SP73=146/WARREN CORP. (Mokuleia, Oahu) 1 of 2

MAYOR'S OFFICE
CITY & COUNTY
HNLU

F 3370

'73 FEB 8 PM 10:20

REAL ESTATE, PROPERTY MANAGEMENT, INSURANCE
parker & company
823 OLIVE AVENUE, WAHIAWA, OAHU 96786 • PHONE 622-4125

February 7, 1973

RECEIVED
MAR 5 1973
State of Hawaii
LAND USE COMMISSION

The Honorable Mayor Fasi
and City Councilmen
c/o City Hall
Honolulu, Hawaii

Re: Mokuleia (Farrington Highway near Polo Field) 72/CUP-12

Dear Mayor Fasi & City Councilmen:

Two public hearings were held January 17, 1973 and January 24, 1973 and I attended both meetings. A capacity crowd attended each hearing and opposed the granting of a Conditional Use Permit to conduct sand mining operations on property located on both sides of Farrington Highway including the Polo Field. This testimony and a petition are on file with the Planning Commission.

Warren Construction's testimony stressed the great need for sand. Mokuleia Ranch & Land Company, owners of the land, stressed the need for the income from the sale of sand to help them stay in business.

At the last public hearing, January 24, 1973, Mr. Robert B. Robinson, president of Pacific Concrete & Rock Company, Ltd., testified that natural sand should be conserved to be used eventually for filling beach erosion and supplying the golf courses. Sand for the construction industry can be manufactured competitively from blue rock. Mr. Robinson also stated that he supplies 40% of the sand market and if demand increased he could double his output overnight. He also stated that H. C. & D., his competitors, supply about 50% of the market and has a new process for making concrete without using our natural sand.

From my evaluation it seems we are not running out of construction sand. The construction industry is using manufactured sand and eventually will probably be using 100% manufactured sand. The natural sand we have should be saved for other uses besides making concrete.

The Warren Corporation mined sand on Bishop Estate land in Haleiwa. At the present time there is pending litigation from owners that lived around the sand mining area for damages. Keith Steiner, attorney, is handling the case for the complainants.

It seems to me your councilmen should hear more of the testimony before making a decision.

Very truly,

Sanford Parker

Sanford Parker

SP/et

cc: City Councilmen

Jack Morse

CONDITIONS FOR CONDITIONAL AND SPECIAL USE PERMIT, MOKULEIA SAND MINING PROJECT

1. Sand Mining shall be permitted only in the area[s] designated as Increment[s] 1 [and 2] as shown on Exhibit "A" on file with the Planning Department and which shall be made a part of this Conditional Use Permit.

2. Thirty-foot setbacks will be observed from the right-of-way of Farrington Highway. Mining shall be prohibited within these setbacks. The setbacks shall be planted with vegetation sufficient to screen the mining activity from Farrington Highway. Landscape plans for the planting of the setbacks shall be submitted to the Director for his review and approval. No mining shall be permitted until such time as the vegetative screening has become established at such a height as to effectively block the view of the operation from passenger vehicles passing on the highway.

3. Fifty-foot setbacks shall be established along both sides of any stream within the areas to be mined. No mining shall be permitted within these setbacks.

4. [A 150-foot setback shall be established from the vegetation line along the beach. No mining shall be permitted within this setback.] (Deleted, as Increment 1 is not along the seashore.)

5. A single point of access shall be established by the applicant to [each of] the area[s] to be mined subject to the review and approval of the Director.

6. Prior to obtaining a grading permit,

a. The applicant shall submit detailed grading plans showing existing topography and drainage, grading to be accomplished, the sequence of excavation and final topography and drainage in the areas to be mined for the Director's review and approval.

b. [The applicant shall submit detailed plans showing existing and proposed topography and drainage of the borrow area and precise engineering plans of the silting basin and its associated dam and drains for the Director's review and approval.] (Deleted: Applicant to submit detailed plans plus Environmental Impact Assessment and Statement for full consideration by the Planning Commission and the public prior to issuance of a permit to mine sand.)

c. The record[ed] owner of the land encompassed by these permits shall be required to file with the Bureau of Conveyances or the Assistant Registrar of the Land Court of the State of Hawaii, a declaration of the above-mentioned restrictive conditions[;], [and] which conditions shall run in favor of, and may be enforced by, both the public and the government; and

d. A certified copy of the documents as issued by the Bureau of Conveyances or Assistant Registrar shall be presented to the Planning Department as evidence of recordation prior to issuance of a grading permit.

7. Before commencing operation, the plans for stripping the existing vegetation, disposing of the stripped vegetation and screening of the sand to eliminate foreign materials must be submitted to the Departments of Agriculture and Health for [their] approval.

8. Noise levels of the operation as measured at the boundaries of the areas to be mined as shown on Exhibit #1, shall not exceed the standards set in Section 21-232 of the CZC. Berms which may become necessary for noise control shall not encroach within the required setback areas. Such berms shall be planted with vegetative covering[.] and shall be removed at conclusion of the mining process and the area shall be replanted in accordance with plans approved by the Director.

9. Positive and complete dust control methods [such as maintaining the moisture content of all excavated, processed, and fill materials at the point where fly dust is nonexistent beyond the boundaries of the mining areas as defined on Exhibit "A", and the covering of the loads of all trucks leaving or entering the mining areas] shall be used[.] to insure that no fugitive dust from the sand mining site, the borrow site, and/or any area over which materials are transported, shall descend or accumulate upon any area outside of the sand mining and borrow sites (including, without limitation, upon adjacent beaches). Watering equipment shall be on-site at all times. The Director shall frequently monitor the project, or cause it to be frequently monitored, to insure compliance with this requirement.

10. Hours of operation shall be from [7:30] 8:00 a.m. to 5:00 p.m., Monday thru Friday[,]. [and from 8:00 a.m. to 4:30 p.m. on Saturday.] No operations shall be permitted on Saturdays, Sundays[.], or State or Federal holidays.

11. Mining operations shall be done in progressive one-acre increments with one acre being mined, one acre being used as an operating base, and one acre being reclaimed at any single point in time.

12. The areas which are mined shall be reclaimed by back-filling to the original grade with materials which are acceptable to the Department of Health. All fills will be topped by at least six inches of fertile topsoil and planted with a suitable vegetative covering. In no instance shall a sanitary waste backfill method be used.

13. The existing Casurina trees, if any, [in Area 2 which are marked in green on Exhibit 1] shall be conserved. No mining shall take place within 20 feet of [the stand of] any of these trees.

14. In the event all conditions as set forth herein are not complied with, the Planning Director shall [may take action to] terminate the use or halt [its] all operations until such time as full compliance is assured. [obtained.]

15. [Any major modifications to the conditions stated herein shall be subject to approval of the City Counsel.] (Delete.)

16. The City Council may at any time impose stricter [additional] conditions[,] when it becomes apparent that such a modification is necessary and appropriate.

17. No more than 20 loads of sand per day, of a maximum of 25 cubic yards each, shall be taken from the mining area. [The applicant, after six months of operation and uponsubmission of supporting documentation as may be required by the Planning Director, may request an increase in the number of loads per day.] The Planning Director may [grant an increase, or] reduce the number of loads per day and may require those improvements which may be necessary to minimize the impact of increased traffic loads.

18. To avoid time-consuming and expensive litigation, the applicant-landowner shall enter into a binding, written agreement with all persons and entities who own land within a one-mile radius of both the borrow area and the sand-mining area whereby the applicant-landowner is bound to reimburse all such persons and entities for all loss or damage (whether by fugitive dust or otherwise) to their property caused directly or indirectly by the project. The agreement shall be approved by the Corporation Counsel of the City and County of Honolulu and shall include, without limitation, provision for inexpensive and prompt arbitration of claims. The agreement shall constitute a covenant running with the applicant's land until cessation of the project and shall be recorded in the Bureau of Conveyances or filed with the Land Court. The agreement shall in no way

abrogate any other rights of such persons or entities or of the public to require compliance with this permit or with all other legal duties. All such persons and entities shall be given thirty (30) days' notice by the applicant-landowner in the manner of service of a civil summons of the opportunity to enter into the agreement.

19. In lieu of the agreement required immediately above, the applicant-landowner may substitute and deposit with the Director a bond in the amount of Three Hundred Thousand Dollars ($300,000.00) guaranteeing all members of the public against loss or damage caused directly or indirectly by the project as set forth above, with a surety satisfactory to the Director.

20. The applicant-landowner shall maintain insurance from an insurance company authorized to do business in Hawaii in the minimum amount of Three Hundred Thousand Dollars ($300,000.00) throughout the duration of the project insuring against all loss or damage caused directly or indirectly by the project and running in favor of all members of the public. Such insurance shall not be contingent upon compliance with this permit or other laws and ordinances.

21. In the event the noise from trucks transporting sand or other materials from the project shall be so loud as to require the momentary cessation of classes when passing Waialua High and Intermediate School, the applicant-landowner shall promptly soundproof every

classroom in which such cessation is required to the extent sufficient to allow classes to proceed without such interruptions, in accordance with plans and specifications first approved by the Department of Education.

(Conditions No. 1 through 17 shown above are as proposed by the Planning Commission staff, with suggested deletions being bracketed and suggested new material being underlined. Conditions No. 18 through 21 are new.)

Respectfully submitted,

JACK C. MORSE

Dated: January 24, 1973

P1173-442

HC&D, LTD. P.O. Box 190, Honolulu, Hawaii 96810 Telephone 841-0911 Cable Address: Honcontra

January 26, 1973

Mr. Gene Connell, Chairman
City Planning Commission
629 Pohukaina
Honolulu, HI 96813

Dear Mr. Connell:

This letter refers to an article which appeared in the Honolulu Advertiser on January 25, 1973, regarding the Warren Corporation's application to mine sand at Mokuleia.

This company neither supports or opposes the aforementioned application at this time. However, we feel the Commission and City Council should be made aware of our plan to fill the needs of the construction industry with sand commencing in 1975 when Molokai sand is no longer available.

It is our intention to build a manufactured sand plant at Kapaa Quarry, having a capacity in excess of 1,000,000 tons per year commencing in 1975. This sand will be manufactured from our Kapaa Quarry basaltic rock and will meet all specifications pertinent to the construction industry. We estimate the Kapaa rock supply will last more than 40 years.

I trust this information will help the Commission and the Council to make their decisions in the Warren Corporation/Mokuleia permit matter.

Very truly yours,

R. L. Muller
President

cc: Chairman George Koga

RECEIVED
'73 JAN 29 PM 12:24
PLANNING DEPARTMENT
CITY AND COUNTY
OF HONOLULU

P1173-443

BISHOP INSURANCE AGENCY, LTD.

Serving Hawaii Since 1859

TELEPHONE 536-7351 • CORNER S. KING & BETHEL STS. • P. O. BOX 3050 • HONOLULU, HAWAII 96802

CABLE ADDRESS: "INSURANCE"

January 25, 1973

Re: Sand mining, Mokuleia

Honolulu City Planning Commission

Gentlemen:

I was born and raised in the North Shore area. There is no more beautiful, delightful place in my opinion. Let us try to keep it that way, please.

I just ended a week's vacation at Mokuleia and was again reminded of Paradise. One of the charming things about all sandy beach-front properties is how well one kind of grass grows. I believe the grass is and is spelled Manunia.

If the sand is replaced with soil you can bet on a fine crop of varied lousy grasses and weeds.

In closing may I ask if any of you have watched the messy unattractive mining operations over the years at Haleiwa-Kawailoa. This was an attractive beautiful area prior to mining. Will the land drain as it does now? Very unlikely. More than likely the replacement material will drain onto streets, streams and ocean.

I am against allowing mining in all areas but particularly the Mokuleia area should be left alone.

Sincerely,

Albert C. Anderson, Jr.

RECEIVED
JAN 29 PM 12:22
CITY AND COUNTY OF HONOLULU
PLANNING DEPARTMENT
173

PI173-231

310 Lemana St.
Kailua, Hawaii
Jan. 12, 1972

Mr. Robert Way
County Planning Dept.

Dear Sir:

My husband and I wish to lodge a strong protest against the Warren Corp. who, it is our understanding are planning to dig up the Pali grass and adjacent grounds at Makalawa No. One standing grass-type tree existing apart in a weak - why then?

Surely it is a crime to remove one of Hawaii's unusual sporting attractions, to clear up the particular property, for such a mere location as to remove

The Island of Hawaii's last unspoiled
natural scenic.

The road at the point and mile stone
zero marked the end of the road. Heavy equipment will undermine the roads and Kohala ditch to and from Mauna Kea, many. We fail to see why such an operation should be allowed next to our beautiful. They will be an eyesore for decades to come besides removing a much beloved part from the local scene.

Surely there must be other locations less conspicuous from the highways & the vast Holdings of land holding companies that would not destroy in part many Hawaiians have looked on for years as a great source of recreation and enjoyment.

Sincerely,

Regulen Loran
(Mrs Allan Loran)

P1173-234

WAIALUA HIGH AND INTERMEDIATE SCHOOL PTA

January 5, 1973

RECEIVED
'73 JAN 15 AM 11:10
PLANNING DEPARTMENT
CITY AND COUNTY
OF HONOLULU

Mr. William E. Wanket
Assistant Planning Director
Planning Department
City and County of Honolulu
629 Pohukaina Street
Honolulu, HI 96813

Dear Mr. Wanket:

Thank you for your immediate letter of response dated December 11, 1972 regarding the Waialua High School PTA's concern over the Proposed Sand Mining Operations at Mokuleia, Oahu.

Please permit the PTA to state some of its views relative to the impact of such an operation to the children and youths of the community and just as important, to the community itself. In general, the magnitude of the proposed sand mining operations scares us. We would have been more at ease, if the PTA, the Waialua Community Association, the Waialua Lions Club, and other organizations were notified and briefed as the nature of this operation. There seems to be an apparent lack of concern for the people of the Waialua Community by the sand mining company. An attitude of damn the community--get the sand out because industry needs the sand, seems to prevail.

The above observation was reached after reviewing the environmental assessment report and because of serious problems that will result from the proposed sand mining operation. Our concerns are delineated below:

A. Disruption to Classroom Work. Waialua High and Intermediate School, consisting of classes from 7th to 12th grades, comprising some 1,050 students and 70 faculty and staff personnel, is located on 67-160 Farrington Highway. Most of our facilities are located adjacent to Farrington Highway, a busy highway which has high usage by heavy equipment. Some of our classrooms are located no less than twelve feet from the highway. The auditorium and cafeteria are located some fifty and two hundred feet, respectively, from the highway.

With the anticipated increase in truck-trailer traffic on the highway, as the result of the sand operation, there will be severe disruption to classroom instructions and will create a potential health problem. The sand operation envisions 80 truckloads per day, with each truckload amounting to 20-25 cubic yards. This equates to approximately one truck passing the school each 7 1/2 minutes. This count would become even worse if we include the present traffic from the gravel hauling trucks.

Presently, everytime a large gravel hauling truck passes the school or stops at the Sagara Store for lunch or snack, all classroom instructions and oral classroom participation must cease until the noise of passing trucks abates. We cannot and will not tolerate any increase to classroom disruptians as education of our youths will be severely affected. It is respectfully requested that other alternatives or corrective actions be vigorously pursued by the Mokuleia Ranch and Land Company, Ltd., the City and the State before approval be granted.

Suggestions:

1. That the Company absorb the cost to air condition and soundproof all classrooms immediately adjacent to Farrington Highway. This will minimize distruption to classes due to the noise problem. This suggestion is not considered unusual because the noise problem is the direct result of the sand operation.

2. That an independent study be made to determine if there is a potential health hazard due to dust particles in the air as the result of heavy use of the highway. Particular emphasis should be placed in the cafeteria area where food is prepared and consumed.

3. That another route be used during school hours.

4. That sand hauling be made only during night time hours, subject to adherence to noise pollution regulations during these hours.

B. Traffic Hazard. School hours are from 8:00 a.m. to 3:00 p.m. It is noted that the proposed hours of the sand operation are from 7:00 a.m. to 5:30 p.m. Obviously, there is or will be heavy traffic congestion on Farrington Highway during the morning and afternoon hours. Added hazards include students crossing the highway to go to Sagara Store.

Suggestion:

1. That sand and gravel hauling trucks not be permitted to use the highway fronting the school one-half hour before and after the start and end of school. This suggestion is made with the assumption that suggestion A-1 in the previous paragraph is implemented.

C. Congestion on Kaukonahua Road. The Kaukonahua Road, which parallels the Kaukonahua Gulch and leading up to Schofield Barracks, is a two lane, narrow, winding, and rising highway. This highway serves as a major thorough-fare for many residents who commute to outlying areas. At the present time, gravel-hauling trucks travel up the highway at a speed of 10 to 15 miles an hour, greatly impeding traffic and creating an extremely hazardous traffic condition for incoming traffic on hills and on curves. The proposed sand hauling operation will increase traffic substantially and if permitted to use Kaukonahua Road, will cause an untenable situation. It is envisioned that travel time to Schofield/Wahiawa will increase 100%. Such inconveniences cannot and should not be tolerated by local residents. Kaukonahua Road by design was not intended for heavy truck use. Since its origin some fifty years ago, Kaukonahua Road has not been improved.

Suggestion:

1. That Kaukonahua Road be off-limits to all sand, gravel, and heavy hauling trucks and equipment. Instead, these trucks and equipment be required to use Kamehameha Highway.

D. Maintenance of Roads. Due to unusually heavy use of roadways, a maintenance plan be prepared by the City and the State to insure that all roads affected by this operation is adequately maintained. This should include the regular use of a Road Sweeper on the highway fronting the high school.

In conclusion, we appreciate the opportunity for bringing the concerns of the local PTA to this honorable body. We know that you will agree that the welfare of the children and youths of the community is of paramount importance to the City as well as the community. The aforementioned views represent our thoughts on the Sand Mining Operation and should be used in any subsequent public hearings.

Sincerely yours,

Jacob Y. W. Ng

Jacob Y. W. Ng
President

ck

cc: State Land Use Commission
Mr. Gordon Kuwada, Principal, Waialua High and Intermediate School
Mr. Tim Hay, President, Waialua Community Association
Councilman Toraki Matsumoto
Representative Howard Oda
Representative Oliver Lunasco
Mr. William Araki, Superintendent, Central Oahu District
Mr. Allen I. Marutani

WAIALUA HIGH AND INTERMEDIATE SCHOOL PTA

January 5, 1973

Mr. William E. Wanket
Assistant Planning Director
Planning Department
City and County of Honolulu
629 Pohukaina Street
Honolulu, HI 96813

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Jacob Y. W. Ng

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President

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cc: State Land Use Commission
Mr. Gordon Kuwada, Principal, Waialua High and Intermediate School
Mr. Tim Hay, President, Waialua Community Association
Councilman Toraki Matsumoto
Representative Howard Oda
Representative Oliver Lunasco
Mr. William Araki, Superintendent, Central Oahu District
Mr. Allen I. Marutani

NOV 10 1972

P. O. Box 339
Honolulu, Hawaii 96809

November 3, 1972

MEMORANDUM

TO: Dr. Richard E. Marland, Director
Office of Environmental Quality Control

FROM: Myron B. Thompson, Director
Department of Social Services and Housing

SUBJECT: Environmental Impact Statement on Sand Mining

Thank you for the opportunity to comment on the Warren Corporation Impact Statement.

We find the project environmentally destructive and aesthetically objectionable. Furthermore, Warren Corporation's impact statement is inadequate. Discussion of the project's wide-ranging impact is incomplete. In addition, the statement fails to fulfill several criteria for EIS outlined in the Governor's Executive Order of August 23, 1971.

Myron B. Thompson
Director

PERS-EI/KM:lm

D R A F T - November 1, 1972

WARREN CORPORATION SAND MINING PROPOSAL

I. Outline

Project involves extraction of 1,687,704 cubic yards (yd^3) of sand from 152 acres of land in Mokuleia. Plans are to haul 1,600-2,000 yd^3 sand per day. Operation will continue approximately 15 years.

II. Objections

A. To Project

1. Soil to replace sand will come from "area mauka of Kamehameha Highway." This will create 1,687,704 yd^3 (approximately 120 yd. x 120 yd. x 120 yd.) hole somewhere which Warren Corporation has neglected to mention. Perhaps to use less fill, the reclaimed area will be lower than original land. If so, tsunami hazard will be increased.

2. At rate of 1,600-2,000 yd^3 sand will last three years and not fifteen. Does this indicate removal of more than 1,687,704 yd^3 sand or will reclamation take 15 years?

3. Operation runs from 7:00 a.m. to 5:30 p.m. on weekdays. Warren Corporation predicts maximum of 80 truckloads daily. This equals 7.6 truckloads hourly leaving or approximately 15 total trucks hourly (allowing for return trips) or 1 truck every 4 minutes. Increased traffic will be safety hazard for residents, create noise disturbance and increase maintenance cost and traffic pressure on ~~Kamehameha~~ FARRINGTON Highway.

4. Sand "strip mining" will begin only 50 yards from beach. Construction noise and equipment will seriously detract from enjoyable recreational use of beach.

5. Ten-foot wide buffer hedge bordering highway will conceal site from motorists' views. Buffer will conceal all other sights from motorists' views, also.

6. Project will ultimately mean destruction of polo field.

B. To Impact Statement

1. EIS does not include serious discussion of any alternative uses of the area.

2. EIS presents only sketchy plans for reclamation. Includes imprecise and meager description of present vegetation and no guarantee than proposed reclaiming plants will be successful.

3. Fails to note that a recent Governor's task force on Oceanography recommended that offshore sand deposits be exploited rather than beach sand because of potential beach sand scarcity. Current sea-grant project is developing technology to exploit offshore deposits.

4. Report argues that this 1,687,704 yd^3 will "substantially absorb" the future demand for sand. With 600,000 yd^3 required by industry per year, the 1.68 million yd^3 will not have substantial effect especially if exploited over 15-year period.

5. Generally, report is justification for project, not critical analysis of it.

3:55 pm
Rec'd 1/17/73

Mokuleia, Hi
Jan 10, 1973

To: Planning Committee
City and County of Honolulu

As we are residing in the Mokuleia area and must use the highway each day to go and return from work, we are opposed to the Sand Mining operation in this area for the following reasons:

1. Due to the narrow 2-lane highway from Mokuleia to Wahiawa, it is already very dangerous because of the number of trucks from the rock crushing plant. These trucks impede traffic particularly on the long hill from Mokuleia to Wahiawa and already there have been many serious accidents and several fatalities in the past years on this dangerous road.

The addition of numbers of trucks moving sand up and down would make it virtually impossible for us to live in Mokuleia.

2. The Ecological problems connected with Sand mining are obvious — Noise, dust and gas fumes.

✓ 1. R.S. Stewart — 68-679 Farrington
2. Kathryn C. Stewart — 68-679 Farrington Hwy.
3. Robert L. Sinclair — 68-679 Farrington Hwy.

4	Frank B. Mc	68-679	Farr. Hwy Waialua.
5	Inga A. McCue	68-679	Farr. Hwy.
6	Sheila Nakis	68 679	Farrington Hwy.
7	Lucia Araya	68679	Farrington Hwy.
8	Johnny Araya	68679	Farrington Hwy.
9	Maynard H. Billie	68679	Farrington Hwy.
10	Jonathan C. Kalaiki	68-679	Farrington Hwy.
11	Rodney J. Schmidt	68-679	Farrington Hwy.
12	Ann M. Schmidt	68-679	Farrington Hwy.
13	Kenneth A. Ames	68-679	Farrington Hwy.
14	Cindy M. Ames	68-679	Farrington Hwy.
15	Gary H Mitsuen	68 679	Farrington Hwy
16	Linda S. Mitsuen	68679	Farrington Hwy.
17	Lynda Rogers	68-679	Farrington Hwy.
18	Gary Rogers	68679	Farrington Hwy.
19	Edward Duby	68 679	Farrington Hwy.
20	Diane K Burke	68 046	Laau Paina Pl.
21	Margaret A. Sullivan	68 040	Laau Paina Pl.
22	Don Kaa	68-032	Laau Paina Pl.
23	Katherine B Kaa	68-032	Laau Paina Pl.
24	Sharon Abrigo	68-011	Laau Paina Pl.
25	Reynold Abrigo 631-5803	68-011	Laau Paina Pl.
26	Robert E. Gerken 631-9733	68-003	Laau Paina Pl.
27	Dan Frost 631-9694	68-017B	Laau Paina Pl.
28	Lawrence Tallmon	68-035	Laau Paina Pl.
29	Jose Castillano	68-04	Laau Paina Pl.
30	Marilyn K. Nagy	68-629	Farrington Hwy.

January 14, 1973

RECEIVED
'73 JAN 16 AM 10:32
PLANNING DEPARTMENT
CITY AND COUNTY
OF HONOLULU

Planning Commission
Honolulu City and County
629 Pohukaina Street
Honolulu, Hawaii 96813

Attention: Mr. Robert R. Way, Planning Director

Gentlemen:

RE: Request for Conditional Use Permit by
Warren Corporation on Mokuleia Lands
Tax Map Key: 6-8-03: 11, 15-17, 19, 20,
30, 33 and 35

As an owner and occupant of real property in Mokuleia, I wish to express my opposition to a conditional use permit to the Warren Corporation on the captioned Dillingham lands for numerous reasons, among which are:

1. Excessive and unhealthful dust and dirt from mining operations.
2. Excessive noise from mining operations in close proximity to residential areas.
3. Excessive noise and danger from greatly increased vehicular traffic over an inadequate two-lane highway.
4. Possible realignment of natural drain basins which may endanger neighboring lands.
5. Possible danger to children of accumulated water in mined areas.
6. Possible danger to children of mining machinery and equipment.
7. Possible pollution of beach.
8. Potential increase of erosion from stripping of land,
9. Deletion of a rural sports area that is an attraction for residents and visitors-one of the few away from congested areas on Oahu.
10. Reduced value of property.

It is with concern that I express these reasons and hope you will conside them while making your decision.

Sincerely yours,

Joyce W. Wrobel
(Mrs. Theodore Wrobel)
68-615 Farrington Hwy.
Waialua, Hawaii 96791

Planning Commission Pub. Hearing re 72/CUP-12, 1/17/72

Testimony to be given:

My name is Lorrin F. Thurston, a property owner in Mokuleia. I wish to speak in opposition to the granting of a CUP at this time for sand mining at Mokuleia, primarily on the grounds of incomplete submission of data or consideration of traffic problems and hazards that will be generated, and its effects on the community.

I have no personal opposition to DILCO, it's companies, agents or operations in using its own properties to their best advantage. I have nothing to gain or lose materially or otherwise in expressing an opinion and I am speaking only as an interested property owner in the immediately affected area and am sincerely concerned over the peripheral effects on our community as a whole.

The Enviornmental Assessment and Environmental Impact Statement as submitted by the applicant and prepared by F. Hertlein and Associates, Environmental Consultants is, in my opinion, grossly inadequate. It deals primarily only with on-site problems and gives no consideration to major peripheral problems which will be generated and their effects on the community. Since the City and County Planning Department imposed the requirement of an EIS as a part of the application, it follows that the EIS submitted should be comprehensive and meet the specific requirements of the Comprehensive Zoning Code, which in my opinion it fails to do. CZC Section 21-242, General Standards for Conditional Uses in part says..."No CUP shall be issued except upon a finding that ....conditional use will have no more adverse effect on the health, safety or comfort of persons living or working in the area, and will be no more injurious, economically or otherwise to property.....Among matters to be considered in the connection are traffic flow and control....." Section 21-248 Extractive Industries (b) (1) Explotation Phase...."The plan shall demonstrate the feasibility of the operation proposed without creating hazards or causing damage to other properties....Plan shall also show where and how traffic on and from the development will be handled, where equipment will be operating and the manner in which safeguards will be provided."

The EA and EIS as submitted by the applicant provides no information on truck routing in hauling the sand from the site to its destination or effects upon health,

Safety or comfort of the residents, school students, or motorists along the routes the loaded and empty trucks will be traversing in delivering the sand to its ultimate destination.

I presume the to/from site truck routing would be east from the mining site on Farrington Highway through a residental area in Waialua and past the Waialua High and Intermediate Schools to Thompson Corner, mauka up Kaukonahua Road to the junction of Wilikina Drive, past Schofield Barracks and Wheeler AFB and into central Oahu through Waikakalau Gulch and Kipapa Gulch.

The effects of noise and safety of the students of Waialua High and Intermediate Schools must be considered.

The potential effects upon the safety, health and comfort of motorists using the existing highways, including the increased potential of injury and damage to property should be investigated in depth prior to granting a permit.

HPD's reply to requested comments on the EIS reflected only on-site traffic control and did not cover the to/from site traffic generation and resulting problems on roads to be used.

C & C Road Dept. made no comment, and State DOT representatives replied only verbally, to the best of my knowledge, indicating minimal problems and that the roads could absorb the increased loads.

