indicates an exacerbation of the Population growth rate problem indicated in the previous paragraph."

Response

That statement is misleading and shall be deleted from the EIS. The proposed system is not designed to serve any other future developments beyond the proposed Koolauloa Housing Project and the Kahuku Elderly Housing Project.

Comment #2c

"How does this project relate to the two well field planned by the BWS for the Kahuku area in the 1975 Oahu Water Plan (each field 2.5 mgd = total 5 mgd)?"

Response

This project is independent from the two well fields planned by the BWS for the Kahuku area in the 1975 Oahu Water Plan.

Mr. George Hudes

October 13, 1978
Page 4

Comment #2d

Possible future conflict between agricultural and domestic water supplies is already implied on page IV-4, para. 1. The presently planned water development will bring area water development up to near capacity.

- 6 mgd - present agriculture use
- 2 mgd - capacity of this project
- 1 mgd - for 12,000 acres of ag land not presently cultivated
- 9 mgd - safe yield of 75% of the area recharge of 12 mgd.

Does the BWS maintain any plans for future additional water development in the Kahuku area? The BWS has primary service commitments and financial dependence on the urban sector. These facts indicate that maintaining the agricultural economic base and lifestyle of the area might be best assured thru over-all water supply development for the Kahuku area by the State Department of Agriculture.

Response

According to our Oahu Water Plan, two future well fields with a combined yield of five (5) million gallons per day are planned for the year 2020.

In view of the water use of the area, the project scope may need to be reevaluated. All water development projects by the BWS will be subject to public review through the EIS process and any objections to any particular one may be brought to the attention of the accepting authority.

Comment #2e

Even though the job of the BWS is to supply water when requested and not conduct over-all area planning per se, area planning coordination is necessary to prevent future area overdraft and adverse effects on water supply for certain economic sectors. For example, lack of over-all planning has already resulted in overdraft and adverse effects on water supply for certain economic sectors. For example, lack of over-all planning has already resulted in overdraft problems in the

Mr. George Hudes

October 13, 1978
Page 5

Pearl Harbor Basin, Honolulu and Punaluu areas. Because of uncertainties regarding groundwater rights, the BWS does not have clear authority to limit future private water development which might result in area overdraft. And where overdraft is likely or occurs, invocation of Ch. 177 (HRS) presently mandates domestic water supply priorities.

Given the fact that it appears the year 2000 projected population for the Kahaluu-Kahuku area will most likely be reached in the early 1980's, given BWS refusals to stand in the way of additional urban development even where substantial overdraft already occurs (eg. Gentry-Waipio and Mililani Town Expansion), and considering the greater costs attendant to piece-meal area water development (coordination of water quality and need, centralized water delivery design in terms of pipe capacity, pressures, etc.) we feel the Kahuku water development should be a part of a more thoroughly developed and coherent Kahaluu-Kahuku plan. This might mean waiting for completion of the Oahu General Plan Revision.

The Kahaluu-Kahuku area is about the last Oahu area where truly integrated water development and use planning seems possible. This opportunity should be utilized."

Response

Our Kahuku water development plan is consistent with our Oahu Water Plan, July 31, 1975. This plan updates the Oahu Water Plan, March 1963 and the 2020 Plan, February 1971. It is continually being revised to reflect new data and information on our groundwater supply obtained from studies and our monitoring program of the groundwater basin. Revisions are also made when population projection data and any development plans of the City and of the State are revised. Therefore, we feel that our water development program is in consonance with all long range population projections and development plans.

If you have any further questions on this matter, please call Lawrence Whang at 548-5221.

Very truly yours,

Edward Y. Hirata

EDWARD Y. HIRATA
Manager and Chief Engineer
Office of Environmental Quality Control

cc: Mr. Richard O'Connell
Office of Environmental



BLACKFIELD
HAWAII
CORPORATION
1221 KAPIOLANI BOULEVARD
SUITE 700
HONOLULU, HAWAII 96814
(808) 530-3841

RECEIVED
BO OF WATER SUPPLY
AUG 31 4 15 PM '78

October 4, 1978

August 30, 1978

Office of Environmental
Quality Control
550 Halekauwila Street
Room 301
Honolulu, Hawaii 96813

Gentlemen:

RE: ENVIRONMENTAL IMPACT STATEMENT
KAHUKU WATER DEVELOPMENT
KAHUKU, OAHU, HAWAII

Thank you for the opportunity to review the proposed action. I am aware that my comments are tardy, but I feel they should still be made. Blackfield Hawaii's interest is occasioned by the fact that our Kahuku Sugar Mill project will be affected by this action.