The most recent traffic survey on Kaukonahua Road by the State Dept. of Transportation was a manual count taken Thurs/Fri. February 10, 11, 1972, for a 12-hour period between 0600 and 1800. The location of this count was the UH Experimental Farm on Kaukonahua Road. This count was taken approximately one year ago:

Total vehicles: 3,570 all types

Percentage and number by classification:

82% or 2,927.4 were passenger vehicles

.3 of 1% or 10.71 were busses

9½% or 339.15 were light trucks, 2 axles (pick-up or van)

8.2% or 293 were heavy multi-axle commercial trucks

293 large commercial trucks passed this point a year ago in a 12-hour period from 0600 to 1800 which would correspond to the weekday hours of operation as proposed by the applicant. The applicant would be adding a maximum of 80 truck loads of sand per day to town and by including the round-trip factor, this would actually be a maximum potential of 160 passages at a given point for a total of 453 heavy multi-axle vehicles. This would be an increase of 54.6% in this catagory alone, based upon figures of one year ago. I also understand that the Hawn.Bitumuls Plant at the Kawaihapai Quarry will be providing additional loads of asphalt to surface the reef runway.

The State Highways traffic count one year ago was only a "spot check". It could in no way give any idea to the average figures in a given month, nor reflect the fluctuation in production at the Kawaihapai Quarry in either rock, gravel or asphalt. Since the vehicle count was taken in February of 1972, it could not reflect the numbers of vehicles hauling bulk sugar and molasses from Waialua Mill as February is not the peak of sugar cane production.

Kaukonahua Road from Thompson Corner to the Wilikina juction is a C & C road and is narrow, winding, 2-lane, with an estimated average 5-6% gradient on the hill. It is lined with large ironwood trees along both sides, closely spaced, from within 2 to 8 feet of the pavement. Some portions of the road have a 2-3 foot deep ditch within 6-8 feet of the pavement. For practical purposes, this section of road is without safe shoulders or many passing zones. Loaded trucks crawl up this grade at speeds of between five to ten miles per hour and take 15 minutes to climb 2.8 miles. Traffic backs up behind these trucks and inevitably, attempts are made to pass by motorists, exposing both themselves and downhill traffic to extreme hazard. A runaway truck on this route without shoulders or escape routes could be as disasterous as the Likelike Highway disaster of last year or the recent Pali Highway disaster, since the gradients are comparable. At least the later two routes are divided four-lane highways rather than narrow two-lane roads. Dust from sand and and quarry mining operations are notoriously destructive to brake and hydraulic systems.

In summation, I believe that the City Planning Department has initiated excellant requirements of the applicant to protect the welfare of this community. I hope that the Commissioners will require additional in-depth studies of the peripheral problems in routing, road capabilities, noise in residential and school areas and other environmental effects, and require satisfactory solutions to these problems before any permit for sand mining is granted.

There will be an alternate source of sand available in the near future from sand mining off-shore, resources estimated at one-half billion cubic yards of sand, near Oahu, Molokai, Lanai and Maui. With this consideration in mind, I feel that any CUP for sand mining at Mokuleia should be limited to annual renewals only and not for a blanket long-term period when the future is unknown.

ENVIRONMENTAL
COMMUNICATIONS
INC.

January 17, 1973

Representing
Mr. Jas. Smith

TESTIMONY FOR THE PLANNING COMMISSION

Applicant:	Warren Kobatake dba Warren Corporation
Agenda Item:	MOKULEIA (Farrington Highway near polo field)
Tax Map Key:	6-8-03: 11, 15-17, 19, 20, 30, 33 and 35
Area:	152+ acres
Zoning:	Ag-1 Restricted Agricultural and R-6 Residential District
Request:	Conditional Use Permit to conduct sand mining operations on property located on both sides of Farrington Highway

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MR. CHAIRMAN, members of the Planning Commission: My name is Fred Rodriguez and I am appearing on behalf of a property owner at the Mokuleia Beach Colony. For the record, this party is at the present time both concerned and confused. Concerned over the pending action and confused on the hearing schedule. I was advised of this hearing late last night and was given a copy of the information which includes a copy of the legal notice that ran in the Star Bulletin and Advertiser on January 14, 1973. This legal notice indicates that action on this application was scheduled for January 24, 1973. However, today's agenda lists this same application; not being a lawyer, I cannot account for this scheduling discrepancy but can only assume that an error has been made somewhere. I must also state that there are a number of residents at the Mokuleia Beach Colony who are interested and concerned, and who also would have appeared today but were unable to reschedule their activities to appear today.

The principal thrust of my statement deals with the application of Warren Corporation to operate a sand mining operation. As you know, the area in question is essentially a recreational area, used as a polo field, but more important to the owners of residences at the Mokuleia Beach Colony, this recreational amenity also constitutes a view amenity which was the original purpose for the establishment of the residential development.

Warren Corporation is applying for a sand mining operation on this site. Does the planning commission incorporate as part of the conditional use permit under application the approvals necessary to conduct such an operation? Under the provisions of Act 100 enacted by the Sixth Legislature of the State of Hawaii, there are environmental considerations remaining unanswered by the applicant. *

I address the Commission's attention to these points of interest:

1. As the quarrying operation takes place, what provisions are being taken to prevent or minimize the resulting noise and air pollution?

2. What will the applicant use to replace the sand in this 152+ acre operation?

3. As a resource, will the sand removed from this site ever be replaced?

4. Has consideration been given by the applicant of the low water table and potential erosion problem which might and could arise from his quarrying of this area?

5. Should he choose to fill the sizeable hole with some material, has he been cleared by the appropriate government agencies, i.e., State Department of Health and City & County Department of Public Works?

* Are you suggesting that reqmts of ~~Act~~ 100 are applicable

6. What compensation is being considered for the residents who will watch this operation for the time period involved?

7. Will the general public have to endure noise levels of the quarrying operation as well as the trucks moving back and forth during the operations for an indefinite period of time?

8. If it is the intent of the applicant to fill the void with refuse, is it his intent to operate the subsequent land fill operation according to the rules and regulations of the City & County Refuse Division?

Mr. Chairman, these are questions which several of the members of the Mokuleia Beach Colony would have asked if they had been present today. As a concerned citizen with limited background in this area, I am asking these questions for those who are absent due to the confused schedule. If there are any questions to be raised , I will be pleased to answer them to the best of my ability.

Thank you.

PE ION CONCERNING SURFACE MINING

Mail entry 1/24/73

We the undersigned are opposed to the proposed sand mining operation at Mokuleia on both sides of the highway for the following reasons:

A. Contributing to an unbearable degree of heavy traffic along an already overloaded two lane highway.

B/ Contributing to a negative environmental impact on the children attending Waialua Intermediate and High School, with excessive noise and dust during school hours and causing a safety hazard to the hundreds of children near the highway and crossing the highway at all hours of the day.

SIGNATURE	ADDRESS
Barbara L. Brown	68-615 Farrington Hwy 19B
Christopher E. Brown	" " " " "
Charlene A. Silva	" " " " "
Melvin J. Kennedy	" " " " 7B
Ellen Kennedy	" " " " 7B
Kim Kennedy	" " " " 7B
M B. Kennedy	
Judy Verigo	169 Anapalau St.
Margaret Farinholt	361 Kawailoa St. Hon.
Patricia A. Yee	877 Kainui Dr - Kailua
Theodore J. F Yee	877 Kainui Dr Kailua
Carl E Schultz	622 Kapaia St
Elaine V Schultz	622 Kapaia St.
Michael Jon S	622-9 Kapaia St
Stephen Nann	111 Poliahale Pl. Hon 96825
Patty Jones	119 Merchant street 96813
J Sanders	1243 Manu-Mele St 96734
Patricia Lee	6224 Kawaihae St. 96825
Jon H Carroll	996 Waiuhe St 96825
Judith Fahrenwald	68-615 Farrington Hwy 4-A Waialua

P T I CONCERNING SURFACE MINING

Total 143 signatures

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1/17/73 3:15 pm fed 72 sig. on this

SIGNATURE	ADDRESS
Virginia K. Sheets	68687 Farrington Hwy.
Gloria K. Sheets	68687 Farr. Hwy.
Edgar C Hedge	68689 Farr. Highway
Regina Colestaedman	68-725 Farrington Hwy.
Emma P. Constantino	68-725 FARRINGTON HY.
Fennie L Landon	68-697 Farrington Hwy
Brooke Ahuli	68-701 Farrington Hwy.
Charles D. Reid	68-709 FARRINGTON Hwy
Jerry Reid	66-126A Ouai Lane
Virginia Reed	68709 Farrington Hwy
Alice C. Fleming	68-711 Farrington Hwy.
Marie Hedgeson	68-713 Farrington Hwy.
Ray Hedgeson	68-713 Farrington Hwy.
Carl J. Bubolz	68-715 Farrington Hiway
George A. Bromley	68-715 Farrington Hiway
Donald L Seasure	68 715 FARRINGTON HIWAY
Robert L. Molnar	67-146 Poppiloa Rd
Joni Robenson	68-729 Farrington Hwy
Steve Robinson	68729 Farrington Hwy
[illegible]	7255 KOKI ST, HONOLULU
[illegible]	1010 GREEN ST HON. HI
Joni S. Francis	68-729 Farrington Hwy
Peter T. Seymour	68-729 Farrington Hwy
Mardee M. Seymour	68-729 Farrington Hwy.

(24)

PETITION CONCERNING SURFACE MINING

We the undersigned are opposed to the proposed sand mining operation at Mokuleia on both sides of the highway for the following reasons:

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B/ Contributing to a negative environmental impact on the children attending Waialua Intermediate and High School, with excessive noise and dust during school hours and causing a safety hazard to the hundreds of children near the highway and crossing the highway at all hours of the day.

SIGNATURE	ADDRESS
Harold D. Sullivan	RT 1 BOX 1024
Mpelo S. Sullivan	" " " " "
James C. Park	68-669 Farrington
Elaine M. Park	68-669 Farrington
Mary A. Egan	68-664 Hoomana Pl.
Barbara Egan	" " " "
Dan C. Egan	68 737 Farrington
Betty Lou Cross	" " "
Robert S. Cope	68657 Farrington Hwy
Deborah J. Cope	"
R S Rogers	68-665 FARRINGTON HWY
Jeffrey B. Hunt	68-673 Hoomana Pl.
Hester B. Edwards	68-666 Hoomana Pl
Marjorie B Edwards	68-666 Hoomana Pl.
Wesley Young	68-665 Hoomana Pl
Pauline J. Spencer	68668 Hoomana Pl
Louis Watkins	68669 Hoomana Pl
Brian Yates	68 675 Hoomana
Lisa Yates	68675 Hoomana Pl.
Kenneth R. DeVaughn	68-653 Farrington Hwy
Jeanette J. DeVaughn	" " "

(21)

Dy Wai. Pet.
A.M.

ION CONCERNING SURFACE MINI

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SIGNATURE	ADDRESS
Jacer Y. W. Ng	PK 393, Haleiwa, Hi 96712
John Celona	67-203 Kuhi St
Betty Yamamoto	66-068 Haleiwa Rd. Hal. Hi 98712
Mariano B. Hernando	67-219 Kaka Cir., Waialua Hi
Tadashi Matsumoto	67-231 Farrington Hwy
John Damaso Jr	66-912 Lupeanui Pl. Waialua Hi
James Miya	67-355 Kuka Circle - Waialua
Ellen H Saracelles	67-106 Nanaki St, Waialua Hi
Daisy Nakatsu	67-163 Kanoulu St. Waialua 96791
[illegible]	67327 Kalmia St Waialua
Jay K. Kawakami	Waialua High School
Bonnie M. Kalua	55-163 Kulauli St.
Antoinette M. Leahey	66-939 Kuewa Dr.
Janet Mitchell	NAD Oahu, Box B, FPO S.F. 96612
Ruby Lindsey	55-523 Moana St.
Linda Keck	61-104 Okuwai Place - Haleiwa 96712
Eileen Okazaki	34 Westervelt St. Wahiawa
Ted Tavares	57-502 Akanako St.
Joel Kawachi	67-595 D Kahuli St
Dorothy T. Sakuoka	66-146 Kamaaku Rd., Waialua
Carol Koga	65-128 Hukilau Loop, Waialua
Thomas H. Fujimura	330 Koa St., Wahiawa
Michael S Tome	67-595 A Kahuli St. Waialua
Joyce A. Matsuoka	67-595B Kahuli St. Waialua
Ethel Nakagawa	624 Kalyoni St. Wah.

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...TION CONCERNING SURFACE MINI

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SIGNATURE	ADDRESS
James Yamada	66-050 Kam Hwy. Haleiwa 96712
Mineko Nishikawa	67-343 Kuhea Circle Waialua 96791
Edward M. Tomoba	67-595-C-KAHOI ST WAIALUA 96791
Thomas Y.H. Chow	67-160 Kam Hwy Waialua 96791
Harry Ishizuka	67-170 A Kam Hwy Waialua 96791
Richard Tagabilanes	66-496 Haleiwa Rd., Haleiwa 96712
Roy I. Nakatani	67-644 Kaui Pl., Waialua 96791
Diana Lee	68-032 Laau Paina
Lorna A. Hiera	61-226 Kam Hwy, Haleiwa 96712

(9)

PETITION CONCERNING SURFACE MINING

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SIGNATURE	ADDRESS
Frank Sabares	68-057 Laau Kuna Pl.
Hayden L. Burke	68-046 " " "
Freeman K. Kina	68-033 " " "
Carol A. Cheape	68-689 Farrington Hwy.
Joseph D Baker	68-695 Farrington Hwy
Gal J Culver	68695 Farrington Hwy

(6)

PETITION CONCERNING SURFACE MINING

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SIGNATURE	ADDRESS
Linda Bachal	R.R. 1 Box 10-A
Mr. R. D. Lombardo	68-001 Laau Paina
Mrs. R. D. Lombardo	68-001 Laau Paina
John Wullenkamp	RR#1 BOX 10CA
Mrs. E. Shimabuku	68-024 Laau Paina Pl.

(5)

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SIGNATURE	ADDRESS
Sharon Ubrigo	68-011 Laau Laina Pl.
George Auwi	61-187 IKUAI Pl.
Manny Banderaza	67-685 Crozier Dr.
Holly Ahe	66-431 Pilcai St.
Marilyn Acoba	67-409 Kekauna St.
Anita Calderon	61-350 Kam Hwy,
Chris Shaw	67-213 Farrington Highway
R. Golden	67-595 Kahuni St.
Francis Carlos	67-416 Alahaka St.
Raymond Bayza	67-116 Kuoha St.
Alan Nezaki	65-109 Wakalua Jp.
Edgar Hamiao	67-231 Kanaku St.
Peter K.S. Chi	21 - Pokai Way
Jane Fraser	67-440 Kekawa
Hollis Jamura	61-125 Punalau Place
Anne Nikita	67-183
Gene Kushikawa	67-343 Kukea Circle
Lelua Lo	59-770A Kam Hwy
Lance Mayfield	67371 Kuka Circle
Tony Tavares	67-211 Kamuela St.

(24)

T. ON CONCERNING SURFACE MINI

We the undersigned are opposed to the proposed sand mining operation at Mokuleia on both sides of the highway for the following reasons:

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SIGNATURE	ADDRESS
Ulura Lani	66-184 C Haleiwa RD.
Laura Rodrigues	61-214-A Kam. Hwy.
Debbie Franke	RR#1 Box 171 Haleiwa
Rachel Farr	66330A Haleiwa Rd.
Pamela Alameida	68280 Crozier Drive
Rosemary Subai	67-138 Kuhi St.
Terri Smith	P.O. Box 117
Bernadette Gouveia	67-157 Kamuela St.

(8)

TION CONCERNING SURFACE MININ

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	SIGNATURE	ADDRESS
1.	Miss C. Kuwahara	1-94-974 Awanani St.
2.	Lisa Watanabe	65-124 Hukilau Lp. Waialua
3.	Pia Townes	65137 Hukilau Lp.
4.	Linda Wheeler	59611 Akanoho Pl.
5.	Russell Yotsuda	61-350 Kam. Hwy.
6.	Nelson Yagyagan	67-300 Pen 5 T.
7.	Roy Yamanaka	67-019 NALUAHI St.
8.	Earl Yamada	66-230A Kam. Hwy.
9.	Arlene Hara	67-270 Kukea Circle
10.	Jill Morita	67-211 Kaualu St.
11.	Lori Miyake	67-066 [illegible]
12.	Michele Lee	59445 Alapio Road
13.	Grace Matsumura	66-457 Kam. Hwy.
14.	Mary Ann Salaber	67-259 Kukea Circle
15.	Kyoko Yamamoto	66-069 Haleiwa Loop
16.	Craig Schwickert	66-001 Alapio St.
17.	Alan Yuasa	66-452 Paala Rd
18.	Stanley Galiciao	67-215 Farrington Hwy
19.	Nanny Fidow	66-452 Paala Rd.
20.	Mark Fuss	67-377 Farrington Hwy.
21.	Michael Boe	61131 Punalau Place
22.	Mrs Sandra Dagoyan	67-423 Kukea Circle
23.	Todd Okazaki	67-247 Mauna Pl.
24.	Leinaala Moniz	67-157 Kaiona St.
25.		

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ON CONCERNING SURFACE MINING

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SIGNATURE	ADDRESS
Shelly Smith	[illegible]
Norine Urata	66-488 Paalaa Road
Janice Acaido	66779-C Halelua Rd.
Sabrina Wagoner	61-469 Kam Hwy
Brenda Cruz	67402 Goodale ave.
Audrey Baldoz	67-207 Kuhi St.
Tracy Otsuka	67-450 Alaloka St.
Mary Ann Salaber	67-259 Kukoa Circle
Sasha Bills	61-775 Papaloa Rd
Grace Matsumura	66-457 Kam Hwy.
Lynn Yamamoto	66-068 Halemio Rd

(11)

PETITION CONCERNING SURFACE MINING

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	SIGNATURE	ADDRESS
1.	Peni Panasi	66-452 Paalaa Road
2.	Barbara Anthony	68-007 Auwaiwa Road
3.	Gary Pescaia	94 - Dole Road
4.	Junior Calaustro	67-433 Aikanaka
5.	Sarah Shimabuco	67-327 Kukea Cir
6.	Noreen Kawamata	66540 Kam Hwy
7.		
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6

WAIALUA INTERMEDIATE & HIGH SCHOOL PTA
67-160 Farrington Hwy.
Waialua, Hawaii 96791

December 6, 1972

Mr. William E. Wanket
Assistant Planning Director
Implementation Division
City and County of Honolulu
629 Pohukaina Street
Honolulu, Hawaii 96813

Re: 72/CUP-12: CONDITIONAL USE PERMIT (Mokuleia)
(dated July 27, 1972)

Dear Mr. Wanket:

The Waialua Intermediate and High School PTA is deeply concerned over the request by Mokuleia Ranch & Land Company, Ltd. for a conditional Use Permit for a proposed sand mining operation. This project to take place on parcels of land mauka and makai of Farrington Highway in Waialua.

In view of the fact that approximately 152 acres are involved, averaging 80 loads per day; and that the removal and replacement operation would take an estimated 15 years, the increased traffic on Farrington Highway fronting Waialua Intermediate and High School will certainly pose a significant problem on the safety and welfare of our children.

The Waialua High School PTA hereby request that we be appeased of future developments and actions concerning the Conditional Use Permit (Mokuleia) sand mining project and further, it is requested that a public hearing be held to receive any questions and comments concerning the proposed sand mining operation by Mokuleia Ranch and Land Company, Ltd..

Your consideration over our concern on this matter will be appreciated.

Please direct all letters and or notices to:
Mr. Jacob Ng, President
Waialua Inter. & High School PTA
67-160 Farrington Hwy.
Waialua, Hawaii 96791

home 637-5814

Yours very truly,

Jacob Ng

Jacob Ng, President

c.c. Mr. Gordon Kuwada, Principal, Waialua Inter. & High School

JN:dn

637-5041

Special Meeting of the Planning Commission
Minutes
January 24, 1973

The Planning Commission met in special session on Wednesday, January 24, 1973, at 2:05 p.m., in the Conference Room of the City Hall Annex with Chairman Rev. Eugene B. Connell presiding:

RECEIVED
FEB 27 1973
State of Hawaii
LAND USE COMMISSION

PRESENT: Rev. Eugene B. Connell, Chairman
Fredda Sullam
Thomas H. Creighton
Antone D. Kahawaiolaa
Thomas N. Yamabe II

STAFF PRESENT: George S. Moriguchi, Deputy Planning Director
John Grant, Deputy Corporation Counsel
Ian McDougall, Staff Planner
Carleton Smith, Staff Planner

ABSENT: Roy R. Bright
James D. Crane

MINUTES: The minutes of January 10, 1973, as circulated, were approved upon the motion by Mrs. Sullam, seconded by Mr. Kahawaiolaa, and carried.

PUBLIC HEARING
GENERAL PLAN/DLUM AMENDMENT
WAIAWA
MAKAI OF INTERSTATE HIGHWAY, EASTERLY OF THE LEEWARD COMMUNITY COLLEGE
PEARL HARBOR HEIGHTS DEVELOPERS
MEDIUM DENSITY APARTMENT USE
(FILE #193/C1/32)

A public hearing was held to consider a proposal to amend the General Plan Detailed Land Use Map for Waiawa by redesignating a 6.2-acre parcel of land from Agriculture to Medium Density Apartment use. The subject parcel is situated on the makai side of the Interstate Highway, easterly of the Leeward Community College and identified by Tax Map Key 9-6-03: portion of 39 and 40.

The notice of the public hearing was advertised in the Sunday Star Bulletin/Advertiser of January 14, 1973. No written protests have been received to date.

Mr. Ian McDougall, staff planner, read the Director's report explaining the proposed change in use and the developers' plan to construct seven apartment structures containing a total of 300 apartment units. The Planning Director has recommended approval based upon the conclusion that the area is appropriate for an apartment development and the project would meet the need to provide moderate priced housing units in low rise structures, and further recommending that at the time of rezoning, the applicant be urged to file a planned development proposal for this project.

Responding to questions from the Commission, Mr. McDougall stated that the Department of Agriculture indicated no objection to the use of the 6.2-acre parcel; however, it expressed concern about the retention of the balance of the area presently in the State Agricultural area and containing some

watercress areas and artesian water supply for agricultural purposes. The parcel under consideration presently is not in agricultural production. The watercress areas are farther makai of the subject parcel.

No one testified AGAINST the proposed change in use.

Testifying FOR the change was Mr. George Houghtailing, planning consultant and civil engineer for the developer. He stated that they have reviewed the Planning Director's report and accept it as presented.

Responding to questions from the Commission, Mr. Houghtailing responded as follows:

1. No shopping facilities are planned within the development area because other facilities are available nearby; for instance, in the Waipahu business areas and the Pearlridge Shopping Center in Pearl City.

2. There is a good possibility that the Federal 236 Program would be discontinued. When that happens, the developer/owners have stated that they would finance this project under conventional financing and follow the same criteria established under the 236 Program. The criteria set forth relate to cost and rental.

There was no further testimony. The public hearing was closed and the matter taken under advisement upon the motion by Mr. Yamabe, seconded by Mr. Creighton, and carried.

AYES: Yamabe, Creighton, Kahawaiolaa, Sullam, Connell;
NAYS: None;
ABSENT: Bright, Crane.

ACTION: Upon the motion by Mr. Creighton, seconded by Mr. Yamabe, and carried, the Commission accepted the Planning Director's recommendation and recommended approval of the proposal to amend the General Plan Detailed Land Use Map for Waiawa.

AYES: Creighton, Yamabe, Kahawaiolaa, Sullam, Connell;
NAYS: None;
ABSENT: Bright, Crane.

PUBLIC HEARING
CONDITIONAL USE PERMIT/SPECIAL USE PERMIT
MOKULEIA
FARRINGTON HIGHWAY
NEAR POLO FIELD
(SAND MINING)
WARREN KOBATAKE
dba WARREN CORP.
(72/CUP-12 and 72/SUP-3)

A public hearing, continued from January 17, 1973, was held to consider an application for a Conditional Use Permit and a Special Use Permit to conduct sand mining operations on property located on both sides of Farrington Highway in Mokuleia, identified by Tax Map Key 6-8-03: parcels 11, 15-17, 19, 20, 30, 33, and 35, and containing approximately 152 acres.

The public hearing was kept open and the application was re-advertised to include the State Special Use Permit portion.

Mr. Carleton Smith, Staff Planner, noted that a supplementary report from the Director with an attachment which

is an environmental submission by the applicant, was submitted to the Commission today. The report recommends the addition of another condition which relates to the number of truck loads of sand per day that may be taken from the mining area.

Mr. Smith then recommended that the Commission keep the public hearing open since the Department is still awaiting replies from the Department of Social Services and Housing and the Office of Environmental Quality Control. The DSS&H has been asked to further clarify its position taken originally, and the OEQC has been asked to comment on the sufficiency of the environmental submission. In addition, the OEQC has submitted copies of three letters. One is from the State Department of Transportation taking some exception to the environmental report; the second is from the Department of Land and Natural Resources with a "no objection" type of comment; and the third is from the Environmental Center at the University of Hawaii giving a very detailed report which the staff has not had an opportunity to analyze since these were received just this morning. He stated that copies of these letters will be made available to the Commission members.

A short discussion was held whether to keep the public hearing open as requested by the staff. Since there were a number of persons in the audience ready to testify, the Commission decided to receive their testimony and decide later whether or not to keep the public hearing open.

Testimony IN OPPOSITION to the application was heard from the following:

1. Mr. J. C. Morse:

   Mr. Chairman, my representation is already on file from the last time. I have a couple of new things I'd like to bring before this Commission. I've just given to Mr. Smith and I'd like to give copies to the Commissioners of suggested revisions to the conditions that were recommended to you by your staff. This is made up on the same schematic as revisions to legislation. I've kept in all the language that was originally in the staff's recommendation and they suggested revisions to them. This was, of course, assuming that a permit would be granted.

   Last time I mentioned to the Commission that there had been, in connection with the applicant, Warren Corporation's previous sand mining in Haleiwa, a lawsuit filed. Since that time, I've been able to dig out the pleadings on file in court and just to put the facts on the record, it's a lawsuit filed by, I believe, 12 residents next to that sand mining operation, asking a total of $180,000 in damages--$60,000 of which is punitive damages. The basic allegations are noise, dust, damage. And the plaintiffs in that case state that the Warren Corporation disregarded the conditions that were previously--or that were in the previous permit--Resolution 67 that was issued in 1970 by the City Council. There has been no determination of that case, at least, on the record in court. It is simply waiting trial at this point.

   I understand that Mr. Hertlein testified last time. I did not stay

to hear his testimony. One fact that I understand he stated as a fact, was that water never came more than 150 feet inland from the beach--outside of a tsunami, of course. There are people here who can testify that that is not correct. In both 1970 and 1971, wave action from storms--not tsunami--came at least 400 feet back of the beach. I'm sure some of the people here can testify to that. I cannot, from my own personal knowledge, but some of the residents can.

Another subject that came up at the last hearing was the need for mining sand in Mokuleia. One of the alternatives that's been talked about was the research that's gone in ocean sand mining. Since that time, I have seen four different reports that were issued by the University of Hawaii, the Sea Grant Program, which is under a Federal program, as you probably know. I've made a few copies, not enough, unfortunately, for everyone. I've selected pages out of these reports. I'm not representing that they are all the pages involved and I don't have enough copies of the report to give. I'll be happy to give the Commissioners these pages and I've underlined in red, some areas I think are pertinent. Perhaps, if you want to go further, I can get these publications from the University.

The Environmental Center's memorandum which Mr. Smith said he just received today, I did want to comment on that. I assume you will be getting it. This was dated back in November of 1972 and I don't know why it wasn't in the Planning Commission's file. Certainly, Mr. Smith didn't have the advantage of looking at it when he made his initial recommendations to you. It is comprehensive, as pointed out, it has some good points.

The last point I'd like to suggest, and I think probably I would refer this to the Corporation Counsel's office, is whether there is any problem under the National Flood Insurance Program with the proposed mining up here. I don't know the answer to that. I did read some of the regulations briefly in the Supreme Court Library today concerning restrictions. I do know that some or all of this area is in the designated flood prone area. This, as you probably know, is that people in that area can get Federal Flood Insurance at a very cheap rate, perhaps, 10 percent of the rate that would otherwise be charged. As I understand it, if there are violations of whatever land use restrictions in this area, the people would stand to lose the benefit of this insurance. I don't pretend to be an expert, but I think this should be reviewed or perhaps a report from the Corporation Counsel to you. Thank you very much.

(There were no questions of Mr. Morse.)

2. Kathleen Maurer:

Mr. Chairman, I, too, spoke last week but since that time I've been up to the area and have done some further research and my testimony today will be different from last week.

My name is Kathleen Maurer and I'm from the Department of Social Services and Housing. I'm representing Myron Thompson. First of all,

I have a question for Mr. Smith. I just want to know when he requested clarification on DSSH's position because I haven't seen anything about it.

(Mr. Smith's reply was that the letter was sent out last evening so the DSSH probably have not received it yet.)

Warren Corporation proposes to mine 1.67 million cubic yards of sand from 152 acres of coastal land on Oahu's North Shore during the next 15 years. The size of the operation and the time period involved clearly indicates massive potential for environmental change. My department, the Department of Social Services and Housing, feels that those agencies charged with evaluating Warren Corporation's request, as well as the people of the State of Hawaii, deserve to know what these ultimate effects might be. Before action can be taken on a proposal of this magnitude, a thorough and well researched study of this wide-ranging impact must be made. The present information provided by the Warren Corporation is inadequate. It is riddled with inaccurate statements and nebulous generalizations. On the following grounds, we question the validity of Warren Corporation's existing study:

Warren Corporation's study--referring to vegetation in the Mokuleia site--says: "The present vegetation on the subject land includes various grasses which are no more than one foot high; there are no tall bushes or Halekoa trees."

I was up there last Sunday. I walked through the area. The grasses are three to four feet high. There is Halekoa in the subject area as well as Keawe, other tall bushes, several Coconut palms, and Monkeypod trees.

Further, the Warren Corporation report states, "Also scattered throughout are tall pine trees which are concentrated in Area 2." (If you are going from here, it's the first area on the right.)

This report is unclear on the location and the number of the trees and, furthermore, they are not pine trees--they are ironwoods--ironwoods are not pine. And there are many of them in both Areas 2 and 4. The report states, "It is not anticipated that any of the tall pinewood trees will be dug up or cut."

I submit that it is nearly impossible to mine Area 2 without digging up or cutting any tall ironwood trees. Furthermore, digging near the roots can be seriously destructive to these trees.

In addition, Warren Corporation intends to locate berms to hold down noise pollution. According to the Environmental Center report which the University of Hawaii produced, these large berms located near these ironwood trees would probably kill the ironwoods.

On the subject of revegetation, the report from Warren Corporation lists five grasses. According to the UH Environmental Center study, one of these listed species is non-existent. To clear up such confusion, we suggest that both the scientific and common names of revegetation grasses be listed in future studies.

The type of vegetation which Warren Corporation intends to put in the buffer zone is not specified. This is important because the vegetation has to meet certain qualifications to serve as a buffer. Particularly, for view, it has to grow fast and it has to be tall.

In addition, last week, Mr. Hertlein, in fact, testified to the effect that the berms would be made of sand. I wonder if the Warren Corporation has made appropriate plans to vegetate sand berms.

In addition, the dust problem. According to the report by the Warren Corporation, "Since sand mining operations will cease at 5:30 p.m., no dust will be generated after this time." Two problems. At night, because of the coastal area, the breeze is generated from mauka out to the sea. This will bring any dust from any storage piles or from the loose soil in the reclaimed areas and from the area mauka where the soil is being dug up to refill the beach area. The wind blowing mauka to the sea will bring any possible dust into residential areas.

And then the Warren Corporation has failed to evaluate any possible ultimate effects. The Environmental Center report suggests that since this beach area may not yet be stabilized a natural alteration of it may occur through storms or whatever, which would eventually cut through the 150-foot setback zone and erode the dirt backfill. There is no evidence presented in the report that the beach is, in fact, stabilized.

As far as noise is concerned, I was up at Waialua Intermediate and High School two days ago. At present, there are heavy trucks going past there. We've had a decibel meter and in the classroom, at a distance of three feet, I had to shout to communicate with the person who was running the decibel meter whenever a truck went by. Now, the trucks that are hauling out of there now would be similar to those that Warren Corporation would be using to haul their sand.

In addition, one of the alternatives which was already presented is undersea sand mining. One problem here is that at present the law has been interpreted to prohibit such undersea sand mining. However, I spoke with a gentleman today from DPED who has drafted a bill and introduced it in the present legislative session which would, in fact, legalize undersea sand mining. The only problem is you would have to get clearance from DL&R--some sort of permits from them and also from DOT Harbors Division.

The general tone of Warren Corporation's report gives DSSH grounds for questioning its reliability. To quote a few passages: "The improved landscape area will hopefully be the end product." In addition, they state: "We understand that the supply of sand will be exhausted in the not too distant future."

In speaking of offshore sand, they say: "The quality, versatility and cost are highly suspect." So, that just indicates an extremely unscientific approach.

In addition, I have received a reply to my first comments that I sent to OATC which got transferred to Warren Corporation and their replies to my comments are no more soundly based--very disappointed.

Thus, because of these questionable points in the study provided by Warren Corporation on their proposed sand mining project, the Department of Social Services and Housing and its Director, Mr. Thompson, repeats its recommendation that a thorough and detailed scientific study be completed before further action is taken.

In addition, we request that the natural aesthetic beauty of this particularly unique area of Oahu be recognized, considered, and above-all, appreciated. Thank you.

Questioning of Miss Maurer followed:

CREIGHTON: You spoke of taking a decibel count in the classroom. What was the result of that? Did it indicate decibel levels above or below the CZC permitted levels?

MAURER: As far as--I don't know CZC's. I talked with the Department of Health and they said that State Standards now supersede the City and County Standards. In this particular case, the trucks were not in violation of the Standards. The Standards are 94 decibels. The reading that we got, taking random samples and it was a very fine scientific experiment, was 72 decibels. I can give you the citation for it. It says: "Communication at 24 feet distance with above 60 decibels can only be accomplished through shouting." Now, at 24 feet we had 72 decibels. So it's impossible to hold classes there. I was out there at five. You know, in this particular case, the State Standards are simply absurd because it's a special case.

YAMABE: A question of the staff. What is the CZC maximum amount of decibel standard?

MORIGUCHI: This varies, Commissioner Yamabe. It depends on the position of the reading taken. Now, the pertinent question here would be, how, and we might address this to Miss Maurer later--how were their readings taken and from what point, etc. There is a problem, as you know, too--the various experts--there is a problem of isolating other sounds that impact on the meter and this becomes a highly technical type of procedure and we would recommend that such efforts only be conducted by engineers--accoustic engineers--highly versed, technically, in the area. As an example, Commissioner Yamabe, the zoning requirements for industrial areas require that certain readings be taken at the property line. And if we're talking about being actually at the site of activity, this would change the readings considerably. So, the Standards should be viewed under each of the cases, the circumstances, involved.

YAMABE: Is it possible for the staff to take a reading in this particular area before the next meeting to determine as to whether this would exceed the maximum allowed under the CZC, as far as the decibels are concerned?

MORIGUCHI: I'm sure this can be done. We'll have to ask the consultant's accoustics engineer to do this for us, Commissioner Yamabe. Carl, do you have any further information on this?

SMITH: I'd like to make a point that we are not really talking about CZC requirements when we're talking about the noise generated by traffic. This is controlled, as Miss Maurer points out, by the State's statute on traffic noise generated by traffic on the highways. Under the standards now permitted, I hope I can remember this, at 20 feet from the center line of the traveled lane, a heavy vehicle is permitted to generate 96 db. At 50 feet from the center line of the traveled lane, they are permitted to generate 84 decibels. When this was--we have done a little bit of research on this--and when this is laid on a map, on a plot plan of the school, the 50-foot line cuts through a certain number of classrooms. The noise levels can be expected to be up to 84 decibels at that 50-foot line. We have also done some other calculations but, basically, that's the situation.

YAMABE: Mr. Chairman, the reason for my questioning is that I would like to determine in my own mind, weighing the testimony here, as to whether the conformance to the requirement of the State Statute or whether it be the City Ordinance, whether this is sufficient or not. I'm under the impression that we do have a very stringent law in this area. However, the testimony as given to us, inasmuch as it does not exceed the maximum allowed, this is quite a disturbance to the people involved--whether it be classroom or elsewhere. What are we talking about? Are the requirements inadequate? If it is, should we do something about that requirement or the law or the statute or the rules or regulations or what may be? Or, should we rely upon the already established rules and regulations and decide as to the fact as to whether it is detrimental or not? We have to have something to hang onto--something where we can hang our hat on.

MORIGUCHI: I'm sorry, Commissioner Yamabe, is this question directed to the department?

YAMABE: No. I made the statement so that you might consider this. I don't know whether you can take a reading or not but....

MORIGUCHI: You mean to actually take a reading at the school site that we're looking into?

YAMABE: Either that or I'll further discuss it when we take it under advisement. We won't be closing it, but...

MORIGUCHI: Fine.

CONNELL: Is is possible, George, that these are requests that can be made of the State agencies? Commissioner Sullam?

SULLAM: I would like to know--this is a question directed to the staff--whether a plan or a map has been made by either the Department of Land & Natural Resources or some other body indicating where the sand deposits are? Obviously, we need sand for construction and we should be looking at the overall picture and look for the least harmful places as far as the environment and, certainly, the people are concerned, rather than waiting until someone comes to us, to the City, asking for special permits. We should already have a map before us telling us where the desirable places are. Has such a map ever been prepared?

MORIGUCHI: Commissioner Sullam, to our knowledge there is no such map prepared that would indicate sites that might be suitable for sand mining. Of course, we do have information indicating where sand basically underlies the strata but nothing that indicates we should have quarries here or there over the next number of years. I think it's a situation where quarry operators apply to the various agencies for permits as they discover they can mine economically, but there is no such map as you speak of.

SULLAM: Then it's all right to say we have no way of evaluating alternatives? Obviously, sand is needed and if an applicant comes to us and we deny it, that means we are limiting the supply of sand.

MORIGUCHI: Yes. About the only thing we can do at this point and time is to ask the applicants whether or not he has considered other options and whether or not he is free to devulge his findings about these other options to us.

MAURER: Mr. Chairman, may I make two more statements? Number one, I just want to comment. I spoke with the principal out at Waialua Intermediate and High School and he told me that they had been forced to discontinue the use of one entire classroom because of the noise level in this particular classroom. The second thing was about the qualifications of the young man who took the decibel readings. He is a graduate student at the University of Hawaii, worked under Dr. Burgess whom most people recognize as an expert in accoustics, and the readings were taken under scientific basis.

CONNELL: I think the only question that might be asked is, is he an expert?

MAURER: Not himself, but you know, we're on the way up.

CONNELL: So he's an expert on the way up?

MAURER: You've got to get there some way.

3. Joyce Wrobel:

Mr. Chairman, my name is Joyce Wrobel and I am the owner of Mokuleia Beach Colony. You have my letter on file.

My concerns are in the letter regarding the noise, the dust, etc. According to the general standards for Conditional Uses compliances and requirements and the Comprehensive Zoning Code, the proposed Conditional Use "will have no more adverse effect on the health, safety or comfort of persons living or working in the area, and will be no more injurious, economically or otherwise, to property or improvements in the surrounding area than would any use generally permitted in the district. Among matters to be considered in this connection are traffic flow and control; access to and circulation within the property; off-street parking and loading; refuse and service areas; utilities; screening and buffering; signs, yards, and other open spaces; height, bulk, and location of structures; location

of proposed open space uses; hours and manner of operation; and noise, lights, dust, odor, fumes and vibration." I'm sure you know that.

One concern that has commanded very little attention is the danger of the mining area to our children. There are many of us who live at Mokuleia Beach Colony that have youngsters. We live next to the Polo Field and do exercise limits on our children with regard to dangers in the area. However, this is a new one. According to the Comprehensive Zoning Code, there must be a plan showing safeguards for access by children to dangerous areas. "The plans for the exploitation phase shall demonstrate the feasibility of the operation proposed without creating hazards or causing damage to other properties. This plan shall also show the manner in which safeguards will be provided including those for preventing access by children and other unauthorized persons to dangerous areas." I would like to know if such a plan has been submitted by the applicant. And, berms are not a safeguard for children.

CONNELL: Mr. Moriguchi, has the Planning Department received any such plans?

MORIGUCHI: We have no such plans, Mr. Chairman.

(There were no questions of Mrs. Wrobel.)

4. Vincent Mazza:

I'd like to make a brief statement here and I concurred, I believe, the last time I met this Board--last week with what was said. But, I would think that there are a few things that were not brought out. Especially by Mr. Hertlein, he seems to be talking of certain size granule and I believe he was addressing his remarks in the way of sand--that at a 20-knot wind, it would not go further than 170 feet. Now, I think he was addressing his remarks to the sand. And the other people who live out there are concerned with dust--not the sand. I'll agree that scientifically the sand will go, maybe, 150 feet, but we're talking about dust that is deposited and stirred up again by trucks and then deposited and stirred up again and I think this is what people out there are concerned about.

Now, I have listened to the testimony here and one of the things--the primary things--that we should be concerned about is, and I've heard it addressed a little bit more today, "Is this the only place you can get sand?" I think that should be our primary purpose.

From the testimony I've heard, it looks like it's going to cause quite an impact and I would object to this if it was going to be done down at Waimanalo--anyplace on Oahu that would interfere with people in their normal living, peace of mind, and the enjoyment of their property. That's part of the real estate that you're supposed to be able to enjoy--your property, etc. This, I would think, would seriously interfere with this, so I've addressed my remarks as a Hawaii resident, not as anybody that lives out there because I don't

live out there. I own property out there and I'm concerned with the property being downgraded.

I would also like to address my remarks concerning the landowners or the corporation that owns the land out there. As I recall, he said that land on the mauka side of the highway was self-supporting in the way of cattle. In other words, he was able to hang onto this land, pay his taxes--it was self-supporting. So it isn't really any hardship on these owners, I would think, in that area. On the other side of the highway he has some very valuable piece of property that he can sell if there is a drain on his income, at fantastic prices, and I am sure there are a lot of interests who would like to invest in this area. But I don't think he has any hardship that I can see in this area, but he has to do it to make ends meet. I should think that would be one of the considerations in considering or, in my opinion, downgrade this part of the country. I think I will drop the rest of my remarks and save you time here.

(There were no questions of Mr. Mazza.)

5. Sanford Parker:

I testified the last time. I'm Sanford Parker. I heard remarks from one of the people that we really haven't got too big a crowd at these public hearings. I want to let you know what a hard job it is to come in from Waialua and Mokuleia to a public hearing. It's a good hour's drive. You can't find a place to park. The last public hearing, we were here until six o'clock. When we got home finally, it was about 7:30 p.m. or 8:00 p.m. Most of our people who work everyday can't come to a public hearing. Maybe it would be nice if we had a public hearing at the Waialua High School instead of 40 of us trying to get into automobiles and come on in. Since we're going to carry the public hearing over, maybe we could have the next public hearing at Waialua.

CONNELL: Let me respond to that, Mr. Parker. Almost every public hearing that we have, they would like to have it held in their area. The Commission, in the past, has only met every other week except for the last two years where we've met every week and we generally run until six o'clock once a week. Our problem would be that, I think, some of us might have to give up our occupations in order to be able to have these public hearings all over the island. The second point is that the Commission does not make its decision based upon the number of people that show up. We're interested in what the testimony is--for and against a particular application, so if we keep hearing a lot of redundant testimony, that doesn't make it any more true or false.

PARKER: Of course, it is true that you do have public hearings outside of this room. We've had a couple of public hearings in Wahiawa.

CONNELL: Not the Planning Commission.

PARKER: Who would hold the public hearing then?

CONNELL: If it is a Planning Commission public hearing, it is held in this room and with the exception of this, occasionally, we have gone to the City Council Chambers but the Commission does not hold public hearings in various parts of the island. Now, it may be one of the other governmental agencies that may be portions of the City Council but it's not this Commission.

(There were no questions of Mr. Parker.)

6. John Parker:

My testimony is the same as the other gentleman's, concerning the content of the sand. I brought some down. I'd like you to all take a look at it. If you put your hand in it, you'll find a lot of fine particles in it. I did take some while I was down there, shoveling away and threw it up in the air and, of course, the sand goes straight down and then there's the general whit (fine particles) that just kind of floats off and there was just a very slight tradewind.

I've nothing more to say then what the other man said about it, but if you all just would like to take a look at what it sort of looks like. (Submitted two packages of sand.)

Testimony FOR the application was then heard.

1. Allen I. Marutani:

Mr. Chairman and members of the Planning Commission, my name is Allen I. Marutani and I represent the applicant corporation.

With respect to the suggestion that was made regarding keeping the public hearing open, I would like to offer my suggestions to the Commission. My suggestion would be that the public hearing would be closed after the testimony is taken today, subject to the receiving by the Planning Commission of the two requests that Mr. Smith had alluded to, with an opportunity on the part of the applicant corporation, within a reasonable time thereafter set by the Commission, to answer any queries or problem areas that might have been received by the Commission respecting these two communications, and that thereafter, if the period of time within which the applicant corporation is required to answer passes, either without the applicant corporation answering or with the applicant corporation having submitted its comments, that the public hearing be closed. This would be my suggestion inasmuch as it appears that we've already gone one public hearing last week. We are now in the process of going through our second public hearing and that, I understand, there is a provision further that there is a 15-day period after the public hearing is closed before which any action can be taken, and I think Mr. Smith testified that, in effect, this would be 21 days, which would be three weeks. So, as long as the public hearing is kept open, this 15-day period is also and, likewise, kept open. So my suggestion would be that inasmuch as there have been two public hearings, that the public hearing be closed, subject to the lmitations that I have just mentioned.

The other comment that I would like to make is with respect to the public hearing in Waialua High School. The staff of the Planning Department did call a public hearing on this particular application some time in December of 1972 concerning this particular application at Waialua Intermediate and High School which was the place that one of the witnesses had suggested that the Planning Commission hold its public hearing. But, this was an informal hearing held by the staff of the Planning Department.

Now, at the last hearing, we had presented testimonies by Mr. Gordon Cran from Mokuleia Ranch Company and also a testimony by Dr. Fred Hertlein, and we would like to continue on with the testimonies from various parties that we have asked to come here before the Commission to testify. So the first person we'd like to call to the stand to testify is Mr. James Higa who is representing the Home Builders Association.

CONNELL: And this is testimony which the Commission has not previously received?

MARUTANI: It has not.

MR. JAMES HIGA:

My name is James Higa and I am Vice Chairman of the Legislative Committee of the Home Builders Association of Hawaii.

(Mr. Higa read his prepared statement as follows:)

"Our builder/members construct almost 90 percent of all the single-family dwellings on Oahu and the general membership is involved at all levels of residential constructions on all the islands. Our association does not normally take positions on individual requests but we do so when it affects the major segment of our industry. Price of housing in Hawaii is skyrocketing and this is due to many causes, one of which is the scarcity of materials. And, in this particular case, sand--sand which is used in making concrete slabs, blocks, and other purposes.

"We want to point out the effect of lack of mining of inland sand would have on the entire cost of home building on the island if it is prevented. As an example, an 8x8x16 concrete block on the island costs 82 percent more than it would on the mainland. Another example is concrete for a typical house slab costs 46 percent more than it would in California.

"These figures were obtained from a study done by the Planning Committee, the City and County of Honolulu, entitled: "Elements of Residential Policies of Housing Programs and Planning Areas" published in December, 1971.

"One of the determining factors in this price difference is the scarcity of materials and, in particular, lack of sand which is an essential material. There are virtually no other known deposits of

inland sand available at this time on Oahu, as testimony later will show. This means the only source would be expensive crushing of rocks to keep our industry going. There is no cheaper sand than naturally-mined sand which would be obtained by the applicant.

"We feel that the alleged problem of noise, dust, and other problems can be adequately handled by the Warren Corporation. Based on this, we urge favorable action on the application by Warren Corporation.

Legislative Committee
HOME BUILDERS ASSOCIATION OF HAWAII"

(Questioning of Mr. Higa followed.)

YAMABE: Mr. Higa, do you have any idea as to how much sand you will be able to extract from this area? and within what period? I'm trying to get to the point of depletion.

HIGA: I don't have those facts available. I think testimony later on will give you those facts.

YAMABE: Has the Association considered synthetic or whatever substitute that they would probably be needing in the future since the fact has been presented that sand is being depleted, not only on Oahu but also on neighbor islands?

HIGA: No, there has been no study done at the present time.

CONNELL: Any further questions? (There were none.) Thank you, Mr. Higa.

MARUTANI: Mr. Chairman, in response to Commissioner Yamabe's question regarding the amount of sand that is expected from this operation, if it is in order, we have made some very rough calculations. In Area No. 1, we expect to have 213,333 cubic yards of sand. In Area No. 2, 568,889 cubic yards of sand. In Area No. 3, 611,556 cubic yards of sand.

YAMABE: What is the annual use? Do you have any idea of the annual use of sand?

MARUTANI: According to the information that we have, there is an approximate use by the construction industry of 500,000 cubic yards of sand in Oahu, on an average basis for the past three years, 500,000 cubic yards per year. We have no statistics as to the total amount of cubic yards that is used in other areas as well, such as public beaches and other areas. But the information that we have is in the construction industry.

YAMABE: Would it be a reasonable guess on my part if I say that this area, representing three areas--1, 2, and 3,--will probably deplete the sand, giving the industry approximately 2-1/2 years' supply?

MARUTANI: Yes, probably that is true, except that it is not our intent to remove everything within 2-1/2 years. It will be incrementally done over a period of time.

YAMABE: Do you have any idea how much sand is being mined at this time in some other areas?

MARUTANI: I am not in a position to submit this information, but I would imagine that Molokai would be the substantial source of supply of natural sand at this time. There is manufactured sand which is available and which is on the market at this time, but as far as natural sand is concerned, the information that I have is that Molokai is a substantial source at the present time.

YAMABE: You don't have the volume?

MARUTANI: I do not.

CONNELL: Are there any questions the Commissioners would like to ask? (No response.) Mr. Marutani, perhaps you will get to this with additional testimony. Two issues that have been raised--one, is the dust level, and secondly, on protection for children. Mr. Higa indicated that the dust problem had been met to his satisfaction or was going to be met to his satisfaction. Can you tell this Commission how you are going to control the dust problem?

MARUTANI: The control of the dust problem will be by constant watering of the dirt--constant moisture in the digging up of the dirt in the fill area or in the dirt area; watering of the dirt in the transportation of that dirt from the fill area or the silt basin area to the area that the dirt will be used to replenish, and; thereafter, from that point on a constant watering again when that dirt is removed from the truck down into the area. Inasmuch as the area to be worked on, at any one particular time will not exceed three acres, only one of which, about one-third of which will be used for the actual sand mining operation, and the actual refilling of dirt, so in approximation, it will be about one acre at any one particular time, so we feel that by our taking precautions to moisture, to keep the dirt moistened as well as to limit the area of operations to a small, relatively small area within the whole area, that this is the way that we intend to keep the level of dust down. We also would ask Dr. Hertlein to present additional testimony regarding fugitive dust from the dirt which we intend to call later on this afternoon.

CONNELL: He'll have more information on this? Because out of the two questions, in response to what you said, one, after wetting down the operation, whether that moisture level will stay moist long enough on toward the evening when the winds come up? Is that going to keep the dust from moving around? Are you going to have the wetting operation going on all through the night?

MARUTANI: This is a comment that was raised by one of the witnesses and I've asked Dr. Hertlein to comment on that point.

CONNELL: Do you have some comments regarding protection for children?

MARUTANI: The only comments that I have on that point would be that we would have to have some type of signs--big posted signs--in that immediate vicinity to warn children not to enter into this area and to

alert the men and the people there to keep the children out of the area. There will be berms that will be set up and that might be a physical barrier to the actual operations area.

CONNELL: So the protection for the children is going to be depended upon their ability to read?

MARUTANI: Not only that, we have, we intend to instruct the men to be wary of wandering children in that area.

CONNELL: I'm sure the Commission would want to give some thought to that. Mr. Marutani, who else would you like to call?

MARUTANI: I'd like to call Dr. Uehara who is a professor at the University of Hawaii to the stand.

DR. GORO UEHARA:

Like all professors, I've got quite a bit of written material. My name is Goro Uehara and I'm with the Department of Agronomy and Soil Science, and my specialty is Soil Science. I'd like to provide information on the distribution and whereabouts of sand in the State of Hawaii.

There are three major sources of sand in Hawaii, and by sand, I'm referring to beach sand which has got some problem. We do import a very small amount of silica sand from Australia. As you go to Lake Michigan, the sand there is white and it has about the same particle size distribution as Waikiki Beach but it is composed of silica which is quartz sand and has a very different composition. In Hawaii, beach sand is calcium carbonate and the remains of shells and coral so that it has a dual purpose as a building material and as a source of lime. The major source and the most visibile supply of sand is along the beaches and currently we are mining sand from the Island of Molokai. This is going to end in 1975, I understand.

The other area is the deep-sea source. Research under the Sea Grant, the University of Hawaii has about five or six publications on the whereabouts of this sand and they are very intensive publications on the whereabouts. For example, this technical bulletin is entitled: "Hawaiian Shallow Marine And Inventory--Part I." They describe a major sand deposit on Ahu o Laka Sand Deposit, Kaneohe Bay, Oahu.

This second report, "Reconnaissance Sand Inventory: off Leeward Oahu."

Third, "Reconnaissance Sand Inventory: Off Leeward Molokai and Maui."

Fourth, "Potential of Offshore Sand as an Exploitable Resource in Hawaii."

They go off onto Maui, Hawaii, and Lahaina--off Lahaina, Maui, and Molokai. If you read the report, you'll find there are thousands of millions of cubic yards of sand so that there is no limit of how much sand we have. It's a matter of cost, but more important than cost, we have another report written by James Levin and approved by the

Chairman in April 29, 1971, and it is entitled: "A Literature Review of the Effects of Sand Removal on a Coral Reef Community."

Let me read for you page 24, a summary and conclusion of this report. I'll just read the first paragraph and I'll leave this with the Commission, for your information. You think you are going to have problems in approving removal of sand from land, wait until you start getting requests for removal of sand from the ocean.

(Dr. Uehara read from the bulletin mentioned.)

"1.5 Summary and Recommendations

Sand mining and other dredging activities alter the reef environment by producing suspended and deposited sediments, removing the original bottom-water interface and deeper substrate material, creating new deep water areas, and possibly causing the release of chemicals from the sediments. All of these conditions can adversely affect the life of a coral reef community. In some instances the effect may be of short duration with the rapid re-population of an area; in others the effects may be of long duration with the ultimate degradation of the reef community."

They go on and on and on and describe the consequences of mining from the ocean. The alternative to--this is not an alternative. The mining of deep water sand is not an alternative at this point. I am sure that in 25 years or sooner, we will be forced to go to the ocean.

The third alternative--I've mentioned the beach, I've mentioned the offshore which is merely a study, it's not an alternative, is the deposit on land, and the Commission, I think, suggested that we'll just have to take what people have to say about where the sand is. In fact, this is not so.

We have soil survey of the Island of Kauai, Oahu, Maui, Molokai, and Lanai. This is a five-island survey and in this survey, all of the different soils in the State, or at least the islands, are delineated very, very carefully. I have a report for you gentlemen. This is a soil survey map of the Mokuleia area and there are two pertinent soils in this area. No. 1, the "Hauka" sand and the "Batu", the Mokuleia series.

The term "Hauka" comes from Puerto Rico where the similar soil is identified. It is beach sand but it is not on the beach. It is inland and represents an old relic shoreline which developed nearly 30,000 years ago when ice was much lower in the South and North Poles when the sea level was higher. This beach sand extends underneath the Mokuleia soil and mining operation would remove sand from the Hauka soil and the Mokuleia soil. The boundaries are carefully delineated on this map. By the way, this thing came out only about three weeks ago, for your information.

There are other areas where similar soils occur on Oahu and you can look in this map, but I think I can appeal to your own experience to determine where they are. For example, if you go to Bellows Field on a Sunday for a picnic, you'll find that the sand, in fact, does extend quite far inland. In fact, the mining operation in Waimanalo represents an old indurated sand dune. If you drive along Kalaheo Avenue in Kailua, that whole area is beach sand. If you play golf on Kahuku Golf Course, that's all beach sand. But you'll notice that most of the areas on Oahu are already being used and populated. The only open area, relatively open area, represents the point from Haleiwa to Kaena Point. And, here, we have beach sand of sufficient good quality for mining.

So the alternative reduces to, and if I can summarize, three areas. The beach, which we cannot touch any more, and we certainly don't want to mine the beaches; the ocean, which will probably be mined in about 25 years; and now, the beach deposits on land. And if we were to look at the distribution, the large distribution occurs in the Mokuleia-Kaena Point area. Thank you. I'd like to leave these reports with you. (The five reports mentioned were filed.)

(Questioning of Dr. Uehara followed.)

SULLAM: Dr. Uehara, since you say that the ocean sand mining would be very harmful to the environment, and even though you say there is unlimited supplies of sand everywhere, it seems like they are not really accessible for many reasons. Would you, or do you concur with this thinking? Do you feel that we really don't have unlimited resource as we would think at first glance?

UEHARA: I think the supply is adequate. It's simply a matter of economics of mining the material and the effect on the environment, particularly on the existing quarry you are talking--you are referring to the marine sand deposits?

SULLAM: Yes, I'm referring to that, and to this as well. Apparently, there are long-range effects that could take place.

UEHARA: In the ocean?

SULLAM: Well, in the ocean and here as well.

UEHARA: Let me add a point about the mining operation in Mokuleia. The soil is the Hauka sand and the Mokuleia series. In the mining operation, the sand will be removed and the soil material will be replaced in excavated areas. The soil material will come from the soil which we call the Kaena series. Now, by doing so, the long-term effect would be beneficial because you are simply removing inert sand which is good for construction material but which is very poor for crop production, and by doing so, you are going to improve the pasture quality. Sand simply can't hold water. As you know, sand is droughty. Soil has finer particles which--fine pores--which can retain the water so that the droughty conditions can be removed. Then the agricultural potentials of that area would be much improved by removing sand and adding soil.