In general, our feeling is that the proposed action is a good job, half done and the half that is not being done should be addressed more adequately.

On the summary page, one objective listed is to "upgrade the present domestic water system." Later in a more detailed statement of objectives, it says "to upgrade the present domestic water system from the standpoint of a more reliable water source and storage facility." (My underlining.) This certainly needs to be done and is commendable. A reader not familiar with the situation would not know that the present distribution system is in poor condition and is presently maintained by a non-profit corporation with limited assets. The existing problem will not be solved until a new distribution system is installed to service those already existing residences and businesses. It seems to me that if this cannot be done now, then it should be stated as an alternative that was considered and rejected. Then, reasons for such rejection and the impact of this rejection should be addressed.

Sincerely,

Robert E. Cooper
Robert E. Cooper
Vice President

REC:rp

cc: Board of Water Supply

Mr. Robert E. Cooper
Vice President
Blackfield Hawaii Corp.
1221 Kapiolani Boulevard
Suite 700
Honolulu, Hawaii 96814

Dear Mr. Cooper:

Your Letter of August 30, 1978 Relating to
Environmental Impact Statement for Kahuku
Water Development, Kahuku, Koolauloa, Oahu

This project is to provide adequate and safe drinking water for the existing residences and businesses presently served by the Kahuku Housing Cooperative, the proposed 300 unit Koolauloa Housing Project and the Kahuku Elderly Housing project.

This project will be funded by a loan from the Farmer's Home Administration (FHA) and the work is for development of a new water source, storage facility and transmission mains.

The upgrading of the existing distribution system is the responsibility of the Housing Corporation and we have already informed them that the system must be upgraded to our standards before we will consider accepting the system.

If you have any further questions on this matter, please call Lawrence Whang at 548-5221.

Very truly yours,

Edward Y. Hirata

EDWARD Y. HIRATA
Manager and Chief Engineer

cc: Office of Environmental Quality Control

NORTH SHORE NEIGHBORHOOD BOARD NO. 27

P. O. Box 607
HALEIWA, HAWAII 96712



July 26, 1978

June 29, 1978

Environmental Quality Commission
Office of the Governor
550 Halekauwila Street
Honolulu, Hawaii 96813

SUBJECT: ENVIRONMENTAL IMPACT STATEMENT
FOR KAHUKU WATER DEVELOPMENT

44
Concur in subject Impact Statement which is returned herewith in
accordance with your request of June 5, 1978.

Sincerely,

Merl W. Hawthorne
Merl W. Hawthorne
Chairman

Enc: Environmental Impact Statement
for Kahuku Water Development

Mr. Merl W. Hawthorne
Chairman
North Shore Neighborhood Board No. 27
P.O. Box 607
Haleiwa, Hawaii 96712

Dear Mr. Hawthorne:

Your Letter of June 29, 1978 Relating to the
Environmental Impact Statement for Kahuku
Water Development, Kahuku, Oahu, Hawaii

Thank you for your response regarding the subject
Environmental Impact Statement. Your letter will be
appended to the final EIS.

Very truly yours,

E. Y. Hirata

FOR EDWARD Y. HIRATA
Manager and Chief Engineer

cc: Office of Environmental Quality Control

State of Hawaii
LAND USE COMMISSION
Suite 1795, Pacific Trade Center
190 South King Street
Honolulu, Hawaii 96813

LUC MAPS

Orig. No.: 3311
Source: Tax Maps Division & Ld. Ct. App. 1035
By: H.A. L.H. Nov. 1937 Revised by: EK Jan 21, 1939



SP79-341 BOARD OF WATER SUPPLY

FOR KAHUKU FOREST RESERVE, KAHUKU-MALAEKAHANA, KOOLAULOA, OAHU.