SULLAM: In your mind, you feel that this is one of the very best places then to mine sand?

UEHARA: I'll have to admit that I haven't made a very thorough study of this area, but if you look around the shorelines of Oahu, and you think, based on your own experience, the unpopulated areas on Oahu, the last remaining area is that point near Kaena Point. And I think that all we have to do is appeal to your knowledge of the population densities on this island. If we did find other deposits, you will find that you will enter areas which are much more highly populated. The problems aren't going to be lessened.

YAMABE: Dr. Uehara, you mentioned that we have ample supply of sand. However, you did also indicate that you did make a thorough study as to what areas may be best, what areas might be mineable, what others may not. Are you at liberty to say that you might work with our staff here in determining what might, or where might be the best area, etc.?

UEHARA: I think so, given sufficient time and resource. The information is here. It's simply a matter of having someone delineate the boundaries and make some rough computations. I might also add that on the island, in the State of Hawaii, we have about 40 million cubic yards of land on the beach--along the beaches. We are currently using a half-million cubic yards per year, and according to this report, if we continue to use sand at this rate, in five years we will have used 25 percent of the sand on the beaches of the State. We simply can't do that, you know.

YAMABE: This is beach sand which we are not able to mine at this time?

UEHARA: Yes, and this is mostly from Molokai and they have the quantity of sand that we mine from Molokai currently. The information is here.

YAMABE: Thank you, Dr. Uehara.

CREIGHTON: I gather from what you say, Dr. Uehara, that you feel that this particular area--Mokuleia to Kaena--is really the only available area on the island for land mining of sand?

UEHARA: I can't say it's the only area but I don't know of any other good areas currently.

CREIGHTON: Then it would seem that we are very rapidly reaching depletion of land-mined sand and we'll have to find some other substitute.

UEHARA: This is true. Once you build a home in an area, no matter how good that deposit, no one is going to remove that sand from underneath your home.

CREIGHTON: So approval of this particular mining operation would simply postpone that day a few years?

UEHARA: That's right. I think, eventually, we would have to go to the ocean, or if we import sand from elsewhere, we will simply have to pay for it from our own pockets.

CREIGHTON: Thank you.

SULLAM: I was just thinking. In view of all that, would you recommend that we start rationing sand, that, perhaps, saying that sand should only be used for ....

UEHARA: If I had to make any kind of recommendation, I would recommend to the State that they utilize, now, those open spaces and utilize those lands quickly before they are covered by man because the mineral resources of the State are very, very limited and we'd better make use of it when we can. Coral sand and basaltic rock, they may seem very common to us, is a very important natural resource for the State and we should use it wisely.

YAMABE: Would you also agree to recommend making a recommendation to the Department of Land and Natural Resources that such an area should be set aside as conservation as far as land use designation is concerned?

UEHARA: They don't have to be conservation areas. They can be used. A conservation area should be up in the mountains.

YAMABE: Well, there's a number of uses that's permitted in conservation. Conservation is primarily to keep developments off this type of natural resources.

UEHARA: Well, that's a recommendation that others can make. I think, from the standpoint of recreation, these are ideal areas for recreation because they are close to the ocean.

YAMABE: As long as it's kept open so that they can be mined?

UEHARA: Kept open, and the land is not going to be--the usefulness of the land is not going to be lessened by adding soil. It's going to be improved. Simply like adding top soil to the area.

YAMABE: Right. Thank you.

CONNELL: Any further questions? (No further questions.)

MARUTANI: Mr. Chairman, at the last hearing we had Dr. Hertlein testify regarding the fugitive dust from sand as well as some noise problem. Now, at the last hearing, some comments were made regarding dust from soil and Dr. Hertlein has made some additional studies in this area and we'd like to ask him to inform the Commission of the result of his findings.

FRED HERTLEIN:

Thank you, Mr. Marutani. Mr. Chairman, Commission members, and interested guests. My name is Fred Hertlein and I guess most of you remember me from last time. Besides being the head of the Industrial Hygiene Unit at Pearl Harbor Naval Shipyard, I have been, the last three years, running my own consulting firm in air, water, and noise pollution, the evaluation of it, and the control of it.

The Warren Corporation originally contacted me in this area to determine what major environmental impact you might have in this area, and I submitted much of my testimony in the way of a summary of the report that you probably have before you now. I think you all have it by now. I have some notes of additional studies and calculations that we've conducted on dirt and noise and I would like to go through these and, as we go along, I have a feeling that many of the questions that have been coming up this afternoon will be answered.

The past--may I go up here? The past testimony I gave indicated that I used, in my calculations, a wind velocity of 20 miles an hour as a maximum and, to date, I still have found nothing in the published literature to indicate that the velocity of the winds out there go anything higher than that on a maximum scale. As a matter of fact, on studying the data a little more critically, we found that the velocity is generally in the area of five miles an hour--more usually between five and ten. I think it would be fair to say that 75 percent of the time, the wind velocity is in this particular range.

Also, the subject came up about the reverse cycle of the wind during the evening. You'll notice in the data before you that it doesn't exactly reverse. It changes roughly from a north-northerly, north-easterly, east-northeasterly, and north-northeasterly, as well as easterly direction over to an east-southeasterly direction from this area. So, the first thing you have going for you is that the wind direction during the daytime is towards the mountain area and away from any residences. Thus, dust, should it be generated, and this is a big IF because I can almost guarantee you it won't be generated by the precautions the contractor will follow and take. It would be blowing into this direction or into over here, this way, and the residences are over here. There will be very little wind direction in this direction here.

In the evening when the operations aren't going, of course, it changes slightly but there will be nothing to be carrying dust in there because nothing will be raising the dust up to make it airborne. Thus, the wind velocity, which we have been bandying around here, please understand, is 20 miles an hour at the very absolute maximum. You're not normally going to have conditions where the wind is 20 miles an hour. It will be generally much below that. So, in my calculations, I have been, what you might call, conservative. And we believe in being conservative because this is the way the recorded data is. As a matter of fact, the maximum is actually 18 miles an hour, which has been recorded. I used 20 because it's two miles higher. Some of the nit-picking that has been coming up from the opposition here is really nothing more than that. They bring up points which seem to appear almost as tiny little crevices in a hill they have to climb. And, almost anything that you can grasp at is being brought up. Some of their points bear little or no weight at all to the major impact on the environment here. Let me go back here now to the rest of the things.

Thus, with the sand particles of 150 micron diameter, as has been brought out, they won't go any further than 105 feet which can easily

be contained in the boundary. Now, people have brought up this matter of dirt and dust that's mixed with the sand. The results from the Pacific Concrete and Aggregate Concrete Laboratories indicate that the smallest size particle in those samples is that size that I mentioned last time. There are none smaller or I would have based my calculations on them. However, when the fill is brought down from the mountain area, we definitely have to consider a different type of material, and when we do this, I have found out from Dr. Uehara, from the University, whom you have just heard, that the aggregate up there is usually in clumps of about 100 micron diameter--the soil is. This is as small as it gets. It's density is 2.5 at the worst and at the best, it gets up to 2.8. So, again, using the worst possible case, we come up with a calculation here of what happens when the dump truck carries this material from the fill area down into the area to be filled by the beach. And, all that will be going on here is a discharge from the back of a dump truck which is conservatively estimated to be approximately 5 feet above the ground.

We can determine again what velocity this particle, of that size which we've indicated is found up there for the fill, will take to settle down in calm air. Then, again, put a 20-mile per hour crosswind tangental to that and using classical trigonometric functions, determine what the vector is, and it comes out that if you have a 20-mile an hour wind, which is again an extremely high velocity wind in this area, that particle will travel 60 feet before it falls down on the ground. Now, what we are saying then is, "Can these operations be maintained within 60 feet before these particles fall out into and beyond the property of the contractor?" We feel it can. We feel it can because there are many procedures and methods in a text of this sort, title: "Air Pollution Engineering Manual" by the U. S. Department of Health, Education and Welfare. The public health service has methods, procedures, engineering controls to take care of this very thing.

And, you've heard Mr. Marutani mention some of these--the business of sprinkling down, watering the area, should prevent any of the material from becoming airborne. To answer your more specific question about watering it down all evening, no, I don't think this probably can be done too practically. However, this material, once it gets wet down and once it gets in place, will fairly well conglomerate with itself and fit together after being wet by the surface. You're not going to find much becoming airborne once it's wet down, in place, in the final fill area.

And, if this isn't enough, let me assure you one more time--I have a feeling I only mentioned it in brief passing last time--that the State Department of Health has Chapter 43 on Air Pollution Control out here which indicates, under the section of Fugitive Dust, that no person (and person is defined in the beginning of the regulation here) shall cause or permit discharge or visible emissions of fugitive dust beyond the lot line of the property on which the emissions originate, or cause or permit to be emitted into the atmosphere, any dust from any source in such a manner that the ground level concentration at a point selected by the department exceeds, (a) 150

micrograms per cubic meter above upwind concentration--and then they indicate the sampling method, using high-volume air sampler or other equivalent methods for a 12-hour period. They also give an alternative here which makes use of a dust-fall method, but they, when you talk with the air sanitation engineers up there, they tell you that they're not going to use that method because it is not as quantitative, it's not as reliable, as reproducible. So the high-volume method will be used. I've been applying this for various clients all around the island and I can assure you that if any of this material does become airborne, this sampling method will surely detect it and pick it up.

Should any of the residents feel that they are being subjected to dust from their operations here, it's a simple matter for the State Department of Health to go out there and sample literally, wherever they want--upwind, and at the boundary, downwind--to assure that it's in this limit of 150 micrograms per cubic meter.

It's a cut-and-dried case, black and white. You either comply or you don't. Ambient levels are variable throughout the island, and so they provide for this by sampling upwind of the operation.

I can assure you that with the procedures that these people intend to take, they will be complying with this. Otherwise, I couldn't, in all honesty, appear before you in this manner. It would be somewhat unethical. Thus, you have this almost quarantee that the dust can't get over these levels and, last but not least, you have one more assurance, and that is that the contractor himself has assured you that he will, in fact, monitor his own operation with this sampling method. The reports, of course, will be given to him and he'll have these in his files.

So, with this, on the matter of dust--why, let me see if there are any comments that came up today that maybe we can mention here. The wind velocity in the early morning hours, I guess, you've noticed in your data is very low. The wind velocity during the daytime hours are what is a higher velocity. It gets sometime over 10 occasionally. But, in the morning hours, it's generally 5 and around in there, so you're not going to be worried about transporting dust in the evening with such low velocity winds. Other dust matters that came up are, well, that's mostly it, I guess.

Concerning the noise, it's pretty obvious from the way questions are being asked and the way some of them are being answered, that there is less than a thorough understanding of what takes place in noise measurement--noise propagation, and noise control. This is very evident on the side of almost everyone.

CONNELL: We've noticed that, or at least, I've noticed it among experts that have appeared before this Commission.

HERTLEIN: That's right. As a matter of fact, the experts that I think appear before you, before the Commission, generally have to couch their explanation with certain qualifications and it's these qualifications that are sometimes forgotten or pushed aside, in the

view of simplifying the statements. That's where the whole problem lies. We'd like to give you a simple, basic, fundamental answer to your question, but it usually requires qualifications and this is where the stumbling block falls in. Like comparing the CZC with the Motor Vehicle Noise Code. Perhaps, we can take this up.

The noise problems can originate from two sources. We didn't mention the trucks, as I mentioned last time very purposely because we thought it was controlled.

Let us mention first the property noise. Noise that will be generated on the property itself. The Comprehensive Zoning Code, which I'm sure you're very, very familiar with, has a penalty of $1,000 and/or 30 days in jail for anyone who does not comply with these values in here--with this code. And the noise code in here is very stringent. I have almost assured you last time, and I'm not going to go into it again, that the operations on land, following the recommendations I proposed here, will comply with this. This is almost a certainty. So, I'd just as soon not delve into that any more.

The calculations that I carried out indicate where these berms should be placed and, by the way, the berms, to me, is irrelevant whether they are made of sand, of sand and dirt, or dirt, or rocks, or almost anything else within reason. You can't use vegetation, of course. You can't make a mound of logs because they become too porous. But anything fairly massive with a good high density, a good high specific gravity, will act as a sound attenuator. These berms attenuate the low frequencies than they are in the high. The higher attenuated greatly. The lower ones, more or less, become refracted and pass over. But the lower ones are much more lenient in the Comprehensive Zoning Code so that's why we can say again, we'll still comply.

And, again, as if that isn't enough assurance for you, the contractor has indicated, in no uncertain terms, he is willing to monitor this noise at his boundary line as indicated in the code itself here, should complaints arise.

Now, the matter of the trucks and the noise from the vehicular operations, I didn't go too much in detail. As a matter of fact, I didn't mention it at all in the report because of the basis--because I thought it was well covered in here and we mentioned it only briefly last time. Perhaps, we can clarify some of your problems here.

The Hawaii Vehicle Noise Code, I indicated to you last time, is one of the tightest in the United States--in any of the states--and I can say this by comparison with California's code because California's code is being used as a guide in many of the other states. This is my basis for that statement. California Noise Code, in here, is not as stringent as the Hawaii's--the Oahu Vehicular Noise Control Code that the State Department of Health has promulgated here. There are reasons for this. The main reason being that Hawaii is a much more open community. We have single-wall construction. I don't have to tell you people that. We usually have our windows open a good piece of the time. We don't keep ourselves cooped up like mainlanders do.

We don't have cold winters where you have to put up storm windows, literally, sometimes. We don't have double-wall construction. So, for this reason, the people on the State committee that developed this code went, what you might call, on the conservative side and went a little tighter than the mainland counterparts. And we felt rightfully so. Therefore, you have nothing to fear in this being, well, a questionable protection device for residents in a community.

The question arises though, in comparing this with the Comprehensive Zoning Code--let me get to that in a moment. The penalties in here are provided by the Hawaii Revised Statutes and these allow a truck to be measured at 50 feet from its center line of travel to make no more than 86 dba. That is measured on an A scale. And let me be very specific in mentioning how this is measured.

Police officers have been trained, not casually, but in detail, how to use these sound level meters and how to correct for reflections and distortions that can be created in a free-sound field. A free-sound field is what these measurements should be performed in. Now, most of us realize you can't do that out here where there are houses, where there's other obstructions nearby. So, they have been shown how to make these corrections and allow for that. This means, normally, they have to be a couple of--one or two more decibels in excess of the code here. Now, this doesn't mean the residents are being subjected to more intense noise. Not by any means. But, when you start taking measurements inside a classroom and comparing them with the Vehicular Noise Code, they are just not comparable. You can't do that.

When you're talking about speech interference levels and telephone usability, and classroom understandability, with teachers presenting topics and class discussion, that's a whole other ballpark. The means in which those measurements are conducted are completely different than the one for this and they, in turn, are completely different from the ones in the Comprehensive Zoning Code.

Now, the statement has been offhand-made. I don't know how this was arrived at by some of the people against this particular noise aspect, that the Comprehensive Zoning Code has been superseded by the State regulations. This is so, but only to a very limited extent. Let me clarify this for you. The State has the power to supersede any local ordinance, that is correct. But, right now there is none for residential property noise control. This is only for vehicles. So the person who informed the testifier here previously that this overrides everything is just as blatantly false as can be. This Comprehensive Zoning Code is in effect until something supersedes it from the State. Now there is nothing. So this is still applicable and it is much tighter than this one here. When they get around to making something for residential areas, it will supersede the CZC, no question about it, and it'll probably be an easier way of measuring it too.

But, to conduct these inside the classroom like this is just not comparable. You can't do that. Undoubtedly, you're going to have good levels in there.

CONNELL: Or bad levels?

HERTLEIN: That's right. The statement has been made that this classroom is--what--12 feet from the highway? Something like that. You certainly will get levels in excess of what you find in your Oahu Vehicular Noise Code. Why? Because the minimum distance at which it is supposed to be measured is listed here at 20 feet.

Now, I can give you a rough guide as to what it is supposed to be at 12 feet simply by having the 25-foot distance and adding 6 decibels to that value in there. That will be the allowed level at 12-1/2 feet and this is what the people who developed this code will probably tell you because they are basing this on the Spherical Sound Propagation Law. That, in other words, will allow a truck then to go from 80, from 92 at 25 feet up to 98 decibels at the edge of the classroom there. Now, if it's under 98, I know that's an intense noise; that's a very loud noise. There's no question about that. I'm not contesting that at all when you compare it with the CZC. But, you are not being realistic when you talk about noise from a truck.

This committee that studied this in detail was made up with very expert people. Dr. John Burgess who has been mentioned before, he was the author of this thing, literally, and he wasn't trying to make it--to be lenient. He was trying to strike a happy ground between industry and residents. And in trucks, and vehicles, and noise, there are certain limiting things which you have to consider which aren't being considered in the CZC and that's why you have higher levels here. Am I making myself a little clearer here?

CONNELL: I think you've made your point.

HERTLEIN: These levels are higher. There's no question. But because of that that doesn't mean these are inadequate, not by any means.

CONNELL: Can we just--regarding this code--you mentioned that the police are enforcing it. How many police officers are equipped in the Mokuleia area to make readings?

HERTLEIN: I don't know because I'm not on the police staff, of course.

CONNELL: Well, is this code being enforced in the Mokuleia area and to what extent?

HERTLEIN: I don't know about the Mokuleia area. Let me reply that the clippings from the newspaper indicate that vehicles have already been cited by police officers with this code. This is not so with the CZC.

CONNELL: Well, I think that the question being raised is in regard to this area--not the downtown Honolulu or Niu Valley or whatever.

HERTLEIN: Let me answer this then in the following manner. I would

think it would be completely sensible, reasonable, logical, practical, for those people who feel they are being subjected to intense noise levels by the operation of these trucks to call the police department. I have a feeling the police department will bend over backwards to have at least a team out there for this purpose to check it. They either will comply or they will not. I don't think you can put off a community of residents who complain about truck noise to the police department who are the people who receive these complaints. You see what I mean? This should be able to be resolved very easily, in my estimate. They will or they won't.

CONNELL: George, can we get a report from the Police Department regarding enforcement in that area?

HERTLEIN: And, as an aside to this, let me mention that some time ago, I measured almost, the noise output of almost every type of a vehicle, heavy-duty truck that's being used here on the Island of Oahu and the results of this are, in part, the basis of this local Noise Code. You can see the extensive amount of data we made on this.

The Navy, to follow up on this, conducted a similar study for all of their vehicles so I can, with some confidence, assure you that trucks will meet this code when they are properly maintained, and properly operated. You can't have hot-rod truck drivers that will exceed this. You see what I mean? But the company is going to be down on them for doing this so they are going to have a very definite impetus to keep this "rapping of the pipes" down. Well, that's for the noise, then.

The CZC can't be applied in a classroom. Neither can the Vehicle Noise Code be applied in a classroom. And I suggest, in the future, that whoever makes these sort of measurements be aware of the existing statutes and regulations and conduct the measurements in accordance therewith. This is extremely critical and you're going to get just funny answers otherwise.

And, lastly, was the matter of the trucks with their--it would seem to me because of their high taxes these trucks pay every year, that we all experience inconvenience when we end up in back of one. I think I'd be the first one to admit that. But, here again, I think if people in that area will take a little more enlightened attitude as to what service the hauling of this sand around to the other part of the island, or wherever it's going, is performing for the residents of the State of Hawaii, as a whole, this may aid some in cooling down your temper. It's hard for me to say that because I don't go out that way, but I can, nevertheless, experience their problems because I have the empathy for these sort of things myself in similar tieups. In a two-lane road, I don't see how you're going to solve this.

And the problem of appraisal of property came up at the previous hearing about which I'd just like to make one simple comment because I talked to an authority that I'd like to bring this up. I don't ever bring up the matter of appraisal of land in regard to these sort of operations because I found out that appraisers generally will not give you a Yes or No answer, and in this sort of a situation, they

would be very reluctant--I have a feeling--to indicate that land values are going to be knocked down because of this. That's just something they won't agree to. They can't say that.

And, lastly, the matter of the wave action. The comment again came up this afternoon that the wave action, as observed by residents in this area, have inundated land back 400 feet. I, again, talked to a very authoritative source out here who has lived there 14 years and he says that in some areas the maximum from a very, very heavy wind and storm, and sea, generates waves that go inland as far as 250 feet--at the very, very worst--this is the highest possible.

Normally, heavy storms go in only 150 feet and this even requires quite large storms. So, again, they talk about facts that we've dredged up. I indicated before you last time that I don't have facts because I wasn't sitting out there measuring how far it came in. The question is, "Supposing the water did come in 400 feet?" I'd then ask you, "So what then?" I don't see how a sand mining operation in any way, is going to have a deleterious effect on this, by having one acre being dug out, another acre where the equipment is going to be settled on, and another acre that is being backfilled.

What happens when a huge inundation of land by even a tsunami comes in here? What will the effect be just because you've got equipment mining sand out there? It doesn't make sense. There's no logic behind it. It's not going to tear it up any more, certainly. It won't take any more out to sea and, as Dr. Uehara has indicated, the best use of the land will probably be improved as more fertile soil comes in there. The beach sand is not even being touched and I think this is probably most of the comments I would like to make, unless you have--oh, one other thing.

Dr. Uehara mentioned this business of the calcium carbonate versus the silica sand. I think I touched on this lightly the last time. Calcium carbonate, which is coral, when it becomes airborne, it's not considered a health hazard. There's no question about this because it is considered normally an inert-nuisance dust. However, when you start talking about free-silica sand, the kind that he mentioned came from Michigan and from other parts of the mainland, and get this material airborne, you're definitely going to create potentials of health hazards there in the area of silicosis--a non-regenerative lung disease. This, then, is my testimony for you this afternoon.

Questioning of Dr. Hertlein followed:

YAMABE: Mr. Hertlein, what is your expertise limited to or what does it cover? You mentioned industrial hygiene.

HERTLEIN: Yes, industrial hygiene is my specialty and industrial hygiene....

YAMABE: I'm not too familiar with this. I just wanted to know what your expertise might be limited to.

HERTLEIN: My expertise in industrial hygiene comprises a very broad interdisciplinary field. It comprises air sampling in workers--in working environments--radiation measurements, sonar for divers underwater, anything that can be considered a health hazard, ultraviolet radiation, noise, any of a wide variety of airborne pollutants, toxic gases, dust, mist, vapors, fumes, anything that you can possibly imagine that a worker in his environment can be exposed to which is subtle and which the five physical human senses cannot readily see or taste or touch or feel and which require specialized instrumentation as an extension of our physical senses to document scientifically and measure quantitatively what the individual is being exposed to, then compare these measurements with standards that have been developed in this area and determine whether or not controls are necessary.

YAMABE: Thank you.

MARUTANI: Mr. Chairman, at the last meeting, we had Gordon Cran testify on certain areas and some questions were raised regarding some of his comments and he'd like to clarify some of these questions that were raised at the last hearing.

GORDON CRAN:

Mr. Chairman, Commission, the questions that have been raised, I have here listed. I also have some statement of what I gave last week, in a very rambling manner, and this is condensed and much more to the point than I presented it last week and I'd like to leave this with you. I think there is one for each of you.

The question was raised on the benefits of the silting basin. I went into that in quite a bit of detail last week. We have one little silting basin that we constructed a year ago to prevent silt from the land to get in to the ocean. It's sort of a temporary thing located in Area 2 right near the Makaleha Stream entrance into the sea.

The past year has not had the heavy rains necessary to give us full tests but we've had fairly good rains this fall and there has been literally no silt entering the sea.

I have some pictures here that were taken after a moderate rain. I'm sorry the rains came at night and the pictures were taken in the morning so that the big gusher that goes over the spillway had already taken place, but may I pass this around to the Commission?

These first two pictures are water going over the silting basin spillway. The spillway has a concrete core to keep it from eroding below the level desired.

This third picture is a coloration in the sea immediately in the morning immediately after a heavy rain. I have two pictures of the same thing. The rest of the pictures I have here are just views of the basin from various angles. However, as I said, it was after the heavy rain the night before, showing the color of the water and the stillness of the water which allows the sediment to drop to the bottom.

The area that we'll be using for a barrow pit is on the air photo outlined in orange, mauka or on the lower side of the picture, the dark orange color being the area that we have selected for the silting basin or sediment basin. This area is quite large and it will give us a lot of area to have water stand and sediment fall out. The slope immediately mauka of that is where we intend to take the fill material and there's no doubt but when there's heavy rains, we'll have to have some method of catching any runoff that'll go through this area. However, the fill, the area of the fill or the barrow pit will be much smaller even than the sand mining area because the sand will be mined off of approximately one acre at a time and the depth is maybe two yards to two and one-half yards, whereas, in the barrow pit area, we will be going like 25 feet to 30 feet deep. Consequently, the area exposed will be less.

The construction of the newer basin would require that we put a drain into it so that the water would not be left standing. The present small basin down at the mouth of the Makaleha Stream has no outlet and this was a, I shouldn't say a requirement, but a request of the Board of Health so that we don't drain it to the point where the fish die. The fish are there. We've put 40,000 fish into it for the purpose of controlling mosquitoes and there's just lots of fish in there. I haven't gotten a count recently.

I have here two more photographs. One is better than the other. I'll put this better one on the top. There are areas where the sand was removed from and refilled. The refilling was completed in 1964. The vegetation other than the extremely tall trees on one side--iron-wood trees on the left side of the second picture--all other vegetation has grown since 1964. The fill material came from the quarry site down at Kaena, the other end of the airstrip, and it is more rocky than the material we will be using. It's the over-cover of the quarry, the material that comes off before they get down to the rock.

Now, it's been discussed quite a bit as to preventing dust and keeping the area moist. In our operation out there, we intend to use it for pasture in the near future, indefinite future, and I anticipate an increased production from this source, after the sand is removed, of an approximate ratio of 1-15. At the present time, the sandy areas or the areas with the most sand will carry approximately one animal unit to five acres. When we're through, we anticipate three animal units per acre with irrigation and fertilization. At the present time, we can't justify intensive use of this land because it's sandy and loses irrigation water.

The present source of water comes from our well here and we have 2.2 million gallons a day that we use or we have available to use for this irrigation purpose. And we have a main waterline that runs under the highway at this point and we can sprinkle at any time Areas 1 and 2 at the present time. In fact, during the summer months, we do irri-gate that way now.

The previous testimony on a type of grass that was not known of, I am unaware that we have such a grass. I've spent my life working on

grasses and to the best of my knowledge, the grasses were identified with their common name which I think most people understand rather than their botanical name. The one grass that is in excess of two or three feet in height is an undesirable plant, referred to again, common name "sour grass". The koa in the area definitely was overlooked in the previous statement. We consider it, under those conditions, as weeds.

A previous statement that I would like to bring out here is, just for my own personal satisfaction, there was a gentlemen who said that we could sell the property does not seem to realize that any purchaser would have to develop to a higher use immediately to get his money out of the kind of money that he would have invested.

The last point is that Areas 1 and 2 are presently fenced with cattle fence. They are posted for trespass as being private property. Area 3 will be fenced by this summer. Any liability due to people trespassing is also present right now--all sort of things like climbing trees, getting in the pen with cattle, going down to the beach and drowning or anything else, so equipment is definitely something that children like to get around to play with but the property will be fenced and posted. Areas 1 and 2 are presently fenced. Are there any questions?

Questioning of Mr. Cran followed:

YAMABE: Mr. Cran, Areas 1 and 2, is that cattle fence or....

CRAN: Yes, cattle fence. That's all we would be putting up. Generally, five strand barbed wire.

YAMABE: Will you have barbed wire with fencing in between?

CRAN: The makai side of the road presently we do have old boards from way back. We have truly not maintained that fence or repaired it in anticipation of getting this permit. It has a board on the top with barbed wire below it and in many places the boards are now dropping off and we would have to rebuild them. However, I would hate to do it if we're going to have equipment in the area.

MARUTANI: Mr. Chairman, we have one more testimony. I would like to call Mr. William Hong who is a private consulting traffic engineer.

WILLIAM HONG:

Mr. Chairman and members of the Commission, my name is William Hong and I am a private consulting engineer. I was asked by Warren Corporation to make a traffic study on truck operation and heavy truck movements on a portion of Kaukonahua Road from Thompson Corner to its junction with Wilikina Drive. I have a map here, could you post it up. (Posts map on board.) I also have some data here that I'll pass around to the Commission. This is not a report of any kind. It's just some traffic data that I picked up that I plotted. It might help you to follow my discussion.

Warren Corporation also asked me to assess the effect that his truck runs will have on the existing traffic that now exists on Kaukonahua Road. Understand that Kaukonahua Road is an uphill road from Thompson Corner to Wilikina Drive.

(While pointing on the map) This is Thompson Corner which is at the junction of Farrington Highway and Kaukonahua Road to Waialua and this is also named Kaukonahua Road, and this is the intersection of Wilikina Drive and Kaukonahua Road. The uphill portion of Kaukonahua Road is from Thompson Corner to Wilikina Drive. This area makai of Thompson Corner is on a flat and Waialua Plantation is just about in this yellow area here. We inventoried the existing road condition, the length of Kaukonahua Road is approximately 41/2 miles uphill. The pavement is 20 feet wide, consists of two moving lanes, one mauka bound and one makai bound. The road grade varies from 4 to 7 percent approximately. This area at Wilikina Drive is fairly flat. The hill begins at this point here at 4 percent then drop to 7 percent. This is the steepest part of Kaukonahua Road, down to 6 then back to flat again at Thompson Corner. So this is really the critical area of Kaukonahua Road at 7 percent grade and a little bit at 6 percent grade.

Shoulder conditions. The shoulders on each side of the road are lined with trees and its usefulness is very limited as far as being used by large vehicles are concerned.

Pavement markings. The roads are very well marked, as I can see, and it has many no passing zones as you go up Thompson Corner. There's one here and pretty near all along the curves of Kaukonahua Road and the speed limit is 35 miles per hour up to this point and 25 miles an hour on the flat at Schofield.

My first impression, when I first went out to get the data was that, there was a feeling of emptiness on Kaukonahua Road. Traffic there was very, very light. The streets, most of the time there was nothing really on the street.

I have given you some of the counts that we took. These are 15 minutes counts that we have taken from a station that we established at the University of Hawaii Experiment Station.

In figure three, this graph here, we have plotted these traffic movements by the hour and this chart shows you the hourly variation of traffic on Kaukonahua Road. In the morning, it's going mauka bound, the traffic is high there. The offpeak hour gets lower, and in the afternoon, the makai bound traffic gets high, at just about 4 o'clock. The peak hour that we have determined from these 15 minute counts, the a.m. peak is from 6:45 to 7:45, the heavy movement being mauka bound. The p.m. peak ran from 1600 to 1700, that's 4 o'clock to 5 o'clock in the afternoon. So your offpeak hour ranges from 7:45 in the morning to 4 o'clock in the afternoon.

We were interested in trucks. I have tabulated some figures on trucks as they relate to the total traffic on Kaukonahua Road.

During the 12 hour period that we made some counts, the percent truck as against the total traffic was approximately 3 percent. During the offpeak hours, the percent trucks as against the total traffic was 5 percent. To give you an idea of these values, meaning 5 percent for example, is a very light and very insignificant amount of trucks on the highway. It doesn't affect your highway capacity very much. When you get up to about 10 percent then it sort of becomes a normal percentage of trucks to have on the road. I think we should get concerned when the truck value rises up to 15 or 20 percent of the total traffic.

We also made some speed runs. Up Kaukonahua Road, we found that, although the speed limit was 35 miles per hour, the light vehicles were traveling at about 45 miles per hour.

Accident records. We checked into the accident records for Kaukonahua Road and had the opportunity to inspect 81 accidents. In 1970, there were 20 accidents; in 1971, 31 accidents; and in 1972, 31 accidents. Most of these accidents took place during the early morning hours or late afternoon. Most of these accidents were hitting a fixed object type or running off the highway type. There were no accidents involving semi-combination trucks or single-unit trucks or buses, and there were no accidents that came as a result of a vehicle attempting to pass a semi-combination truck, a single-unit truck, or a bus, so I think from the safety standpoint, the safety record of the trucks is excellent.

Utilizing the data that I have just given you, we will measure the effects of Warren Corporation's additional truck runs on Kaukonahua Road in two ways. First, we will measure it in terms of ratio of truck movements to the total movements and secondly, comparison of overall speeds right through the critical section, the 7 percent grade or the steepest portion. It is at this grade where the speed of your truck is about 17 miles per hour. I might point out something that I forgot. As these truck combinations move up the hill, they could start at about 40 miles per hour but as they go up the hill, their speed would be somewhere about 25 miles per hour. Now, right at this critical section where the grade is the steepest, the trucks, called semi-combination trucks, are operating at about 17 miles per hour. As you get further up the hill, the speeds are increased, but very gradually until you hit at this point, for example, this would be about 25 miles per hour, then it would go up to 30, then as soon as you reach the flat portion near Wilikina Drive, these trucks are able to pick up speed up to 40 to 45 miles per hour. So, what we did, we made a comparison of overall travel speeds that exist right now at the critical section of Kaukonahua Road and tried to compare it with the additional trucks that the Warren Corporation would be adding to the traffic stream.

Percentage-wise, under the existing condition you have a 5 percent truck traffic there. Now, if Warren Corporation did add, say 7 percent, were to add 20 trucks to their run per day, the percent truck would increase to 7 percent. If 35 trucks were added to the traffic stream, then you would have an 8 percent truck traffic.

If 50 trucks were added to the traffic stream, then the percent truck would be about 9 percent. Now, because of the very small increase in percent trucks, your additional trucks should not cause any problem.

Another thing is that the percent truck is directly related to capacity. In other words, if you add 5 percent trucks, for example, you take away from your capacity, 5 percent capacity. You add 1 percent capacity, you take away 1 percent capacity. There is a direct relation to operating levels of the road.

Now, in comparing the overall speeds of Kaukonahua Road through the critical section, I came out with figures where the existing overall traffic speed is 26 miles per hour, and if the Warren Corporation were to add 20 trucks, the overall speed would be reduced to 25 miles per hour, and if 35 truck movements were added, the overall speed would be reduced to 24 miles per hour, and if 50 movements were added, it would be reduced to 23 miles per hour. Now, these reductions of 1 mile per hour or, let's say, 20 trucks added is an insignificant reduction in overall speed.

Because of these percentages, the small reduction in percentage of trucks and also the slight decrease in overall traffic speed, I have concluded that the additional trucks that Warren Corporation wants to put on Kaukonahua Road would have very small effect upon the present traffic conditions. This ends my presentation.

YAMABE: Would you consider this to be an average, vehicles and movements for the year? For example, I don't know whether there might be plantation trucks or construction trucks or whatever it might be, there might possibly be a fluctuation in the number of trucks based on the operation, like harvest time or....

HONG: During harvest time, there will be an increase in truck movements there but I think this is for a limited period of time throughout the year.

YAMABE: Do you have the statistics?

HONG: No, I don't. This was picked up last Friday, for instance, so this is not the harvesting time in Waialua.

YAMABE: I just wanted to know whether you considered this in the overall.

HONG: This situation would occur for the majority of the time during the year.

MARUTANI: I have no further testimony. I would now like to summarize. With respect to the report of the staff of the Planning Department, I would just like to state that we have gone over the list of recommendations that the staff has come up with, consisting of 17 different recommendations. We do concur with 16 of them except for the first one, which is, that Areas 1 and 2 only shall be mined and that Areas 3 and 4 be left alone.

As I had earlier indicated, Areas 1 and 2 would have approximately 750,000 cubic yards of sand. The amount of use or consumption of sand on an average annual basis, of course, would depend on demand, but we anticipate anywhere from 130,000 cubic yards to 200,000 cubic yards a year. Based on that figure, in approximately 4 to 6 years, Areas 1 and 2 would be completely exhausted. Area 3 is approximately 611,000 cubic yards. Area 3 at the same rate of 130,000 to 200,000 cubic yards per year, that would give approximately three years to an additional five years possibly, or four and a half years, so in fact, the recommendation of the Planning Department will be for Areas 1 and 2 would mean that in approximately 4 to 6 years, the operation would be completed.

Warren Corporation intends to expend a considerable sum of money for equipment that is needed for the sand mining operation. The initial capital outlay will come to approximately $150,000 in various equipment and in various starting out cost that Warren Corporation is projecting to expend.

In the light of the lack of sand, natural sand that is expected to occur in the not to distant future, and in the light of the needs of the concrete industry for more sand which has a very direct effect on the cost of housing, and in the light of the total amount of capital expenditure that Warren Corporation intends to spend, we would like to ask the Commission to give consideration to allow and permit Area 3 as well as Areas 1 and 2. We have no objection to Area 4 being completely eliminated at this time. Other than that one recommendation, we concur with the rest of the 16 recommendations presented by the staff.

With respect to the litigation that has been alluded to both at the last hearing and at today's hearing, I would just like to state for the record that the allegation has been denied by the Warren Corporation, but inasmuch as this matter is still in litigation, I don't think that it would be fair to comment before the Planning Commission of all the testimony presented at subsequent hearings before the court.

There has also been some testimony last week that the operation of Warren Corporation in the Haleiwa area had left a big hole in the ground. We have had an opportunity to take some pictures of that so-called hole today and we would like to present these pictures to the Commission for their perusal to see whether or not there actually is a hole. You will note that it is covered up with vegetation. (Submitted two photographs.)

With respect to the need for sand itself, Dr. Uehara testified that the available areas of sand in Oahu are very limited. The source of sand might be there but the economics and the legal problems of extracting sand which is populated and in all different use is a real problem and is not a feasible solution. Sand mining from the ocean, Dr. Uehara testified as to the environmental and harmful effects and presently there is no legislation to authorize sand mining from the ocean so, at this time, this is not an alternative solution. With respect to sand, source of supply of sand from Molokai, Act 136, Session Laws of 1970 would prohibit sand removal from the shoreline setback area starting July 1, 1975, and thereafter, and this is approximately two years from now, so what alternatives do we have? We do have manufactured sand that is available right now. But I understand that manufactured sand does not meet the demands presently

of the concrete industry, and that the total consumption of sand right now is that substantially most of it is coming from natural sand and less than majority is coming from manufactured sand.

As far as the detrimental effects on the environment, the testimony has evolved around noise, dust, and traffic problems. I believe the objections can be more or less categorized in these three areas.

As far as the noise problem is concerned, I believe that Mr. Hertlein testified at the last hearing that the noise regulations of the State of Hawaii promulgated by the Department of Health and the CZC regulations promulgated by the City are probably two of the very strictest type of regulations throughout the nation. We submit that as long as Warren Corporation complies with the requirements of the law regarding noise, this is as much as can be expected under the present circumstances of the applicant's operation. The remedies for violation of the law are present, and as Mr. Hertlein testified, there have been 29 citations issued ever since enforcement has been made.

With respect to the dust problem, Mr. Hertlein testified that there is no real danger as far as fugitive dust from the sand is concerned. Sand is a heavy particle. I believe he testified at the last hearing that a 105 feet setback should be very adequate in terms of creating any problems to the surrounding neighborhood. As far as fugitive dust from the soil is concerned, Mr. Hertlein testified that there is approximately 150 feet setback should be sufficient to prevent any fugitive dust from the soil operations from going to the surrounding areas. Mr. Hertlein also mentioned the fact that we do have very strict requirements, under the Air Sanitation branch, which would requlate any type of fugitive dust and the enforcement remedies are available.

With respect to the traffic problem, Mr. Hong testified that the amount of trucks that would go out to the road would not be an appreciable number. Twenty truckloads would give approximately 2 percent increase over the existing truckloads presently on the basis of studies last Friday.

In summary, I believe that we do have a very strong need for sand to meet the demands of the construction industry, the public beaches, the golf courses, and various other uses. We are all aware of the rising cost of housing and the rising cost of construction. Many elements go into what constitutes cost. At least we know that one element is cement and the element in concrete is sand. We feel that by contributing sand to the concrete industry that we will be providing a very important public service to the State by meeting the demands of the concrete industry and the building industry.

In summary, I would like to state that Warren Corporation intends to take all precautions in complying with the law, intends to take all precautions to minimize whatever environmental effects that might possibly result from this operation, and that we will take additional precautions, such as monitoring the sound, such as putting mufflers on the cars, this type of action over and above whatever requirements that the Planning Commission imposes. Thank you very much.

SULLAM: I have a question. Since you are aware of how scarce the source of sand is becoming, would you object to a provision being placed in the ordinance whereby sand from this quarry could be used only for low cost housing, that it could be sold only to those contractors who are building low cost housing?

MARUTANI: I believe this is going to be a very difficult matter of enforcement. I don't know whether contractors buy material on the basis of what type of housing. For example, the contractor will sub-contract to another sub-contractor to buy concrete ready mix, for example, and the ready mix would purchase the sand from an outfit like Warren Corporation so that the contractor himself would call for ready mix, and it's pretty difficult to segregate the sand that is obtained from this particular source and sand from any other source when the manufacturer of the sand, who mixes all the sand together, sells it as a ready mix to a contractor. I think it's a matter of, it's a practical problem of enforcement, how you are going to enforce this kind of condition.

SULLAM: Well, if it could be enforced, would you object? I mean, I don't know the details but it might be worth looking into.

MARUTANI: I would say that if you limit us to a percentage we might go along, but to say all of it; for example, Warren Corporation intends to bid on the Natatorium job that is coming up--the widening of the beach in the San Souci area. This is a real public need for sand and whether we would be the successful contractor or the sub-contractor is problematical but still then, we would like to be in a position to bid on this job, and we intend to use the sand that we obtain here for this particular purpose, so to say that all of this should be limited to low cost housing, I would say, that we wouldn't be willing to go along; however, if some workable solution can be made, we would be willing to sit down and discuss the percentage of it.

2. ROBERT R. ROBINSON, President of Pacific Concrete and Rock Co., Ltd.

I'm here to testify for the operation, although in testifying for it I may be cutting my own throat because we compete with this kind of operation with our own manufactured sand. But, I feel strongly because of Hawaii's lack of natural resources--no metal, no minerals, only really rock and sand as the natural resources so that the resources should be conserved and should be utilized for mankind purposes, and when a resource is covered over with housing or where a housing or other human use get too close to the resource so it can no longer be extracted, then we've lost something, we've wasted something of that resource and we shouldn't do that. We've done that all too much already, especially on Oahu.

There's been comments with respect to various sources today and I listened to a lot of testimony because I've gone through so much of this in trying to reach a salvation for our own company in how to cope with the current problem, so I'll like to make a few comments. I know it's a late hour and I don't mean to take any longer than necessary so I'll make my comments as brief as I can and if there are any questions, I'll be happy to answer them.

We explored the possibility of sea resource or mining from the sea, dredging operation before we went into sand manufacturing about three years ago and we found that in spite of the work done by the University, to a large extent, that most of, they inventoried quantity but they didn't inventory quality properly. The particle sizes weren't properly inventoried. What we call sand equivalent, in the industry, was not checked upon. That means the amount of sand as compared with silt and other deleterious material. The organism impurities weren't properly studied, but most of all, the absorptive qualities of sand weren't studied. When sand have an absorptive quality of about over 5 percent, it becomes very expensive to use in concrete, almost useless you might say. We call it dead sand. Most of the sources that we found in the ocean site were what we call dead sand--the Kaneohe Bay site is an exception but, I think, environmentally, we have problems in trying to mine in that area. There is quite a resource there though.

There was testimony given that it is illegal to mine from the sea and of course this is not quite correct. There is an ordinance against taking from the ocean, around Oahu, but I don't think that covers, necessarily, the neighbor islands. Now, I know the recent legislation where they are saying, nothing off the beaches. Now, I don't think that goes out into the ocean, however. There has been mining done off the Big Island and a modest amount off Molokai.

With respect to the need for sand, I think 500,000 tons is a reasonable estimate. I don't think that the past years, the last year it was quite that, but I think it was something like 350,000, 400,000, but 500,000 is a reasonable amount to talk towards. Our own company is the largest manufacturer of sand. We manufacture by 150,000 tons a year. We think we have a source that is good for 15 years. This would be of sand and other products that we are taking out of our Waimanalo source and processing, not of sand but other types of aggregates. With respect to increased capacity, we can double that capacity without any particular problem. I think H.C. & D., who is the biggest user of sand, the biggest supplier of sand, we use just as much as they do, but they supply us as well, we suppy them some, but they are the biggest producer. It looks to me as though they are going toward manufactured sand rather than using the natural beach sand in the future. Manufacturing is possible out of blue rock. It present some problem in the blue rock area but, in essense, we are doing that now. I don't want to get into any technical detail here unless you really want it, but, the sand we use in concrete here really, even in the blue rock area is a combination of beach sand and blue rock. You can manufacture the beach sand element if you want to go to the trouble of doing it. We find that it's easier out of limestone, but there's no doubt that natural beach sand is the cheapest and easiest source if it's immediately available, and by available, I mean the distance is not too far from the market place and if the quality is the kind of quality. Distance from the market place is a very significant thing and we've looked at sand and, in fact, we take sand from out beyond this deposit here, from mainland source, and that is cheaper than what we are doing now, but nevertheless, it's quite a long ways.

I'm pretty sure that the sand they are talking about there will have to be processed, will have to be washed, I think, to make it suitable. I did not hear prior testimony and I'm really not that familiar with this operation, but I'm somewhat familiar with sand. I would say it will take some processing so I'm not really sure of the economics, but really, you're talking economics in this whole area. You can manufacture or substitute what we find, for our purposes, than the real thing. However, there are certain things it won't do as well as natural sand. For instance, masons like the natural sand better in mortar. For beach restoration, I think, natural sand is superior to man-made sand. Certainly superior to black sand. That wouldn't be acceptable for beach restoration. The particle shape of a natural sand is better--it's rounded and polished. The way we overcome its good characteristics is by better gradation and gradation is very important in sand and I would guess that there's lot you find in the sand here.

Enough on the technicalities of things. As far as creating a cheaper source for the industry, I don't think it will really. I rather doubt that there would be a cheaper source than what we're doing now. I don't think that we, as a company, would meet it in concrete and we provide about 40 percent of all the concrete on Oahu. However, I'm not trying to condemn this operation by saying praise. It is desirable to conserve this product. Our sources are limited in time. Whatever resources we can conserve now should be conserved. The amount of resource planning that has been done on Oahu you could measure and assemble. The City has not done it and the State has not done it. There has not been decent resource planning, and when they say that this may be the only inland source of natural sand, maybe they're right. It could very well be right. If this is the case, and I'm inclined to think it probably is, it ought to be conserved even if it isn't needed in the next 10 or 15 years, if it could possibly be conserved, it should be conserved and used, for beach restoration certainly, and for golf courses, natural sand is much better than black sand would be and I think better than man-made sand, and for masonry as well.

As to the consumption figure that Warren is talking about, I think they're quite questionable in terms of volume, but if he can produce the material cheaper than we can make it, I'll buy it. So, it's a matter of economics and the market place. This is a competitive type of thing. I don't want to dwell any more on this. I have a lot of other comments I could make but an awful lot has already been made and so I'd rather, if there's any questions, I'll be happy to answer them.

Questioning of Mr. Robinson followed:

CREIGHTON: You have clarified a lot of points in my mind. I certainly agree with your comment that we haven't planned for conservation and for use of resources, but I am confused by your use of the word "concur". I don't see that mining and using this resource is conserving them.

ROBINSON: Well, if you go to the definition in the dictionary what conserve means, conserve for the use of man, I think, it becomes pretty clear. It doen't mean just put away and not used. Conserve, as far as use. We are not protecting it for infinitive.

CREIGHTON: Do I understand, from your discussion on the economics of this, your manufactured sand is now in a competitive situation, price-wise, with the mined sand? Are they relatively the same cost to the other?

ROBINSON: We had to make a choice--I've mined hundreds of thousand tons of sand in Oahu actually, and we had to make a choice between this and other alternatives, and we made this choice, so I would say yes, it is competitive.

CREIGHTON: Would you agree with the statement made today that this particular area from Mokuleia to Kaena is almost the only spot left in Oahu for mining of natural sand?

ROBINSON: It's possibly, yes. I couldn't swear to it. In Kahuku there are large amounts of sand there. I think under the golf course out there there is a large quantity which would require probably some kind of a land trade or possibly incremental mining, but there is really vast quantities out in that area, I think, and probably recoverable, I think, they're fairly fine. Again, it's a matter of economics. I don't think it's the only source but I don't think it's really--we don't have an unlimited source. We do need to conserve for the use of man, the sand that we do have and, irrespective of whether it is the only source, it should be.

CREIGHTON: Apparently, you would agree that within a very brief period of time this resource will be utilized.

ROBINSON: Yes, I think speaking of it, yes, brief time.

CREIGHTON: Well, the figures that were given to us would indicate that if the use is, total use is 500,000 yards a year and this area can produce a million and three, that's about a 2-1/2 years' supply.

ROBINSON: Most of the sand is used, the 500,000 is used in concrete. We have successfully found a way not to use any. We haven't been on any of our beach sand for almost three years, but, be that it may, this is a good and maybe preferred source to a manufactured source.

SULLAM: You were talking about conserving for the use of man since there is a limited supply of this resource. You think we should start thinking in terms of allocating the uses of this sand to specific areas, that is....

ROBINSON: Such as beach restoration or something like that?

SULLAM: Yes, where manufactured sand could not be used or for purposes that are very necessary for society?

ROBINSON: It's worth consideration. I'm not prepared to comment on whether it should or shouldn't be done. I don't see it as a real....

SULLAM: Threat at the moment?

ROBINSON: A real terrible threat, but it's worth some consideration.

YAMABE: What is the capacity or capability of an operation such as yours to manufacture sand?

ROBINSON: We are producing about 150,000 tons a year.

YAMABE: What is that in cubic yard?

ROBINSON: You can figure 1.1 ton per cubic yard so it's almost comparable.

YAMABE: So it's 150,000 cubic yards?

ROBINSON: Yes. It's a little less. Maybe a 130,000 or something like that.

YAMABE: Can you increase that production?

ROBINSON: I can double that if there is a market. I'm meeting my own needs and something over that, and H.C. & D., has a very good product coming in from Molokai at the moment. When that is exhausted, I can increase my capacity substantially for concrete use. As I said, it's not a preferred thing on the beaches or golf courses but, a natural sand is a fine sand.

YAMABE: What is the reason for the industry not demanding more of this manufactured sand and preferring the natural sand, understanding your earlier statement made as far as economics, that it was comparable?

ROBINSON: Well, partially, somewhat prejudiced in certain areas for a product that has been used, recognized, and so forth. In the case of mortar sand, the natural sand doesn't dry quite as rapidly and this seems to be desirable in the use of troweling and mortaring for a block lane. On the other hand, for plastering such as to a concrete gun, I think our manufactured sand--to a plastering gun, our manufactured sand, I think is superior. It's somewhat a trade practice that's kept the thing going. Of course, our capacity to produce, we produce for our own use. H. C. & D., has a tremendous investment in Lono (?) Harbor and is going obviously to use their source as long as they have it. They've supplied Lone Star through the years. We are supplying somewhat and I think we could supply their need if it were required. I'm saying, this isn't the only source but a good source of natural sand.

YAMABE: I don't know enough about manufacturing of sand but would you be facing the same problem these people have in extracting natural sand in the future if manufacturing would be using some natural resources, extracting of....

ROBINSON: Yes. Our resources of limestone in Waimanalo are not unlimited. We figure maybe about 15 years left, then we will be going out scrounging too. Then we could go to blue rock manufacturing route

we could go to more distant sources, and there are other sources on this island for manufacture, but then you are adding substantial cost and apparently would not be competitive.

YAMABE: So there is the possibility, you may be running out of....

ROBINSON: Oh, yes, we will. It's not unlimited. I'm not saying 15 years then we'll be scrounging around too. So when I say resource planning, that's what I mean. It's planning out.

YAMABE: That would be blue rock? What is the base you used in your manufactured thing?

ROBINSON: We use limestone; however, blue rock can be used and technically, we are manufacturing some of it now out of blue rock. I really didn't want to get into the details of it. We could go a hundred percent blue rock if we had to. We find we like the limestone better. H. C. & D., seems to be producing 100 percent blue rock aspect of that thing so they must feel that it's more economical than going the natural route.

YAMABE: What other resources can you use to manufacture sand? Is blue rock and limestone the only....

ROBINSON: They are the only kinds of rock we have in the island. We have no choice.

CONNELL: Mr. Robinson, you mentioned the fact that the State and the County have not entered into resource planning. Has the industry entered into resource planning?

ROBINSON: By necessity we've done our own planning, yes.

CONNELL: As an individual company?

ROBINSON: Yes.

CONNELL: As a total industry?

ROBINSON: No. Really not. We are competiting with one another.

CONNELL: Also, it appears from what you are saying that you are also jointly competing for survival?

ROBINSON: I guess that's true.

CONNELL: So, at least it would seem, as a layman, that it would almost behoove your industry, perhaps, to work along with the County and the State in resource planning?

ROBINSON: That is a good thought.

CONNELL: Any further questions? Thank you, Mr. Robinson. Does anyone else wish to testify for this application?

(Someone from the audience, submitted two photographs of the subject site.)

The Commission took this matter under advisement upon the motion by Mr. Yamabe, seconded by Mrs. Sullam, and carried.

AYES: Yamabe, Sullam, Creighton, Kahawaiolaa, Connell;
NAYS: None;
ABSENT: Bright, Crane.

The Commission considered this matter later and noted four possible courses of action it could take: 1) Accept the Director's original report; 2) Modify that report and add additional conditions; 3) Deny the application; or 4) Follow the recommendation of the Director and keep the public hearing open. It further noted the statutory waiting period of 15 days after closing of the public hearing before it could take action.

Mr. Moriguchi explained that the Department's recommendation was in order to provide the Commission with the additional information received just this morning from the three State departments and not necessarily to receive further testimony from the general public. In view of the waiting period of 15 days, the Commission could close the public hearing and in the meantime, the staff would evaluate the comments received this morning and report back to the Commission.

MOTION: Mr. Creighton moved to close the public hearing and to hold the matter under advisement until sometime during the lapse of the 15-day period. The motion was seconded by Mr. Kahawaiolaa.

Mr. Creighton expressed his desire to receive all additional information received, particularly the statements received from the three State departments.

A discussion ensued whether the closing of the public hearing would preclude the Commission from receiving additional comments from the general public or for the applicant and the opponents from being apprised of any additional information received by the Commission.

Mr. Moriguchi stated that any information received is considered public record so that it would be available to whomever asks to see it. The staff will make Xerox copies of the letters received today and send them to the Commission. The three letters are from the Environmental Center of the University of Hawaii, the State Department of Transportation, and the State Department of Land and Natural Resources. The Department has also asked the Department of Social Services and Housing to clarify some of the comments made earlier and upon receipt of a reply would be reporting back to the Commission.

If it finds it necessary, the Commission stated that it could reopen the public hearing to receive additional testimony. The 15-day waiting period is the minimum, and it has sufficient time thereafter for deliberation before taking action.

ACTION: A vote was taken and the motion carried.

AYES: Creighton, Kahawaiolaa, Sullam, Yamabe, Connell;
NAYS: None;
ABSENT: Bright, Crane.

STATE SPECIAL USE PERMIT/CONDITIONAL USE PERMIT
KAHUKU
KAHUKU HOSPITAL ASSOCIATION
EXPANSION OF HOSPITAL USE
(FILE #72/CUP-20)

A public hearing was held and closed on January 3, 1973, to consider an application for a State Special Use Permit and a Conditional Use Permit to expand and add to the existing Kahuku General Hospital in Kahuku. Action had been deferred pending a statutory wait of 15 days after the close of the public hearing.

ACTION: Mr. Yamabe's motion to concur with the recommendation of the Planning Director and to recommend approval of the application was seconded by Mr. Creighton and carried.

AYES: Yamabe, Creighton, Kahawaiolaa, Sullam, Connell;
NAYS: None;
ABSENT: Bright, Crane.

MISC.
CHINATOWN GENERAL NEIGHBORHOOD RENEWAL PLAN AND PAUAHI URBAN RENEWAL PROJECT
HONOLULU REDEVELOPMENT AGENCY

Presented to the Commission for its information was the proposed Chinatown General Neighborhood Renewal Plan and the first project the Pauahi Urban Renewal Plan.

Mr. Moriguchi stated that the Planning Director has reviewed the plan and is recommending approval subject to the review of the necessary amendments to the General Plan and the Development Plan. The plan will now be transmitted to the City Council for a formal public hearing and action. Planning Commission action is not required; however, by being apprised of what is being proposed, the Commission may desire to convey its comments or recommendations to the City Council.

Mr. Willard Lee, Executive Assistant for the Honolulu Redevelopment Agency, presented the proposed Chinatown General Neighborhood Renewal Plan and the first increment of development which is the Pauahi Project. The total project area is bounded by Beretania Street, Nuuanu Avenue, Nimitz Highway, and River Street containing a total area of 36 acres. The General Plan changes for which they have submitted justifications to the Planning Department would be the parking facilities plus a proposed mall on Pauahi Street and a service alley because of the mall within the Pauahi Project.

Mr. Moriguchi confirmed the receipt of the application from the Agency. The Department is presently evaluating the changes to determine whether or not an amendment to the General Plan and the Development Plan is necessary.

The Commission received the report and had no comments or recommendations to offer. The Commissioners stated that they required a more detailed

review of the proposal before they could intelligently comment on it. They stated further that they would have an opportunity to comment on it at the time of the General Plan and Development Plan amendment review.

MISC. WORKSHOP SESSION GENERAL PLAN REVISION PROGRAM — The Commission was informed of a workshop session to be held on Thursday, February 8, 1973, starting at 1:30 p.m., in the Ala Moana Hotel Carnation Room to discuss the General Plan Revision Program with members of the Planning Department staff and other organizations invited to participate.

ADJOURNMENT: — The meeting was adjourned at 6:35 p.m.