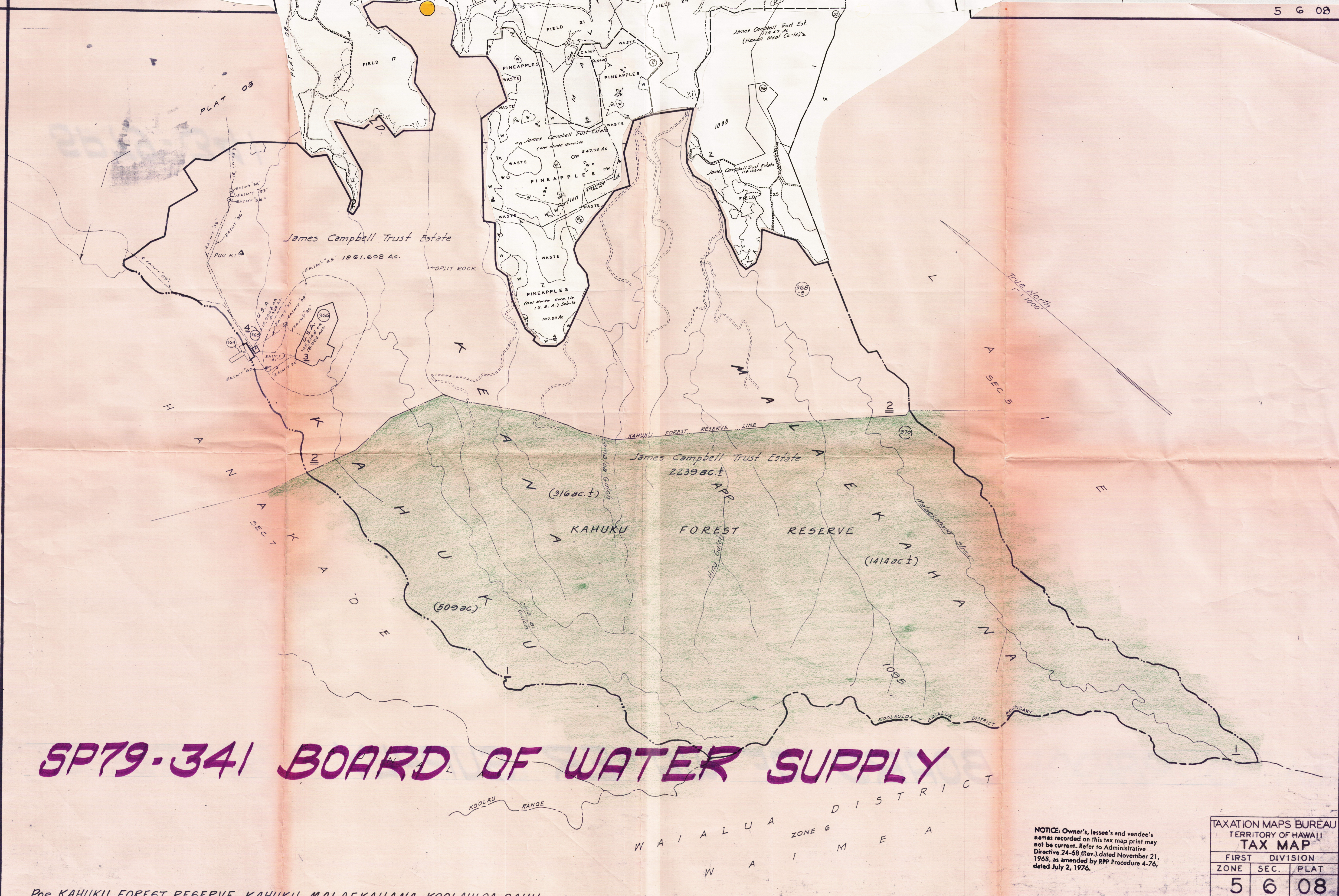
NOTICE: Owner's, lessee's and vendee's names recorded on this tax map print may not be current. Refer to Administrative Directive 24-68 (Rev.) dated November 21, 1968, as amended by RPP Procedure 4-76, dated July 2, 1976.

TAXATION MAPS BUREAU		
TERRITORY OF HAWAII		
TAX MAP		
FIRST DIVISION		
ZONE	SEC.	PLAT
5	6	08
CONTAINING PARCELS		
SCALE 1 in. = 1000 Ft.		
PRINTED MAY 7 1979		

SUBJECT TO CHANGE

MAY 1 1978

Orig. No.: 3311
 Source: Tax Maps Division of Ld. Ct. App. 1035
 By: H.A. L.H. Nov. 1937 Revised by PK Jan 21, 1939



SP79-341 BOARD OF WATER SUPPLY

Por. KAHUKU FOREST RESERVE, KAHUKU-MALAEKAHANA, KOOLAULOA, OAHU.

NOTICE: Owner's, lessee's and vendee's names recorded on this tax map print may not be current. Refer to Administrative Directive 24-68 (Rev.) dated November 21, 1968, as amended by RPP Procedure 4-76, dated July 2, 1976.

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TERRITORY OF HAWAII		
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SCALE 1 in. = 1000 Ft.		

SUBJECT TO CHANGE

PRINTED MAY 7 1978

SP79-341 BOARD OF WATER SUPPLY