Respectfully submitted,

Carole A. Kamishima

Carole A. Kamishima
Secretary-Reporter

(2)

Special Meeting of the Planning Commission
Minutes
January 24, 1973

The Planning Commission met in special session on Wednesday, January 24, 1973, at 2:05 p.m., in the Conference Room of the City Hall Annex with Chairman Rev. Eugene B. Connell presiding:

PRESENT: Rev. Eugene B. Connell, Chairman
Fredda Sullam
Thomas H. Creighton
Antone D. Kahawaiolaa
Thomas N. Yamabe II

STAFF PRESENT: George S. Moriguchi, Deputy Planning Director
John Grant, Deputy Corporation Counsel
Ian McDougall, Staff Planner
Carleton Smith, Staff Planner

ABSENT: Roy R. Bright
James D. Crane

MINUTES: The minutes of January 10, 1973, as circulated, were approved upon the motion by Mrs. Sullam, seconded by Mr. Kahawaiolaa, and carried.

PUBLIC HEARING
GENERAL PLAN/DLUM AMENDMENT
WAIAWA MAKAI OF INTERSTATE HIGHWAY, EASTERLY OF THE LEEWARD COMMUNITY COLLEGE
PEARL HARBOR HEIGHTS DEVELOPERS MEDIUM DENSITY APARTMENT USE
(FILE #193/C1/32)

A public hearing was held to consider a proposal to amend the General Plan Detailed Land Use Map for Waiawa by redesignating a 6.2-acre parcel of land from Agriculture to Medium Density Apartment use. The subject parcel is situated on the makai side of the Interstate Highway, easterly of the Leeward Community College and identified by Tax Map Key 9-6-03: portion of 39 and 40.

The notice of the public hearing was advertised in the Sunday Star Bulletin/Advertiser of January 14, 1973. No written protests have been received to date.

Mr. Ian McDougall, staff planner, read the Director's report explaining the proposed change in use and the developers' plan to construct seven apartment structures containing a total of 300 apartment units. The Planning Director has recommended approval based upon the conclusion that the area is appropriate for an apartment development and the project would meet the need to provide moderate priced housing units in low rise structures, and further recommending that at the time of rezoning, the applicant be urged to file a planned development proposal for this project.

Responding to questions from the Commission, Mr. McDougall stated that the Department of Agriculture indicated no objection to the use of the 6.2-acre parcel; however, it expressed concern about the retention of the balance of the area presently in the State Agricultural area and containing some

watercress areas and artesian water supply for agricultural purposes. The parcel under consideration presently is not in agricultural production. The watercress areas are farther makai of the subject parcel.

No one testified AGAINST the proposed change in use.

Testifying FOR the change was Mr. George Houghtailing, planning consultant and civil engineer for the developer. He stated that they have reviewed the Planning Director's report and accept it as presented.

Responding to questions from the Commission, Mr. Houghtailing responded as follows:

1. No shopping facilities are planned within the development area because other facilities are available nearby; for instance, in the Waipahu business areas and the Pearlridge Shopping Center in Pearl City.

2. There is a good possibility that the Federal 236 Program would be discontinued. When that happens, the developer/owners have stated that they would finance this project under conventional financing and follow the same criteria established under the 236 Program. The criteria set forth relate to cost and rental.

There was no further testimony. The public hearing was closed and the matter taken under advisement upon the motion by Mr. Yamabe, seconded by Mr. Creighton, and carried.

AYES: Yamabe, Creighton, Kahawaiolaa, Sullam, Connell;
NAYS: None;
ABSENT: Bright, Crane.

ACTION: Upon the motion by Mr. Creighton, seconded by Mr. Yamabe, and carried, the Commission accepted the Planning Director's recommendation and recommended approval of the proposal to amend the General Plan Detailed Land Use Map for Waiawa.

AYES: Creighton, Yamabe, Kahawaiolaa, Sullam, Connell;
NAYS: None;
ABSENT: Bright, Crane.

PUBLIC HEARING
CONDITIONAL USE PERMIT/SPECIAL USE PERMIT
MOKULEIA
FARRINGTON HIGHWAY
NEAR POLO FIELD
(SAND MINING)
WARREN KOBATAKE
dba WARREN CORP.
(72/CUP-12 and 72/SUP-3)

A public hearing, continued from January 17, 1973, was held to consider an application for a Conditional Use Permit and a Special Use Permit to conduct sand mining operations on property located on both sides of Farrington Highway in Mokuleia, identified by Tax Map Key 6-8-03: parcels 11, 15-17, 19, 20, 30, 33, and 35, and containing approximately 152 acres.

The public hearing was kept open and the application was re-advertised to include the State Special Use Permit portion.

Mr. Carleton Smith, Staff Planner, noted that a supplementary report from the Director with an attachment which

is an environmental submission by the applicant, was submitted to the Commission today. The report recommends the addition of another condition which relates to the number of truck loads of sand per day that may be taken from the mining area.

Mr. Smith then recommended that the Commission keep the public hearing open since the Department is still awaiting replies from the Department of Social Services and Housing and the Office of Environmental Quality Control. The DSS&H has been asked to further clarify its position taken originally, and the OEQC has been asked to comment on the sufficiency of the environmental submission. In addition, the OEQC has submitted copies of three letters. One is from the State Department of Transportation taking some exception to the environmental report; the second is from the Department of Land and Natural Resources with a "no objection" type of comment; and the third is from the Environmental Center at the University of Hawaii giving a very detailed report which the staff has not had an opportunity to analyze since these were received just this morning. He stated that copies of these letters will be made available to the Commission members.

A short discussion was held whether to keep the public hearing open as requested by the staff. Since there were a number of persons in the audience ready to testify, the Commission decided to receive their testimony and decide later whether or not to keep the public hearing open.

Testimony IN OPPOSITION to the application was heard from the following:

1. Mr. J. C. Morse:

   Mr. Chairman, my representation is already on file from the last time. I have a couple of new things I'd like to bring before this Commission. I've just given to Mr. Smith and I'd like to give copies to the Commissioners of suggested revisions to the conditions that were recommended to you by your staff. This is made up on the same schematic as revisions to legislation. I've kept in all the language that was originally in the staff's recommendation and they suggested revisions to them. This was, of course, assuming that a permit would be granted.

   Last time I mentioned to the Commission that there had been, in connection with the applicant, Warren Corporation's previous sand mining in Haleiwa, a lawsuit filed. Since that time, I've been able to dig out the pleadings on file in court and just to put the facts on the record, it's a lawsuit filed by, I believe, 12 residents next to that sand mining operation, asking a total of $180,000 in damages--$60,000 of which is punitive damages. The basic allegations are noise, dust, damage. And the plaintiffs in that case state that the Warren Corporation disregarded the conditions that were previously--or that were in the previous permit--Resolution 67 that was issued in 1970 by the City Council. There has been no determination of that case, at least, on the record in court. It is simply waiting trial at this point.

   I understand that Mr. Hertlein testified last time. I did not stay

to hear his testimony. One fact that I understand he stated as a fact, was that water never came more than 150 feet inland from the beach--outside of a tsunami, of course. There are people here who can testify that that is not correct. In both 1970 and 1971, wave action from storms--not tsunami--came at least 400 feet back of the beach. I'm sure some of the people here can testify to that. I cannot, from my own personal knowledge, but some of the residents can.

Another subject that came up at the last hearing was the need for mining sand in Mokuleia. One of the alternatives that's been talked about was the research that's gone in ocean sand mining. Since that time, I have seen four different reports that were issued by the University of Hawaii, the Sea Grant Program, which is under a Federal program, as you probably know. I've made a few copies, not enough, unfortunately, for everyone. I've selected pages out of these reports. I'm not representing that they are all the pages involved and I don't have enough copies of the report to give. I'll be happy to give the Commissioners these pages and I've underlined in red, some areas I think are pertinent. Perhaps, if you want to go further, I can get these publications from the University.

The Environmental Center's memorandum which Mr. Smith said he just received today, I did want to comment on that. I assume you will be getting it. This was dated back in November of 1972 and I don't know why it wasn't in the Planning Commission's file. Certainly, Mr. Smith didn't have the advantage of looking at it when he made his initial recommendations to you. It is comprehensive, as pointed out, it has some good points.

The last point I'd like to suggest, and I think probably I would refer this to the Corporation Counsel's office, is whether there is any problem under the National Flood Insurance Program with the proposed mining up here. I don't know the answer to that. I did read some of the regulations briefly in the Supreme Court Library today concerning restrictions. I do know that some or all of this area is in the designated flood prone area. This, as you probably know, is that people in that area can get Federal Flood Insurance at a very cheap rate, perhaps, 10 percent of the rate that would otherwise be charged. As I understand it, if there are violations of whatever land use restrictions in this area, the people would stand to lose the benefit of this insurance. I don't pretend to be an expert, but I think this should be reviewed or perhaps a report from the Corporation Counsel to you. Thank you very much.

(There were no questions of Mr. Morse.)

2. Kathleen Maurer:

Mr. Chairman, I, too, spoke last week but since that time I've been up to the area and have done some further research and my testimony today will be different from last week.

My name is Kathleen Maurer and I'm from the Department of Social Services and Housing. I'm representing Myron Thompson. First of all,

I have a question for Mr. Smith. I just want to know when he requested clarification on DSSH's position because I haven't seen anything about it.

(Mr. Smith's reply was that the letter was sent out last evening so the DSSH probably have not received it yet.)

Warren Corporation proposes to mine 1.67 million cubic yards of sand from 152 acres of coastal land on Oahu's North Shore during the next 15 years. The size of the operation and the time period involved clearly indicates massive potential for environmental change. My department, the Department of Social Services and Housing, feels that those agencies charged with evaluating Warren Corporation's request, as well as the people of the State of Hawaii, deserve to know what these ultimate effects might be. Before action can be taken on a proposal of this magnitude, a thorough and well researched study of this wide-ranging impact must be made. The present information provided by the Warren Corporation is inadequate. It is riddled with inaccurate statements and nebulous generalizations. On the following grounds, we question the validity of Warren Corporation's existing study:

Warren Corporation's study--referring to vegetation in the Mokuleia site--says: "The present vegetation on the subject land includes various grasses which are no more than one foot high; there are no tall bushes or Halekoa trees."

I was up there last Sunday. I walked through the area. The grasses are three to four feet high. There is Halekoa in the subject area as well as Keawe, other tall bushes, several Coconut palms, and Monkeypod trees.

Further, the Warren Corporation report states, "Also scattered throughout are tall pine trees which are concentrated in Area 2." (If you are going from here, it's the first area on the right.)

This report is unclear on the location and the number of the trees and, furthermore, they are not pine trees--they are ironwoods--ironwoods are not pine. And there are many of them in both Areas 2 and 4. The report states, "It is not anticipated that any of the tall pinewood trees will be dug up or cut."

I submit that it is nearly impossible to mine Area 2 without digging up or cutting any tall ironwood trees. Furthermore, digging near the roots can be seriously destructive to these trees.

In addition, Warren Corporation intends to locate berms to hold down noise pollution. According to the Environmental Center report which the University of Hawaii produced, these large berms located near these ironwood trees would probably kill the ironwoods.

On the subject of revegetation, the report from Warren Corporation lists five grasses. According to the UH Environmental Center study, one of these listed species is non-existent. To clear up such confusion, we suggest that both the scientific and common names of revegetation grasses be listed in future studies.

The type of vegetation which Warren Corporation intends to put in the buffer zone is not specified. This is important because the vegetation has to meet certain qualifications to serve as a buffer. Particularly, for view, it has to grow fast and it has to be tall.

In addition, last week, Mr. Hertlein, in fact, testified to the effect that the berms would be made of sand. I wonder if the Warren Corporation has made appropriate plans to vegetate sand berms.

In addition, the dust problem. According to the report by the Warren Corporation, "Since sand mining operations will cease at 5:30 p.m., no dust will be generated after this time." Two problems. At night, because of the coastal area, the breeze is generated from mauka out to the sea. This will bring any dust from any storage piles or from the loose soil in the reclaimed areas and from the area mauka where the soil is being dug up to refill the beach area. The wind blowing mauka to the sea will bring any possible dust into residential areas.

And then the Warren Corporation has failed to evaluate any possible ultimate effects. The Environmental Center report suggests that since this beach area may not yet be stabilized a natural alteration of it may occur through storms or whatever, which would eventually cut through the 150-foot setback zone and erode the dirt backfill. There is no evidence presented in the report that the beach is, in fact, stabilized.

As far as noise is concerned, I was up at Waialua Intermediate and High School two days ago. At present, there are heavy trucks going past there. We've had a decibel meter and in the classroom, at a distance of three feet, I had to shout to communicate with the person who was running the decibel meter whenever a truck went by. Now, the trucks that are hauling out of there now would be similar to those that Warren Corporation would be using to haul their sand.

In addition, one of the alternatives which was already presented is undersea sand mining. One problem here is that at present the law has been interpreted to prohibit such undersea sand mining. However, I spoke with a gentleman today from DPED who has drafted a bill and introduced it in the present legislative session which would, in fact, legalize undersea sand mining. The only problem is you would have to get clearance from DL&R--some sort of permits from them and also from DOT Harbors Division.

The general tone of Warren Corporation's report gives DSSH grounds for questioning its reliability. To quote a few passages: "The improved landscape area will hopefully be the end product." In addition, they state: "We understand that the supply of sand will be exhausted in the not too distant future."

In speaking of offshore sand, they say: "The quality, versatility and cost are highly suspect." So, that just indicates an extremely unscientific approach.

In addition, I have received a reply to my first comments that I sent to OATC which got transferred to Warren Corporation and their replies to my comments are no more soundly based--very disappointed.

Thus, because of these questionable points in the study provided by Warren Corporation on their proposed sand mining project, the Department of Social Services and Housing and its Director, Mr. Thompson, repeats its recommendation that a thorough and detailed scientific study be completed before further action is taken.

In addition, we request that the natural aesthetic beauty of this particularly unique area of Oahu be recognized, considered, and above-all, appreciated. Thank you.

Questioning of Miss Maurer followed:

CREIGHTON: You spoke of taking a decibel count in the classroom. What was the result of that? Did it indicate decibel levels above or below the CZC permitted levels?

MAURER: As far as--I don't know CZC's. I talked with the Department of Health and they said that State Standards now supersede the City and County Standards. In this particular case, the trucks were not in violation of the Standards. The Standards are 94 decibels. The reading that we got, taking random samples and it was a very fine scientific experiment, was 72 decibels. I can give you the citation for it. It says: "Communication at 24 feet distance with above 60 decibels can only be accomplished through shouting." Now, at 24 feet we had 72 decibels. So it's impossible to hold classes there. I was out there at five. You know, in this particular case, the State Standards are simply absurd because it's a special case.

YAMABE: A question of the staff. What is the CZC maximum amount of decibel standard?

MORIGUCHI: This varies, Commissioner Yamabe. It depends on the position of the reading taken. Now, the pertinent question here would be, how, and we might address this to Miss Maurer later--how were their readings taken and from what point, etc. There is a problem, as you know, too--the various experts--there is a problem of isolating other sounds that impact on the meter and this becomes a highly technical type of procedure and we would recommend that such efforts only be conducted by engineers--accoustic engineers--highly versed, technically, in the area. As an example, Commissioner Yamabe, the zoning requirements for industrial areas require that certain readings be taken at the property line. And if we're talking about being actually at the site of activity, this would change the readings considerably. So, the Standards should be viewed under each of the cases, the circumstances, involved.

YAMABE: Is it possible for the staff to take a reading in this particular area before the next meeting to determine as to whether this would exceed the maximum allowed under the CZC, as far as the decibels are concerned?

MORIGUCHI: I'm sure this can be done. We'll have to ask the consultant's accoustics engineer to do this for us, Commissioner Yamabe. Carl, do you have any further information on this?

SMITH: I'd like to make a point that we are not really talking about CZC requirements when we're talking about the noise generated by traffic. This is controlled, as Miss Maurer points out, by the State's statute on traffic noise generated by traffic on the highways. Under the standards now permitted, I hope I can remember this, at 20 feet from the center line of the traveled lane, a heavy vehicle is permitted to generate 96 db. At 50 feet from the center line of the traveled lane, they are permitted to generate 84 decibels. When this was--we have done a little bit of research on this--and when this is laid on a map, on a plot plan of the school, the 50-foot line cuts through a certain number of classrooms. The noise levels can be expected to be up to 84 decibels at that 50-foot line. We have also done some other calculations but, basically, that's the situation.

YAMABE: Mr. Chairman, the reason for my questioning is that I would like to determine in my own mind, weighing the testimony here, as to whether the conformance to the requirement of the State Statute or whether it be the City Ordinance, whether this is sufficient or not. I'm under the impression that we do have a very stringent law in this area. However, the testimony as given to us, inasmuch as it does not exceed the maximum allowed, this is quite a disturbance to the people involved--whether it be classroom or elsewhere. What are we talking about? Are the requirements inadequate? If it is, should we do something about that requirement or the law or the statute or the rules or regulations or what may be? Or, should we rely upon the already established rules and regulations and decide as to the fact as to whether it is detrimental or not? We have to have something to hang onto--something where we can hang our hat on.

MORIGUCHI: I'm sorry, Commissioner Yamabe, is this question directed to the department?

YAMABE: No. I made the statement so that you might consider this. I don't know whether you can take a reading or not but....

MORIGUCHI: You mean to actually take a reading at the school site that we're looking into?

YAMABE: Either that or I'll further discuss it when we take it under advisement. We won't be closing it, but...

MORIGUCHI: Fine.

CONNELL: Is is possible, George, that these are requests that can be made of the State agencies? Commissioner Sullam?

SULLAM: I would like to know--this is a question directed to the staff--whether a plan or a map has been made by either the Department of Land & Natural Resources or some other body indicating where the sand deposits are? Obviously, we need sand for construction and we should be looking at the overall picture and look for the least harmful places as far as the environment and, certainly, the people are concerned, rather than waiting until someone comes to us, to the City, asking for special permits. We should already have a map before us telling us where the desirable places are. Has such a map ever been prepared?

MORIGUCHI: Commissioner Sullam, to our knowledge there is no such map prepared that would indicate sites that might be suitable for sand mining. Of course, we do have information indicating where sand basically underlies the strata but nothing that indicates we should have quarries here or there over the next number of years. I think it's a situation where quarry operators apply to the various agencies for permits as they discover they can mine economically, but there is no such map as you speak of.

SULLAM: Then it's all right to say we have no way of evaluating alternatives? Obviously, sand is needed and if an applicant comes to us and we deny it, that means we are limiting the supply of sand.

MORIGUCHI: Yes. About the only thing we can do at this point and time is to ask the applicants whether or not he has considered other options and whether or not he is free to devulge his findings about these other options to us.

MAURER: Mr. Chairman, may I make two more statements? Number one, I just want to comment. I spoke with the principal out at Waialua Intermediate and High School and he told me that they had been forced to discontinue the use of one entire classroom because of the noise level in this particular classroom. The second thing was about the qualifications of the young man who took the decibel readings. He is a graduate student at the University of Hawaii, worked under Dr. Burgess whom most people recognize as an expert in accoustics, and the readings were taken under scientific basis.

CONNELL: I think the only question that might be asked is, is he an expert?

MAURER: Not himself, but you know, we're on the way up.

CONNELL: So he's an expert on the way up?

MAURER: You've got to get there some way.

3. Joyce Wrobel:

Mr. Chairman, my name is Joyce Wrobel and I am the owner of Mokuleia Beach Colony. You have my letter on file.

My concerns are in the letter regarding the noise, the dust, etc. According to the general standards for Conditional Uses compliances and requirements and the Comprehensive Zoning Code, the proposed Conditional Use "will have no more adverse effect on the health, safety or comfort of persons living or working in the area, and will be no more injurious, economically or otherwise, to property or improvements in the surrounding area than would any use generally permitted in the district. Among matters to be considered in this connection are traffic flow and control; access to and circulation within the property; off-street parking and loading; refuse and service areas; utilities; screening and buffering; signs, yards, and other open spaces; height, bulk, and location of structures; location

of proposed open space uses; hours and manner of operation; and noise, lights, dust, odor, fumes and vibration." I'm sure you know that.

One concern that has commanded very little attention is the danger of the mining area to our children. There are many of us who live at Mokuleia Beach Colony that have youngsters. We live next to the Polo Field and do exercise limits on our children with regard to dangers in the area. However, this is a new one. According to the Comprehensive Zoning Code, there must be a plan showing safeguards for access by children to dangerous areas. "The plans for the exploitation phase shall demonstrate the feasibility of the operation proposed without creating hazards or causing damage to other properties. This plan shall also show the manner in which safeguards will be provided including those for preventing access by children and other unauthorized persons to dangerous areas." I would like to know if such a plan has been submitted by the applicant. And, berms are not a safeguard for children.

CONNELL: Mr. Moriguchi, has the Planning Department received any such plans?

MORIGUCHI: We have no such plans, Mr. Chairman.

(There were no questions of Mrs. Wrobel.)

4. Vincent Mazza:

I'd like to make a brief statement here and I concurred, I believe, the last time I met this Board--last week with what was said. But, I would think that there are a few things that were not brought out. Especially by Mr. Hertlein, he seems to be talking of certain size granule and I believe he was addressing his remarks in the way of sand--that at a 20-knot wind, it would not go further than 170 feet. Now, I think he was addressing his remarks to the sand. And the other people who live out there are concerned with dust--not the sand. I'll agree that scientifically the sand will go, maybe, 150 feet, but we're talking about dust that is deposited and stirred up again by trucks and then deposited and stirred up again and I think this is what people out there are concerned about.

Now, I have listened to the testimony here and one of the things--the primary things--that we should be concerned about is, and I've heard it addressed a little bit more today, "Is this the only place you can get sand?" I think that should be our primary purpose.

From the testimony I've heard, it looks like it's going to cause quite an impact and I would object to this if it was going to be done down at Waimanalo--anyplace on Oahu that would interfere with people in their normal living, peace of mind, and the enjoyment of their property. That's part of the real estate that you're supposed to be able to enjoy--your property, etc. This, I would think, would seriously interfere with this, so I've addressed my remarks as a Hawaii resident, not as anybody that lives out there because I don't

live out there. I own property out there and I'm concerned with the property being downgraded.

I would also like to address my remarks concerning the landowners or the corporation that owns the land out there. As I recall, he said that land on the mauka side of the highway was self-supporting in the way of cattle. In other words, he was able to hang onto this land, pay his taxes--it was self-supporting. So it isn't really any hardship on these owners, I would think, in that area. On the other side of the highway he has some very valuable piece of property that he can sell if there is a drain on his income, at fantastic prices, and I am sure there are a lot of interests who would like to invest in this area. But I don't think he has any hardship that I can see in this area, but he has to do it to make ends meet. I should think that would be one of the considerations in considering or, in my opinion, downgrade this part of the country. I think I will drop the rest of my remarks and save you time here.

(There were no questions of Mr. Mazza.)

5. Sanford Parker:

I testified the last time. I'm Sanford Parker. I heard remarks from one of the people that we really haven't got too big a crowd at these public hearings. I want to let you know what a hard job it is to come in from Waialua and Mokuleia to a public hearing. It's a good hour's drive. You can't find a place to park. The last public hearing, we were here until six o'clock. When we got home finally, it was about 7:30 p.m. or 8:00 p.m. Most of our people who work everyday can't come to a public hearing. Maybe it would be nice if we had a public hearing at the Waialua High School instead of 40 of us trying to get into automobiles and come on in. Since we're going to carry the public hearing over, maybe we could have the next public hearing at Waialua.

CONNELL: Let me respond to that, Mr. Parker. Almost every public hearing that we have, they would like to have it held in their area. The Commission, in the past, has only met every other week except for the last two years where we've met every week and we generally run until six o'clock once a week. Our problem would be that, I think, some of us might have to give up our occupations in order to be able to have these public hearings all over the island. The second point is that the Commission does not make its decision based upon the number of people that show up. We're interested in what the testimony is--for and against a particular application, so if we keep hearing a lot of redundant testimony, that doesn't make it any more true or false.

PARKER: Of course, it is true that you do have public hearings outside of this room. We've had a couple of public hearings in Wahiawa.

CONNELL: Not the Planning Commission.

PARKER: Who would hold the public hearing then?

CONNELL: If it is a Planning Commission public hearing, it is held in this room and with the exception of this, occasionally, we have gone to the City Council Chambers but the Commission does not hold public hearings in various parts of the island. Now, it may be one of the other governmental agencies that may be portions of the City Council but it's not this Commission.

(There were no questions of Mr. Parker.)

6. John Parker:

My testimony is the same as the other gentleman's, concerning the content of the sand. I brought some down. I'd like you to all take a look at it. If you put your hand in it, you'll find a lot of fine particles in it. I did take some while I was down there, shoveling away and threw it up in the air and, of course, the sand goes straight down and then there's the general whit (fine particles) that just kind of floats off and there was just a very slight tradewind.

I've nothing more to say then what the other man said about it, but if you all just would like to take a look at what it sort of looks like. (Submitted two packages of sand.)

Testimony FOR the application was then heard.

1. Allen I. Marutani:

Mr. Chairman and members of the Planning Commission, my name is Allen I. Marutani and I represent the applicant corporation.

With respect to the suggestion that was made regarding keeping the public hearing open, I would like to offer my suggestions to the Commission. My suggestion would be that the public hearing would be closed after the testimony is taken today, subject to the receiving by the Planning Commission of the two requests that Mr. Smith had alluded to, with an opportunity on the part of the applicant corporation, within a reasonable time thereafter set by the Commission, to answer any queries or problem areas that might have been received by the Commission respecting these two communications, and that thereafter, if the period of time within which the applicant corporation is required to answer passes, either without the applicant corporation answering or with the applicant corporation having submitted its comments, that the public hearing be closed. This would be my suggestion inasmuch as it appears that we've already gone one public hearing last week. We are now in the process of going through our second public hearing and that, I understand, there is a provision further that there is a 15-day period after the public hearing is closed before which any action can be taken, and I think Mr. Smith testified that, in effect, this would be 21 days, which would be three weeks. So, as long as the public hearing is kept open, this 15-day period is also and, likewise, kept open. So my suggestion would be that inasmuch as there have been two public hearings, that the public hearing be closed, subject to the lmitations that I have just mentioned.

The other comment that I would like to make is with respect to the public hearing in Waialua High School. The staff of the Planning Department did call a public hearing on this particular application some time in December of 1972 concerning this particular application at Waialua Intermediate and High School which was the place that one of the witnesses had suggested that the Planning Commission hold its public hearing. But, this was an informal hearing held by the staff of the Planning Department.

Now, at the last hearing, we had presented testimonies by Mr. Gordon Cran from Mokuleia Ranch Company and also a testimony by Dr. Fred Hertlein, and we would like to continue on with the testimonies from various parties that we have asked to come here before the Commission to testify. So the first person we'd like to call to the stand to testify is Mr. James Higa who is representing the Home Builders Association.

CONNELL: And this is testimony which the Commission has not previously received?

MARUTANI: It has not.

MR. JAMES HIGA:

My name is James Higa and I am Vice Chairman of the Legislative Committee of the Home Builders Association of Hawaii.

(Mr. Higa read his prepared statement as follows:)

"Our builder/members construct almost 90 percent of all the single-family dwellings on Oahu and the general membership is involved at all levels of residential constructions on all the islands. Our association does not normally take positions on individual requests but we do so when it affects the major segment of our industry. Price of housing in Hawaii is skyrocketing and this is due to many causes, one of which is the scarcity of materials. And, in this particular case, sand--sand which is used in making concrete slabs, blocks, and other purposes.

"We want to point out the effect of lack of mining of inland sand would have on the entire cost of home building on the island if it is prevented. As an example, an 8x8x16 concrete block on the island costs 82 percent more than it would on the mainland. Another example is concrete for a typical house slab costs 46 percent more than it would in California.

"These figures were obtained from a study done by the Planning Committee, the City and County of Honolulu, entitled: "Elements of Residential Policies of Housing Programs and Planning Areas" published in December, 1971.

"One of the determining factors in this price difference is the scarcity of materials and, in particular, lack of sand which is an essential material. There are virtually no other known deposits of

inland sand available at this time on Oahu, as testimony later will show. This means the only source would be expensive crushing of rocks to keep our industry going. There is no cheaper sand than naturally-mined sand which would be obtained by the applicant.

"We feel that the alleged problem of noise, dust, and other problems can be adequately handled by the Warren Corporation. Based on this, we urge favorable action on the application by Warren Corporation.

Legislative Committee
HOME BUILDERS ASSOCIATION OF HAWAII"

(Questioning of Mr. Higa followed.)

YAMABE: Mr. Higa, do you have any idea as to how much sand you will be able to extract from this area? and within what period? I'm trying to get to the point of depletion.

HIGA: I don't have those facts available. I think testimony later on will give you those facts.

YAMABE: Has the Association considered synthetic or whatever substitute that they would probably be needing in the future since the fact has been presented that sand is being depleted, not only on Oahu but also on neighbor islands?

HIGA: No, there has been no study done at the present time.

CONNELL: Any further questions? (There were none.) Thank you, Mr. Higa.

MARUTANI: Mr. Chairman, in response to Commissioner Yamabe's question regarding the amount of sand that is expected from this operation, if it is in order, we have made some very rough calculations. In Area No. 1, we expect to have 213,333 cubic yards of sand. In Area No. 2, 568,889 cubic yards of sand. In Area No. 3, 611,556 cubic yards of sand.

YAMABE: What is the annual use? Do you have any idea of the annual use of sand?

MARUTANI: According to the information that we have, there is an approximate use by the construction industry of 500,000 cubic yards of sand in Oahu, on an average basis for the past three years, 500,000 cubic yards per year. We have no statistics as to the total amount of cubic yards that is used in other areas as well, such as public beaches and other areas. But the information that we have is in the construction industry.

YAMABE: Would it be a reasonable guess on my part if I say that this area, representing three areas--1, 2, and 3,--will probably deplete the sand, giving the industry approximately 2-1/2 years' supply?

MARUTANI: Yes, probably that is true, except that it is not our intent to remove everything within 2-1/2 years. It will be incrementally done over a period of time.

YAMABE: Do you have any idea how much sand is being mined at this time in some other areas?

MARUTANI: I am not in a position to submit this information, but I would imagine that Molokai would be the substantial source of supply of natural sand at this time. There is manufactured sand which is available and which is on the market at this time, but as far as natural sand is concerned, the information that I have is that Molokai is a substantial source at the present time.

YAMABE: You don't have the volume?

MARUTANI: I do not.

CONNELL: Are there any questions the Commissioners would like to ask? (No response.) Mr. Marutani, perhaps you will get to this with additional testimony. Two issues that have been raised--one, is the dust level, and secondly, on protection for children. Mr. Higa indicated that the dust problem had been met to his satisfaction or was going to be met to his satisfaction. Can you tell this Commission how you are going to control the dust problem?

MARUTANI: The control of the dust problem will be by constant watering of the dirt--constant moisture in the digging up of the dirt in the fill area or in the dirt area; watering of the dirt in the transportation of that dirt from the fill area or the silt basin area to the area that the dirt will be used to replenish, and; thereafter, from that point on a constant watering again when that dirt is removed from the truck down into the area. Inasmuch as the area to be worked on, at any one particular time will not exceed three acres, only one of which, about one-third of which will be used for the actual sand mining operation, and the actual refilling of dirt, so in approximation, it will be about one acre at any one particular time, so we feel that by our taking precautions to moisture, to keep the dirt moistened as well as to limit the area of operations to a small, relatively small area within the whole area, that this is the way that we intend to keep the level of dust down. We also would ask Dr. Hertlein to present additional testimony regarding fugitive dust from the dirt which we intend to call later on this afternoon.

CONNELL: He'll have more information on this? Because out of the two questions, in response to what you said, one, after wetting down the operation, whether that moisture level will stay moist long enough on toward the evening when the winds come up? Is that going to keep the dust from moving around? Are you going to have the wetting operation going on all through the night?

MARUTANI: This is a comment that was raised by one of the witnesses and I've asked Dr. Hertlein to comment on that point.

CONNELL: Do you have some comments regarding protection for children?

MARUTANI: The only comments that I have on that point would be that we would have to have some type of signs--big posted signs--in that immediate vicinity to warn children not to enter into this area and to

alert the men and the people there to keep the children out of the area. There will be berms that will be set up and that might be a physical barrier to the actual operations area.

CONNELL: So the protection for the children is going to be depended upon their ability to read?

MARUTANI: Not only that, we have, we intend to instruct the men to be wary of wandering children in that area.

CONNELL: I'm sure the Commission would want to give some thought to that. Mr. Marutani, who else would you like to call?

MARUTANI: I'd like to call Dr. Uehara who is a professor at the University of Hawaii to the stand.

DR. GORO UEHARA:

Like all professors, I've got quite a bit of written material. My name is Goro Uehara and I'm with the Department of Agronomy and Soil Science, and my specialty is Soil Science. I'd like to provide information on the distribution and whereabouts of sand in the State of Hawaii.

There are three major sources of sand in Hawaii, and by sand, I'm referring to beach sand which has got some problem. We do import a very small amount of silica sand from Australia. As you go to Lake Michigan, the sand there is white and it has about the same particle size distribution as Waikiki Beach but it is composed of silica which is quartz sand and has a very different composition. In Hawaii, beach sand is calcium carbonate and the remains of shells and coral so that it has a dual purpose as a building material and as a source of lime. The major source and the most visibile supply of sand is along the beaches and currently we are mining sand from the Island of Molokai. This is going to end in 1975, I understand.

The other area is the deep-sea source. Research under the Sea Grant, the University of Hawaii has about five or six publications on the whereabouts of this sand and they are very intensive publications on the whereabouts. For example, this technical bulletin is entitled: "Hawaiian Shallow Marine And Inventory--Part I." They describe a major sand deposit on Ahu o Laka Sand Deposit, Kaneohe Bay, Oahu.

This second report, "Reconnaissance Sand Inventory: off Leeward Oahu."

Third, "Reconnaissance Sand Inventory: Off Leeward Molokai and Maui."

Fourth, "Potential of Offshore Sand as an Exploitable Resource in Hawaii."

They go off onto Maui, Hawaii, and Lahaina--off Lahaina, Maui, and Molokai. If you read the report, you'll find there are thousands of millions of cubic yards of sand so that there is no limit of how much sand we have. It's a matter of cost, but more important than cost, we have another report written by James Levin and approved by the

Chairman in April 29, 1971, and it is entitled: "A Literature Review of the Effects of Sand Removal on a Coral Reef Community."

Let me read for you page 24, a summary and conclusion of this report. I'll just read the first paragraph and I'll leave this with the Commission, for your information. You think you are going to have problems in approving removal of sand from land, wait until you start getting requests for removal of sand from the ocean.

(Dr. Uehara read from the bulletin mentioned.)

"1.5 Summary and Recommendations

Sand mining and other dredging activities alter the reef environment by producing suspended and deposited sediments, removing the original bottom-water interface and deeper substrate material, creating new deep water areas, and possibly causing the release of chemicals from the sediments. All of these conditions can adversely affect the life of a coral reef community. In some instances the effect may be of short duration with the rapid re-population of an area; in others the effects may be of long duration with the ultimate degradation of the reef community."

They go on and on and on and describe the consequences of mining from the ocean. The alternative to--this is not an alternative. The mining of deep water sand is not an alternative at this point. I am sure that in 25 years or sooner, we will be forced to go to the ocean.

The third alternative--I've mentioned the beach, I've mentioned the offshore which is merely a study, it's not an alternative, is the deposit on land, and the Commission, I think, suggested that we'll just have to take what people have to say about where the sand is. In fact, this is not so.

We have soil survey of the Island of Kauai, Oahu, Maui, Molokai, and Lanai. This is a five-island survey and in this survey, all of the different soils in the State, or at least the islands, are delineated very, very carefully. I have a report for you gentlemen. This is a soil survey map of the Mokuleia area and there are two pertinent soils in this area. No. 1, the "Hauka" sand and the "Batu", the Mokuleia series.

The term "Hauka" comes from Puerto Rico where the similar soil is identified. It is beach sand but it is not on the beach. It is inland and represents an old relic shoreline which developed nearly 30,000 years ago when ice was much lower in the South and North Poles when the sea level was higher. This beach sand extends underneath the Mokuleia soil and mining operation would remove sand from the Hauka soil and the Mokuleia soil. The boundaries are carefully delineated on this map. By the way, this thing came out only about three weeks ago, for your information.

There are other areas where similar soils occur on Oahu and you can look in this map, but I think I can appeal to your own experience to determine where they are. For example, if you go to Bellows Field on a Sunday for a picnic, you'll find that the sand, in fact, does extend quite far inland. In fact, the mining operation in Waimanalo represents an old indurated sand dune. If you drive along Kalaheo Avenue in Kailua, that whole area is beach sand. If you play golf on Kahuku Golf Course, that's all beach sand. But you'll notice that most of the areas on Oahu are already being used and populated. The only open area, relatively open area, represents the point from Haleiwa to Kaena Point. And, here, we have beach sand of sufficient good quality for mining.

So the alternative reduces to, and if I can summarize, three areas. The beach, which we cannot touch any more, and we certainly don't want to mine the beaches; the ocean, which will probably be mined in about 25 years; and now, the beach deposits on land. And if we were to look at the distribution, the large distribution occurs in the Mokuleia-Kaena Point area. Thank you. I'd like to leave these reports with you. (The five reports mentioned were filed.)

(Questioning of Dr. Uehara followed.)

SULLAM: Dr. Uehara, since you say that the ocean sand mining would be very harmful to the environment, and even though you say there is unlimited supplies of sand everywhere, it seems like they are not really accessible for many reasons. Would you, or do you concur with this thinking? Do you feel that we really don't have unlimited resource as we would think at first glance?

UEHARA: I think the supply is adequate. It's simply a matter of economics of mining the material and the effect on the environment, particularly on the existing quarry you are talking--you are referring to the marine sand deposits?

SULLAM: Yes, I'm referring to that, and to this as well. Apparently, there are long-range effects that could take place.

UEHARA: In the ocean?

SULLAM: Well, in the ocean and here as well.

UEHARA: Let me add a point about the mining operation in Mokuleia. The soil is the Hauka sand and the Mokuleia series. In the mining operation, the sand will be removed and the soil material will be replaced in excavated areas. The soil material will come from the soil which we call the Kaena series. Now, by doing so, the long-term effect would be beneficial because you are simply removing inert sand which is good for construction material but which is very poor for crop production, and by doing so, you are going to improve the pasture quality. Sand simply can't hold water. As you know, sand is droughty. Soil has finer particles which--fine pores--which can retain the water so that the droughty conditions can be removed. Then the agricultural potentials of that area would be much improved by removing sand and adding soil.

SULLAM: In your mind, you feel that this is one of the very best places then to mine sand?

UEHARA: I'll have to admit that I haven't made a very thorough study of this area, but if you look around the shorelines of Oahu, and you think, based on your own experience, the unpopulated areas on Oahu, the last remaining area is that point near Kaena Point. And I think that all we have to do is appeal to your knowledge of the population densities on this island. If we did find other deposits, you will find that you will enter areas which are much more highly populated. The problems aren't going to be lessened.

YAMABE: Dr. Uehara, you mentioned that we have ample supply of sand. However, you did also indicate that you did make a thorough study as to what areas may be best, what areas might be mineable, what others may not. Are you at liberty to say that you might work with our staff here in determining what might, or where might be the best area, etc.?

UEHARA: I think so, given sufficient time and resource. The information is here. It's simply a matter of having someone delineate the boundaries and make some rough computations. I might also add that on the island, in the State of Hawaii, we have about 40 million cubic yards of land on the beach--along the beaches. We are currently using a half-million cubic yards per year, and according to this report, if we continue to use sand at this rate, in five years we will have used 25 percent of the sand on the beaches of the State. We simply can't do that, you know.

YAMABE: This is beach sand which we are not able to mine at this time?

UEHARA: Yes, and this is mostly from Molokai and they have the quantity of sand that we mine from Molokai currently. The information is here.

YAMABE: Thank you, Dr. Uehara.

CREIGHTON: I gather from what you say, Dr. Uehara, that you feel that this particular area--Mokuleia to Kaena--is really the only available area on the island for land mining of sand?

UEHARA: I can't say it's the only area but I don't know of any other good areas currently.

CREIGHTON: Then it would seem that we are very rapidly reaching depletion of land-mined sand and we'll have to find some other substitute.

UEHARA: This is true. Once you build a home in an area, no matter how good that deposit, no one is going to remove that sand from underneath your home.

CREIGHTON: So approval of this particular mining operation would simply postpone that day a few years?

UEHARA: That's right. I think, eventually, we would have to go to the ocean, or if we import sand from elsewhere, we will simply have to pay for it from our own pockets.

CREIGHTON: Thank you.

SULLAM: I was just thinking. In view of all that, would you recommend that we start rationing sand, that, perhaps, saying that sand should only be used for ....

UEHARA: If I had to make any kind of recommendation, I would recommend to the State that they utilize, now, those open spaces and utilize those lands quickly before they are covered by man because the mineral resources of the State are very, very limited and we'd better make use of it when we can. Coral sand and basaltic rock, they may seem very common to us, is a very important natural resource for the State and we should use it wisely.

YAMABE: Would you also agree to recommend making a recommendation to the Department of Land and Natural Resources that such an area should be set aside as conservation as far as land use designation is concerned?

UEHARA: They don't have to be conservation areas. They can be used. A conservation area should be up in the mountains.

YAMABE: Well, there's a number of uses that's permitted in conservation. Conservation is primarily to keep developments off this type of natural resources.

UEHARA: Well, that's a recommendation that others can make. I think, from the standpoint of recreation, these are ideal areas for recreation because they are close to the ocean.

YAMABE: As long as it's kept open so that they can be mined?

UEHARA: Kept open, and the land is not going to be--the usefulness of the land is not going to be lessened by adding soil. It's going to be improved. Simply like adding top soil to the area.

YAMABE: Right. Thank you.

CONNELL: Any further questions? (No further questions.)

MARUTANI: Mr. Chairman, at the last hearing we had Dr. Hertlein testify regarding the fugitive dust from sand as well as some noise problem. Now, at the last hearing, some comments were made regarding dust from soil and Dr. Hertlein has made some additional studies in this area and we'd like to ask him to inform the Commission of the result of his findings.

FRED HERTLEIN:

Thank you, Mr. Marutani. Mr. Chairman, Commission members, and interested guests. My name is Fred Hertlein and I guess most of you remember me from last time. Besides being the head of the Industrial Hygiene Unit at Pearl Harbor Naval Shipyard, I have been, the last three years, running my own consulting firm in air, water, and noise pollution, the evaluation of it, and the control of it.

The Warren Corporation originally contacted me in this area to determine what major environmental impact you might have in this area, and I submitted much of my testimony in the way of a summary of the report that you probably have before you now. I think you all have it by now. I have some notes of additional studies and calculations that we've conducted on dirt and noise and I would like to go through these and, as we go along, I have a feeling that many of the questions that have been coming up this afternoon will be answered.

The past--may I go up here? The past testimony I gave indicated that I used, in my calculations, a wind velocity of 20 miles an hour as a maximum and, to date, I still have found nothing in the published literature to indicate that the velocity of the winds out there go anything higher than that on a maximum scale. As a matter of fact, on studying the data a little more critically, we found that the velocity is generally in the area of five miles an hour--more usually between five and ten. I think it would be fair to say that 75 percent of the time, the wind velocity is in this particular range.

Also, the subject came up about the reverse cycle of the wind during the evening. You'll notice in the data before you that it doesn't exactly reverse. It changes roughly from a north-northerly, north-easterly, east-northeasterly, and north-northeasterly, as well as easterly direction over to an east-southeasterly direction from this area. So, the first thing you have going for you is that the wind direction during the daytime is towards the mountain area and away from any residences. Thus, dust, should it be generated, and this is a big IF because I can almost guarantee you it won't be generated by the precautions the contractor will follow and take. It would be blowing into this direction or into over here, this way, and the residences are over here. There will be very little wind direction in this direction here.

In the evening when the operations aren't going, of course, it changes slightly but there will be nothing to be carrying dust in there because nothing will be raising the dust up to make it airborne. Thus, the wind velocity, which we have been bandying around here, please understand, is 20 miles an hour at the very absolute maximum. You're not normally going to have conditions where the wind is 20 miles an hour. It will be generally much below that. So, in my calculations, I have been, what you might call, conservative. And we believe in being conservative because this is the way the recorded data is. As a matter of fact, the maximum is actually 18 miles an hour, which has been recorded. I used 20 because it's two miles higher. Some of the nit-picking that has been coming up from the opposition here is really nothing more than that. They bring up points which seem to appear almost as tiny little crevices in a hill they have to climb. And, almost anything that you can grasp at is being brought up. Some of their points bear little or no weight at all to the major impact on the environment here. Let me go back here now to the rest of the things.

Thus, with the sand particles of 150 micron diameter, as has been brought out, they won't go any further than 105 feet which can easily

be contained in the boundary. Now, people have brought up this matter of dirt and dust that's mixed with the sand. The results from the Pacific Concrete and Aggregate Concrete Laboratories indicate that the smallest size particle in those samples is that size that I mentioned last time. There are none smaller or I would have based my calculations on them. However, when the fill is brought down from the mountain area, we definitely have to consider a different type of material, and when we do this, I have found out from Dr. Uehara, from the University, whom you have just heard, that the aggregate up there is usually in clumps of about 100 micron diameter--the soil is. This is as small as it gets. It's density is 2.5 at the worst and at the best, it gets up to 2.8. So, again, using the worst possible case, we come up with a calculation here of what happens when the dump truck carries this material from the fill area down into the area to be filled by the beach. And, all that will be going on here is a discharge from the back of a dump truck which is conservatively estimated to be approximately 5 feet above the ground.

We can determine again what velocity this particle, of that size which we've indicated is found up there for the fill, will take to settle down in calm air. Then, again, put a 20-mile per hour crosswind tangental to that and using classical trigonometric functions, determine what the vector is, and it comes out that if you have a 20-mile an hour wind, which is again an extremely high velocity wind in this area, that particle will travel 60 feet before it falls down on the ground. Now, what we are saying then is, "Can these operations be maintained within 60 feet before these particles fall out into and beyond the property of the contractor?" We feel it can. We feel it can because there are many procedures and methods in a text of this sort, title: "Air Pollution Engineering Manual" by the U. S. Department of Health, Education and Welfare. The public health service has methods, procedures, engineering controls to take care of this very thing.

And, you've heard Mr. Marutani mention some of these--the business of sprinkling down, watering the area, should prevent any of the material from becoming airborne. To answer your more specific question about watering it down all evening, no, I don't think this probably can be done too practically. However, this material, once it gets wet down and once it gets in place, will fairly well conglomerate with itself and fit together after being wet by the surface. You're not going to find much becoming airborne once it's wet down, in place, in the final fill area.

And, if this isn't enough, let me assure you one more time--I have a feeling I only mentioned it in brief passing last time--that the State Department of Health has Chapter 43 on Air Pollution Control out here which indicates, under the section of Fugitive Dust, that no person (and person is defined in the beginning of the regulation here) shall cause or permit discharge or visible emissions of fugitive dust beyond the lot line of the property on which the emissions originate, or cause or permit to be emitted into the atmosphere, any dust from any source in such a manner that the ground level concentration at a point selected by the department exceeds, (a) 150

micrograms per cubic meter above upwind concentration--and then they indicate the sampling method, using high-volume air sampler or other equivalent methods for a 12-hour period. They also give an alternative here which makes use of a dust-fall method, but they, when you talk with the air sanitation engineers up there, they tell you that they're not going to use that method because it is not as quantitative, it's not as reliable, as reproducible. So the high-volume method will be used. I've been applying this for various clients all around the island and I can assure you that if any of this material does become airborne, this sampling method will surely detect it and pick it up.

Should any of the residents feel that they are being subjected to dust from their operations here, it's a simple matter for the State Department of Health to go out there and sample literally, wherever they want--upwind, and at the boundary, downwind--to assure that it's in this limit of 150 micrograms per cubic meter.

It's a cut-and-dried case, black and white. You either comply or you don't. Ambient levels are variable throughout the island, and so they provide for this by sampling upwind of the operation.

I can assure you that with the procedures that these people intend to take, they will be complying with this. Otherwise, I couldn't, in all honesty, appear before you in this manner. It would be somewhat unethical. Thus, you have this almost quarantee that the dust can't get over these levels and, last but not least, you have one more assurance, and that is that the contractor himself has assured you that he will, in fact, monitor his own operation with this sampling method. The reports, of course, will be given to him and he'll have these in his files.

So, with this, on the matter of dust--why, let me see if there are any comments that came up today that maybe we can mention here. The wind velocity in the early morning hours, I guess, you've noticed in your data is very low. The wind velocity during the daytime hours are what is a higher velocity. It gets sometime over 10 occasionally. But, in the morning hours, it's generally 5 and around in there, so you're not going to be worried about transporting dust in the evening with such low velocity winds. Other dust matters that came up are, well, that's mostly it, I guess.

Concerning the noise, it's pretty obvious from the way questions are being asked and the way some of them are being answered, that there is less than a thorough understanding of what takes place in noise measurement--noise propagation, and noise control. This is very evident on the side of almost everyone.

CONNELL: We've noticed that, or at least, I've noticed it among experts that have appeared before this Commission.

HERTLEIN: That's right. As a matter of fact, the experts that I think appear before you, before the Commission, generally have to couch their explanation with certain qualifications and it's these qualifications that are sometimes forgotten or pushed aside, in the

view of simplifying the statements. That's where the whole problem lies. We'd like to give you a simple, basic, fundamental answer to your question, but it usually requires qualifications and this is where the stumbling block falls in. Like comparing the CZC with the Motor Vehicle Noise Code. Perhaps, we can take this up.

The noise problems can originate from two sources. We didn't mention the trucks, as I mentioned last time very purposely because we thought it was controlled.

Let us mention first the property noise. Noise that will be generated on the property itself. The Comprehensive Zoning Code, which I'm sure you're very, very familiar with, has a penalty of $1,000 and/or 30 days in jail for anyone who does not comply with these values in here--with this code. And the noise code in here is very stringent. I have almost assured you last time, and I'm not going to go into it again, that the operations on land, following the recommendations I proposed here, will comply with this. This is almost a certainty. So, I'd just as soon not delve into that any more.

The calculations that I carried out indicate where these berms should be placed and, by the way, the berms, to me, is irrelevant whether they are made of sand, of sand and dirt, or dirt, or rocks, or almost anything else within reason. You can't use vegetation, of course. You can't make a mound of logs because they become too porous. But anything fairly massive with a good high density, a good high specific gravity, will act as a sound attenuator. These berms attenuate the low frequencies than they are in the high. The higher attenuated greatly. The lower ones, more or less, become refracted and pass over. But the lower ones are much more lenient in the Comprehensive Zoning Code so that's why we can say again, we'll still comply.

And, again, as if that isn't enough assurance for you, the contractor has indicated, in no uncertain terms, he is willing to monitor this noise at his boundary line as indicated in the code itself here, should complaints arise.

Now, the matter of the trucks and the noise from the vehicular operations, I didn't go too much in detail. As a matter of fact, I didn't mention it at all in the report because of the basis--because I thought it was well covered in here and we mentioned it only briefly last time. Perhaps, we can clarify some of your problems here.

The Hawaii Vehicle Noise Code, I indicated to you last time, is one of the tightest in the United States--in any of the states--and I can say this by comparison with California's code because California's code is being used as a guide in many of the other states. This is my basis for that statement. California Noise Code, in here, is not as stringent as the Hawaii's--the Oahu Vehicular Noise Control Code that the State Department of Health has promulgated here. There are reasons for this. The main reason being that Hawaii is a much more open community. We have single-wall construction. I don't have to tell you people that. We usually have our windows open a good piece of the time. We don't keep ourselves cooped up like mainlanders do.

We don't have cold winters where you have to put up storm windows, literally, sometimes. We don't have double-wall construction. So, for this reason, the people on the State committee that developed this code went, what you might call, on the conservative side and went a little tighter than the mainland counterparts. And we felt rightfully so. Therefore, you have nothing to fear in this being, well, a questionable protection device for residents in a community.

The question arises though, in comparing this with the Comprehensive Zoning Code--let me get to that in a moment. The penalties in here are provided by the Hawaii Revised Statutes and these allow a truck to be meausred at 50 feet from its center line of travel to make no more than 86 dba. That is measured on an A scale. And let me be very specific in mentioning how this is measured.

Police officers have been trained, not casually, but in detail, how to use these sound level meters and how to correct for reflections and distortions that can be created in a free-sound field. A free-sound field is what these measurements should be performed in. Now, most of us realize you can't do that out here where there are houses, where there's other obstructions nearby. So, they have been shown how to make these corrections and allow for that. This means, normally, they have to be a couple of--one or two more decibels in excess of the code here. Now, this doesn't mean the residents are being subjected to more intense noise. Not by any means. But, when you start taking measurements inside a classroom and comparing them with the Vehicular Noise Code, they are just not comparable. You can't do that.

When you're talking about speech interference levels and telephone usability, and classroom understandability, with teachers presenting topics and class discussion, that's a whole other ballpark. The means in which those measurements are conducted are completely different than the one for this and they, in turn, are completely different from the ones in the Comprehensive Zoning Code.

Now, the statement has been offhand-made. I don't know how this was arrived at by some of the people against this particular noise aspect, that the Comprehensive Zoning Code has been superseded by the State regulations. This is so, but only to a very limited extent. Let me clarify this for you. The State has the power to supersede any local ordinance, that is correct. But, right now there is none for residential property noise control. This is only for vehicles. So the person who informed the testifier here previously that this overrides everything is just as blatantly false as can be. This Comprehensive Zoning Code is in effect until something supersedes it from the State. Now there is nothing. So this is still applicable and it is much tighter than this one here. When they get around to making something for residential areas, it will supersede the CZC, no question about it, and it'll probably be an easier way of measuring it too.

But, to conduct these inside the classroom like this is just not comparable. You can't do that. Undoubtedly, you're going to have good levels in there.

CONNELL: Or bad levels?

HERTLEIN: That's right. The statement has been made that this classroom is--what--12 feet from the highway? Something like that. You certainly will get levels in excess of what you find in your Oahu Vehicular Noise Code. Why? Because the minimum distance at which it is supposed to be measured is listed here at 20 feet.

Now, I can give you a rough guide as to what it is supposed to be at 12 feet simply by having the 25-foot distance and adding 6 decibels to that value in there. That will be the allowed level at 12-1/2 feet and this is what the people who developed this code will probably tell you because they are basing this on the Spherical Sound Propagation Law. That, in other words, will allow a truck then to go from 80, from 92 at 25 feet up to 98 decibels at the edge of the classroom there. Now, if it's under 98, I know that's an intense noise; that's a very loud noise. There's no question about that. I'm not contesting that at all when you compare it with the CZC. But, you are not being realistic when you talk about noise from a truck.

This committee that studied this in detail was made up with very expert people. Dr. John Burgess who has been mentioned before, he was the author of this thing, literally, and he wasn't trying to make it--to be lenient. He was trying to strike a happy ground between industry and residents. And in trucks, and vehicles, and noise, there are certain limiting things which you have to consider which aren't being considered in the CZC and that's why you have higher levels here. Am I making myself a little clearer here?

CONNELL: I think you've made your point.

HERTLEIN: These levels are higher. There's no question. But because of that that doesn't mean these are inadequate, not by any means.

CONNELL: Can we just--regarding this code--you mentioned that the police are enforcing it. How many police officers are equipped in the Mokuleia area to make readings?

HERTLEIN: I don't know because I'm not on the police staff, of course.

CONNELL: Well, is this code being enforced in the Mokuleia area and to what extent?

HERTLEIN: I don't know about the Mokuleia area. Let me reply that the clippings from the newspaper indicate that vehicles have already been cited by police officers with this code. This is not so with the CZC.

CONNELL: Well, I think that the question being raised is in regard to this area--not the downtown Honolulu or Niu Valley or whatever.

HERTLEIN: Let me answer this then in the following manner. I would

think it would be completely sensible, reasonable, logical, practical, for those people who feel they are being subjected to intense noise levels by the operation of these trucks to call the police department. I have a feeling the police department will bend over backwards to have at least a team out there for this purpose to check it. They either will comply or they will not. I don't think you can put off a community of residents who complain about truck noise to the police department who are the people who receive these complaints. You see what I mean? This should be able to be resolved very easily, in my estimate. They will or they won't.

CONNELL: George, can we get a report from the Police Department regarding enforcement in that area?

HERTLEIN: And, as an aside to this, let me mention that some time ago, I measured almost, the noise output of almost every type of a vehicle, heavy-duty truck that's being used here on the Island of Oahu and the results of this are, in part, the basis of this local Noise Code. You can see the extensive amount of data we made on this.

The Navy, to follow up on this, conducted a similar study for all of their vehicles so I can, with some confidence, assure you that trucks will meet this code when they are properly maintained, and properly operated. You can't have hot-rod truck drivers that will exceed this. You see what I mean? But the company is going to be down on them for doing this so they are going to have a very definite impetus to keep this "rapping of the pipes" down. Well, that's for the noise, then.

The CZC can't be applied in a classroom. Neither can the Vehicle Noise Code be applied in a classroom. And I suggest, in the future, that whoever makes these sort of measurements be aware of the existing statutes and regulations and conduct the measurements in accordance therewith. This is extremely critical and you're going to get just funny answers otherwise.

And, lastly, was the matter of the trucks with their--it would seem to me because of their high taxes these trucks pay every year, that we all experience inconvenience when we end up in back of one. I think I'd be the first one to admit that. But, here again, I think if people in that area will take a little more enlightened attitude as to what service the hauling of this sand around to the other part of the island, or wherever it's going, is performing for the residents of the State of Hawaii, as a whole, this may aid some in cooling down your temper. It's hard for me to say that because I don't go out that way, but I can, nevertheless, experience their problems because I have the empathy for these sort of things myself in similar tieups. In a two-lane road, I don't see how you're going to solve this.

And the problem of appraisal of property came up at the previous hearing about which I'd just like to make one simple comment because I talked to an authority that I'd like to bring this up. I don't ever bring up the matter of appraisal of land in regard to these sort of operations because I found out that appraisers generally will not give you a Yes or No answer, and in this sort of a situation, they

would be very reluctant--I have a feeling--to indicate that land values are going to be knocked down because of this. That's just something they won't agree to. They can't say that.

And, lastly, the matter of the wave action. The comment again came up this afternoon that the wave action, as observed by residents in this area, have inundated land back 400 feet. I, again, talked to a very authoritative source out here who has lived there 14 years and he says that in some areas the maximum from a very, very heavy wind and storm, and sea, generates waves that go inland as far as 250 feet--at the very, very worst--this is the highest possible.

Normally, heavy storms go in only 150 feet and this even requires quite large storms. So, again, they talk about facts that we've dredged up. I indicated before you last time that I don't have facts because I wasn't sitting out there measuring how far it came in. The question is, "Supposing the water did come in 400 feet?" I'd then ask you, "So what then?" I don't see how a sand mining operation in any way, is going to have a deleterious effect on this, by having one acre being dug out, another acre where the equipment is going to be settled on, and another acre that is being backfilled.

What happens when a huge inundation of land by even a tsunami comes in here? What will the effect be just because you've got equipment mining sand out there? It doesn't make sense. There's no logic behind it. It's not going to tear it up any more, certainly. It won't take any more out to sea and, as Dr. Uehara has indicated, the best use of the land will probably be improved as more fertile soil comes in there. The beach sand is not even being touched and I think this is probably most of the comments I would like to make, unless you have--oh, one other thing.

Dr. Uehara mentioned this business of the calcium carbonate versus the silica sand. I think I touched on this lightly the last time. Calcium carbonate, which is coral, when it becomes airborne, it's not considered a health hazard. There's no question about this because it is considered normally an inert-nuisance dust. However, when you start talking about free-silica sand, the kind that he mentioned came from Michigan and from other parts of the mainland, and get this material airborne, you're definitely going to create potentials of health hazards there in the area of silicosis--a non-regenerative lung disease. This, then, is my testimony for you this afternoon.

Questioning of Dr. Hertlein followed:

YAMABE: Mr. Hertlein, what is your expertise limited to or what does it cover? You mentioned industrial hygiene.

HERTLEIN: Yes, industrial hygiene is my specialty and industrial hygiene....

YAMABE: I'm not too familiar with this. I just wanted to know what your expertise might be limited to.

HERTLEIN: My expertise in industrial hygiene comprises a very broad interdisciplinary field. It comprises air sampling in workers--in working environments--radiation measurements, sonar for divers underwater, anything that can be considered a health hazard, ultraviolet radiation, noise, any of a wide variety of airborne pollutants, toxic gases, dust, mist, vapors, fumes, anything that you can possibly imagine that a worker in his environment can be exposed to which is subtle and which the five physical human senses cannot readily see or taste or touch or feel and which require specialized instrumentation as an extension of our physical senses to document scientifically and measure quantitatively what the individual is being exposed to, then compare these measurements with standards that have been developed in this area and determine whether or not controls are necessary.

YAMABE: Thank you.

MARUTANI: Mr. Chairman, at the last meeting, we had Gordon Cran testify on certain areas and some questions were raised regarding some of his comments and he'd like to clarify some of these questions that were raised at the last hearing.

GORDON CRAN:

Mr. Chairman, Commission, the questions that have been raised, I have here listed. I also have some statement of what I gave last week, in a very rambling manner, and this is condensed and much more to the point than I presented it last week and I'd like to leave this with you. I think there is one for each of you.

The question was raised on the benefits of the silting basin. I went into that in quite a bit of detail last week. We have one little silting basin that we constructed a year ago to prevent silt from the land to get in to the ocean. It's sort of a temporary thing located in Area 2 right near the Makaleha Stream entrance into the sea.

The past year has not had the heavy rains necessary to give us full tests but we've had fairly good rains this fall and there has been literally no silt entering the sea.

I have some pictures here that were taken after a moderate rain. I'm sorry the rains came at night and the pictures were taken in the morning so that the big gusher that goes over the spillway had already taken place, but may I pass this around to the Commission?

These first two pictures are water going over the silting basin spillway. The spillway has a concrete core to keep it from eroding below the level desired.

This third picture is a coloration in the sea immediately in the morning immediately after a heavy rain. I have two pictures of the same thing. The rest of the pictures I have here are just views of the basin from various angles. However, as I said, it was after the heavy rain the night before, showing the color of the water and the stillness of the water which allows the sediment to drop to the bottom.

The area that we'll be using for a barrow pit is on the air photo outlined in orange, mauka or on the lower side of the picture, the dark orange color being the area that we have selected for the silting basin or sediment basin. This area is quite large and it will give us a lot of area to have water stand and sediment fall out. The slope immediately mauka of that is where we intend to take the fill material and there's no doubt but when there's heavy rains, we'll have to have some method of catching any runoff that'll go through this area. However, the fill, the area of the fill or the barrow pit will be much smaller even than the sand mining area because the sand will be mined off of approximately one acre at a time and the depth is maybe two yards to two and one-half yards, whereas, in the barrow pit area, we will be going like 25 feet to 30 feet deep. Consequently, the area exposed will be less.

The construction of the newer basin would require that we put a drain into it so that the water would not be left standing. The present small basin down at the mouth of the Makaleha Stream has no outlet and this was a, I shouldn't say a requirement, but a request of the Board of Health so that we don't drain it to the point where the fish die. The fish are there. We've put 40,000 fish into it for the purpose of controlling mosquitoes and there's just lots of fish in there. I haven't gotten a count recently.

I have here two more photographs. One is better than the other. I'll put this better one on the top. There are areas where the sand was removed from and refilled. The refilling was completed in 1964. The vegetation other than the extremely tall trees on one side--iron-wood trees on the left side of the second picture--all other vegetation has grown since 1964. The fill material came from the quarry site down at Kaena, the other end of the airstrip, and it is more rocky than the material we will be using. It's the over-cover of the quarry, the material that comes off before they get down to the rock.

Now, it's been discussed quite a bit as to preventing dust and keeping the area moist. In our operation out there, we intend to use it for pasture in the near future, indefinite future, and I anticipate an increased production from this source, after the sand is removed, of an approximate ratio of 1-15. At the present time, the sandy areas or the areas with the most sand will carry approximately one animal unit to five acres. When we're through, we anticipate three animal units per acre with irrigation and fertilization. At the present time, we can't justify intensive use of this land because it's sandy and loses irrigation water.

The present source of water comes from our well here and we have 2.2 million gallons a day that we use or we have available to use for this irrigation purpose. And we have a main waterline that runs under the highway at this point and we can sprinkle at any time Areas 1 and 2 at the present time. In fact, during the summer months, we do irri-gate that way now.

The previous testimony on a type of grass that was not known of, I am unaware that we have such a grass. I've spent my life working on

grasses and to the best of my knowledge, the grasses were identified with their common name which I think most people understand rather than their botanical name. The one grass that is in excess of two or three feet in height is an undesirable plant, referred to again, common name "sour grass". The koa in the area definitely was overlooked in the previous statement. We consider it, under those conditions, as weeds.

A previous statement that I would like to bring out here is, just for my own personal satisfaction, there was a gentlemen who said that we could sell the property does not seem to realize that any purchaser would have to develop to a higher use immediately to get his money out of the kind of money that he would have invested.

The last point is that Areas 1 and 2 are presently fenced with cattle fence. They are posted for trespass as being private property. Area 3 will be fenced by this summer. Any liability due to people trespassing is also present right now--all sort of things like climbing trees, getting in the pen with cattle, going down to the beach and drowning or anything else, so equipment is definitely something that children like to get around to play with but the property will be fenced and posted. Areas 1 and 2 are presently fenced. Are there any questions?

Questioning of Mr. Cran followed:

YAMABE: Mr. Cran, Areas 1 and 2, is that cattle fence or....

CRAN: Yes, cattle fence. That's all we would be putting up. Generally, five strand barbed wire.

YAMABE: Will you have barbed wire with fencing in between?

CRAN: The makai side of the road presently we do have old boards from way back. We have truly not maintained that fence or repaired it in anticipation of getting this permit. It has a board on the top with barbed wire below it and in many places the boards are now dropping off and we would have to rebuild them. However, I would hate to do it if we're going to have equipment in the area.

MARUTANI: Mr. Chairman, we have one more testimony. I would like to call Mr. William Hong who is a private consulting traffic engineer.

WILLIAM HONG:

Mr. Chairman and members of the Commission, my name is William Hong and I am a private consulting engineer. I was asked by Warren Corporation to make a traffic study on truck operation and heavy truck movements on a portion of Kaukonahua Road from Thompson Corner to its junction with Wilikina Drive. I have a map here, could you post it up. (Posts map on board.) I also have some data here that I'll pass around to the Commission. This is not a report of any kind. It's just some traffic data that I picked up that I plotted. It might help you to follow my discussion.

Warren Corporation also asked me to assess the effect that his truck runs will have on the existing traffic that now exists on Kaukonahua Road. Understand that Kaukonahua Road is an uphill road from Thompson Corner to Wilikina Drive.

(While pointing on the map) This is Thompson Corner which is at the junction of Farrington Highway and Kaukonahua Road to Waialua and this is also named Kaukonahua Road, and this is the intersection of Wilikina Drive and Kaukonahua Road. The uphill portion of Kaukonahua Road is from Thompson Corner to Wilikina Drive. This area makai of Thompson Corner is on a flat and Waialua Plantation is just about in this yellow area here. We inventoried the existing road condition, the length of Kaukonahua Road is approximately 41/2 miles uphill. The pavement is 20 feet wide, consists of two moving lanes, one mauka bound and one makai bound. The road grade varies from 4 to 7 percent approximately. This area at Wilikina Drive is fairly flat. The hill begins at this point here at 4 percent then drop to 7 percent. This is the steepest part of Kaukonahua Road, down to 6 then back to flat again at Thompson Corner. So this is really the critical area of Kaukonahua Road at 7 percent grade and a little bit at 6 percent grade.

Shoulder conditions. The shoulders on each side of the road are lined with trees and its usefulness is very limited as far as being used by large vehicles are concerned.

Pavement markings. The roads are very well marked, as I can see, and it has many no passing zones as you go up Thompson Corner. There's one here and pretty near all along the curves of Kaukonahua Road and the speed limit is 35 miles per hour up to this point and 25 miles an hour on the flat at Schofield.

My first impression, when I first went out to get the data was that, there was a feeling of emptiness on Kaukonahua Road. Traffic there was very, very light. The streets, most of the time there was nothing really on the street.

I have given you some of the counts that we took. These are 15 minutes counts that we have taken from a station that we established at the University of Hawaii Experiment Station.

In figure three, this graph here, we have plotted these traffic movements by the hour and this chart shows you the hourly variation of traffic on Kaukonahua Road. In the morning, it's going mauka bound, the traffic is high there. The offpeak hour gets lower, and in the afternoon, the makai bound traffic gets high, at just about 4 o'clock. The peak hour that we have determined from these 15 minute counts, the a.m. peak is from 6:45 to 7:45, the heavy movement being mauka bound. The p.m. peak ran from 1600 to 1700, that's 4 o'clock to 5 o'clock in the afternoon. So your offpeak hour ranges from 7:45 in the morning to 4 o'clock in the afternoon.

We were interested in trucks. I have tabulated some figures on trucks as they relate to the total traffic on Kaukonahua Road.

During the 12 hour period that we made some counts, the percent truck as against the total traffic was approximately 3 percent. During the offpeak hours, the percent trucks as against the total traffic was 5 percent. To give you an idea of these values, meaning 5 percent for example, is a very light and very insignificant amount of trucks on the highway. It doesn't affect your highway capacity very much. When you get up to about 10 percent then it sort of becomes a normal percentage of trucks to have on the road. I think we should get concerned when the truck value rises up to 15 or 20 percent of the total traffic.

We also made some speed runs. Up Kaukonahua Road, we found that, although the speed limit was 35 miles per hour, the light vehicles were traveling at about 45 miles per hour.

Accident records. We checked into the accident records for Kaukonahua Road and had the opportunity to inspect 81 accidents. In 1970, there were 20 accidents; in 1971, 31 accidents; and in 1972, 31 accidents. Most of these accidents took place during the early morning hours or late afternoon. Most of these accidents were hitting a fixed object type or running off the highway type. There were no accidents involving semi-combination trucks or single-unit trucks or buses, and there were no accidents that came as a result of a vehicle attempting to pass a semi-combination truck, a single-unit truck, or a bus, so I think from the safety standpoint, the safety record of the trucks is excellent.

Utilizing the data that I have just given you, we will measure the effects of Warren Corporation's additional truck runs on Kaukonahua Road in two ways. First, we will measure it in terms of ratio of truck movements to the total movements and secondly, comparison of overall speeds right through the critical section, the 7 percent grade or the steepest portion. It is at this grade where the speed of your truck is about 17 miles per hour. I might point out something that I forgot. As these truck combinations move up the hill, they could start at about 40 miles per hour but as they go up the hill, their speed would be somewhere about 25 miles per hour. Now, right at this critical section where the grade is the steepest, the trucks, called semi-combination trucks, are operating at about 17 miles per hour. As you get further up the hill, the speeds are increased, but very gradually until you hit at this point, for example, this would be about 25 miles per hour, then it would go up to 30, then as soon as you reach the flat portion near Wilikina Drive, these trucks are able to pick up speed up to 40 to 45 miles per hour. So, what we did, we made a comparison of overall travel speeds that exist right now at the critical section of Kaukonahua Road and tried to compare it with the additional trucks that the Warren Corporation would be adding to the traffic stream.

Percentage-wise, under the existing condition you have a 5 percent truck traffic there. Now, if Warren Corporation did add, say 7 percent, were to add 20 trucks to their run per day, the percent truck would increase to 7 percent. If 35 trucks were added to the traffic stream, then you would have an 8 percent truck traffic.

If 50 trucks were added to the traffic stream, then the percent truck would be about 9 percent. Now, because of the very small increase in percent trucks, your additional trucks should not cause any problem.

Another thing is that the percent truck is directly related to capacity. In other words, if you add 5 percent trucks, for example, you take away from your capacity, 5 percent capacity. You add 1 percent capacity, you take away 1 percent capacity. There is a direct relation to operating levels of the road.

Now, in comparing the overall speeds of Kaukonahua Road through the critical section, I came out with figures where the existing overall traffic speed is 26 miles per hour, and if the Warren Corporation were to add 20 trucks, the overall speed would be reduced to 25 miles per hour, and if 35 truck movements were added, the overall speed would be reduced to 24 miles per hour, and if 50 movements were added, it would be reduced to 23 miles per hour. Now, these reductions of 1 mile per hour or, let's say, 20 trucks added is an insignificant reduction in overall speed.

Because of these percentages, the small reduction in percentage of trucks and also the slight decrease in overall traffic speed, I have concluded that the additional trucks that Warren Corporation wants to put on Kaukonahua Road would have very small effect upon the present traffic conditions. This ends my presentation.

YAMABE: Would you consider this to be an average, vehicles and movements for the year? For example, I don't know whether there might be plantation trucks or construction trucks or whatever it might be, there might possibly be a fluctuation in the number of trucks based on the operation, like harvest time or....

HONG: During harvest time, there will be an increase in truck movements there but I think this is for a limited period of time throughout the year.

YAMABE: Do you have the statistics?

HONG: No, I don't. This was picked up last Friday, for instance, so this is not the harvesting time in Waialua.

YAMABE: I just wanted to know whether you considered this in the overall.

HONG: This situation would occur for the majority of the time during the year.

MARUTANI: I have no further testimony. I would now like to summarize. With respect to the report of the staff of the Planning Department, I would just like to state that we have gone over the list of recommendations that the staff has come up with, consisting of 17 different recommendations. We do concur with 16 of them except for the first one, which is, that Areas 1 and 2 only shall be mined and that Areas 3 and 4 be left alone.

As I had earlier indicated, Areas 1 and 2 would have approximately 750,000 cubic yards of sand. The amount of use or consumption of sand on an average annual basis, of course, would depend on demand, but we anticipate anywhere from 130,000 cubic yards to 200,000 cubic yards a year. Based on that figure, in approximately 4 to 6 years, Areas 1 and 2 would be completely exhausted. Area 3 is approximately 611,000 cubic yards. Area 3 at the same rate of 130,000 to 200,000 cubic yards per year, that would give approximately three years to an additional five years possibly, or four and a half years, so in fact, the recommendation of the Planning Department will be for Areas 1 and 2 would mean that in approximately 4 to 6 years, the operation would be completed.

Warren Corporation intends to expend a considerable sum of money for equipment that is needed for the sand mining operation. The initial capital outlay will come to approximately $150,000 in various equipment and in various starting out cost that Warren Corporation is projecting to expend.

In the light of the lack of sand, natural sand that is expected to occur in the not to distant future, and in the light of the needs of the concrete industry for more sand which has a very direct effect on the cost of housing, and in the light of the total amount of capital expenditure that Warren Corporation intends to spend, we would like to ask the Commission to give consideration to allow and permit Area 3 as well as Areas 1 and 2. We have no objection to Area 4 being completely eliminated at this time. Other than that one recommendation, we concur with the rest of the 16 recommendations presented by the staff.

With respect to the litigation that has been alluded to both at the last hearing and at today's hearing, I would just like to state for the record that the allegation has been denied by the Warren Corporation, but inasmuch as this matter is still in litigation, I don't think that it would be fair to comment before the Planning Commission of all the testimony presented at subsequent hearings before the court.

There has also been some testimony last week that the operation of Warren Corporation in the Haleiwa area had left a big hole in the ground. We have had an opportunity to take some pictures of that so-called hole today and we would like to present these pictures to the Commission for their perusal to see whether or not there actually is a hole. You will note that it is covered up with vegetation. (Submitted two photographs.)

With respect to the need for sand itself, Dr. Uehara testified that the available areas of sand in Oahu are very limited. The source of sand might be there but the economics and the legal problems of extracting sand which is populated and in all different use is a real problem and is not a feasible solution. Sand mining from the ocean, Dr. Uehara testified as to the environmental and harmful effects and presently there is no legislation to authorize sand mining from the ocean so, at this time, this is not an alternative solution. With respect to sand, source of supply of sand from Molokai, Act 136, Session Laws of 1970 would prohibit sand removal from the shoreline setback area starting July 1, 1975, and thereafter, and this is approximately two years from now, so what alternatives do we have? We do have manufactured sand that is available right now. But I understand that manufactured sand does not meet the demands presently

of the concrete industry, and that the total consumption of sand right now is that substantially most of it is coming from natural sand and less than majority is coming from manufactured sand.

As far as the detrimental effects on the environment, the testimony has evolved around noise, dust, and traffic problems. I believe the objections can be more or less categorized in these three areas.

As far as the noise problem is concerned, I believe that Mr. Hertlein testified at the last hearing that the noise regulations of the State of Hawaii promulgated by the Department of Health and the CZC regulations promulgated by the City are probably two of the very strictest type of regulations throughout the nation. We submit that as long as Warren Corporation complies with the requirements of the law regarding noise, this is as much as can be expected under the present circumstances of the applicant's operation. The remedies for violation of the law are present, and as Mr. Hertlein testified, there have been 29 citations issued ever since enforcement has been made.

With respect to the dust problem, Mr. Hertlein testified that there is no real danger as far as fugitive dust from the sand is concerned. Sand is a heavy particle. I believe he testified at the last hearing that a 105 feet setback should be very adequate in terms of creating any problems to the surrounding neighborhood. As far as fugitive dust from the soil is concerned, Mr. Hertlein testified that there is approximately 150 feet setback should be sufficient to prevent any fugitive dust from the soil operations from going to the surrounding areas. Mr. Hertlein also mentioned the fact that we do have very strict requirements, under the Air Sanitation branch, which would regulate any type of fugitive dust and the enforcement remedies are available.

With respect to the traffic problem, Mr. Hong testified that the amount of trucks that would go out to the road would not be an appreciable number. Twenty truckloads would give approximately 2 percent increase over the existing truckloads presently on the basis of studies last Friday.

In summary, I believe that we do have a very strong need for sand to meet the demands of the construction industry, the public beaches, the golf courses, and various other uses. We are all aware of the rising cost of housing and the rising cost of construction. Many elements go into what constitutes cost. At least we know that one element is cement and the element in concrete is sand. We feel that by contributing sand to the concrete industry that we will be providing a very important public service to the State by meeting the demands of the concrete industry and the building industry.

In summary, I would like to state that Warren Corporation intends to take all precautions in complying with the law, intends to take all precautions to minimize whatever environmental effects that might possibly result from this operation, and that we will take additional precautions, such as monitoring the sound, such as putting mufflers on the cars, this type of action over and above whatever requirements that the Planning Commission imposes. Thank you very much.

SULLAM: I have a question. Since you are aware of how scarce the source of sand is becoming, would you object to a provision being placed in the ordinance whereby sand from this quarry could be used only for low cost housing, that it could be sold only to those contractors who are building low cost housing?

MARUTANI: I believe this is going to be a very difficult matter of enforcement. I don't know whether contractors buy material on the basis of what type of housing. For example, the contractor will sub-contract to another sub-contractor to buy concrete ready mix, for example, and the ready mix would purchase the sand from an outfit like Warren Corporation so that the contractor himself would call for ready mix, and it's pretty difficult to segregate the sand that is obtained from this particular source and sand from any other source when the manufacturer of the sand, who mixes all the sand together, sells it as a ready mix to a contractor. I think it's a matter of, it's a practical problem of enforcement, how you are going to enforce this kind of condition.

SULLAM: Well, if it could be enforced, would you object? I mean, I don't know the details but it might be worth looking into.

MARUTANI: I would say that if you limit us to a percentage we might go along, but to say all of it; for example, Warren Corporation intends to bid on the Natatorium job that is coming up--the widening of the beach in the San Souci area. This is a real public need for sand and whether we would be the successful contractor or the sub-contractor is problematical but still then, we would like to be in a position to bid on this job, and we intend to use the sand that we obtain here for this particular purpose, so to say that all of this should be limited to low cost housing, I would say, that we wouldn't be willing to go along; however, if some workable solution can be made, we would be willing to sit down and discuss the percentage of it.

2. ROBERT R. ROBINSON, President of Pacific Concrete and Rock Co., Ltd.

I'm here to testify for the operation, although in testifying for it I may be cutting my own throat because we compete with this kind of operation with our own manufactured sand. But, I feel strongly because of Hawaii's lack of natural resources--no metal, no minerals, only really rock and sand as the natural resources so that the resources should be conserved and should be utilized for mankind purposes, and when a resource is covered over with housing or where a housing or other human use get too close to the resource so it can no longer be extracted, then we've lost something, we've wasted something of that resource and we shouldn't do that. We've done that all too much already, especially on Oahu.

There's been comments with respect to various sources today and I listened to a lot of testimony because I've gone through so much of this in trying to reach a salvation for our own company in how to cope with the current problem, so I'll like to make a few comments. I know it's a late hour and I don't mean to take any longer than necessary so I'll make my comments as brief as I can and if there are any questions, I'll be happy to answer them.

We explored the possibility of sea resource or mining from the sea, dredging operation before we went into sand manufacturing about three years ago and we found that in spite of the work done by the University, to a large extent, that most of, they inventoried quantity but they didn't inventory quality properly. The particle sizes weren't properly inventoried. What we call sand equivalent, in the industry, was not checked upon. That means the amount of sand as compared with silt and other deleterious material. The organism impurities weren't properly studied, but most of all, the absorptive qualities of sand weren't studied. When sand have an absorptive quality of about over 5 percent, it becomes very expensive to use in concrete, almost useless you might say. We call it dead sand. Most of the sources that we found in the ocean site were what we call dead sand--the Kaneohe Bay site is an exception but, I think, environmentally, we have problems in trying to mine in that area. There is quite a resource there though.

There was testimony given that it is illegal to mine from the sea and of course this is not quite correct. There is an ordinance against taking from the ocean, around Oahu, but I don't think that covers, necessarily, the neighbor islands. Now, I know the recent legislation where they are saying, nothing off the beaches. Now, I don't think that goes out into the ocean, however. There has been mining done off the Big Island and a modest amount off Molokai.

With respect to the need for sand, I think 500,000 tons is a reasonable estimate. I don't think that the past years, the last year it was quite that, but I think it was something like 350,000, 400,000, but 500,000 is a reasonable amount to talk towards. Our own company is the largest manufacturer of sand. We manufacture by 150,000 tons a year. We think we have a source that is good for 15 years. This would be of sand and other products that we are taking out of our Waimanalo source and processing, not of sand but other types of aggregates. With respect to increased capacity, we can double that capacity without any particular problem. I think H.C. & D., who is the biggest user of sand, the biggest supplier of sand, we use just as much as they do, but they supply us as well, we suppy them some, but they are the biggest producer. It looks to me as though they are going toward manufactured sand rather than using the natural beach sand in the future. Manufacturing is possible out of blue rock. It present some problem in the blue rock area but, in essense, we are doing that now. I don't want to get into any technical detail here unless you really want it, but, the sand we use in concrete here really, even in the blue rock area is a combination of beach sand and blue rock. You can manufacture the beach sand element if you want to go to the trouble of doing it. We find that it's easier out of limestone, but there's no doubt that natural beach sand is the cheapest and easiest source if it's immediately available, and by available, I mean the distance is not too far from the market place and if the quality is the kind of quality. Distance from the market place is a very significant thing and we've looked at sand and, in fact, we take sand from out beyond this deposit here, from mainland source, and that is cheaper than what we are doing now, but nevertheless, it's quite a long ways.

I'm pretty sure that the sand they are talking about there will have to be processed, will have to be washed, I think, to make it suitable. I did not hear prior testimony and I'm really not that familiar with this operation, but I'm somewhat familiar with sand. I would say it will take some processing so I'm not really sure of the economics, but really, you're talking economics in this whole area. You can manufacture or substitute what we find, for our purposes, than the real thing. However, there are certain things it won't do as well as natural sand. For instance, masons like the natural sand better in mortar. For beach restoration, I think, natural sand is superior to man-made sand. Certainly superior to black sand. That wouldn't be acceptable for beach restoration. The particle shape of a natural sand is better--it's rounded and polished. The way we overcome its good characteristics is by better gradation and gradation is very important in sand and I would guess that there's lot you find in the sand here.

Enough on the technicalities of things. As far as creating a cheaper source for the industry, I don't think it will really. I rather doubt that there would be a cheaper source than what we're doing now. I don't think that we, as a company, would meet it in concrete and we provide about 40 percent of all the concrete on Oahu. However, I'm not trying to condemn this operation by saying praise. It is desirable to conserve this product. Our sources are limited in time. Whatever resources we can conserve now should be conserved. The amount of resource planning that has been done on Oahu you could measure and assemble. The City has not done it and the State has not done it. There has not been decent resource planning, and when they say that this may be the only inland source of natural sand, maybe they're right. It could very well be right. If this is the case, and I'm inclined to think it probably is, it ought to be conserved even if it isn't needed in the next 10 or 15 years, if it could possibly be conserved, it should be conserved and used, for beach restoration certainly, and for golf courses, natural sand is much better than black sand would be and I think better than man-made sand, and for masonry as well.

As to the consumption figure that Warren is talking about, I think they're quite questionable in terms of volume, but if he can produce the material cheaper than we can make it, I'll buy it. So, it's a matter of economics and the market place. This is a competitive type of thing. I don't want to dwell any more on this. I have a lot of other comments I could make but an awful lot has already been made and so I'd rather, if there's any questions, I'll be happy to answer them.

Questioning of Mr. Robinson followed:

CREIGHTON: You have clarified a lot of points in my mind. I certainly agree with your comment that we haven't planned for conservation and for use of resources, but I am confused by your use of the word "concur". I don't see that mining and using this resource is conserving them.

ROBINSON: Well, if you go to the definition in the dictionary what conserve means, conserve for the use of man, I think, it becomes pretty clear. It doen't mean just put away and not used. Conserve, as far as use. We are not protecting it for infinitive.

CREIGHTON: Do I understand, from your discussion on the economics of this, your manufactured sand is now in a competitive situation, price-wise, with the mined sand? Are they relatively the same cost to the other?

ROBINSON: We had to make a choice--I've mined hundreds of thousand tons of sand in Oahu actually, and we had to make a choice between this and other alternatives, and we made this choice, so I would say yes, it is competitive.

CREIGHTON: Would you agree with the statement made today that this particular area from Mokuleia to Kaena is almost the only spot left in Oahu for mining of natural sand?

ROBINSON: It's possibly, yes. I couldn't swear to it. In Kahuku there are large amounts of sand there. I think under the golf course out there there is a large quantity which would require probably some kind of a land trade or possibly incremental mining, but there is really vast quantities out in that area, I think, and probably recoverable, I think, they're fairly fine. Again, it's a matter of economics. I don't think it's the only source but I don't think it's really--we don't have an unlimited source. We do need to conserve for the use of man, the sand that we do have and, irrespective of whether it is the only source, it should be.

CREIGHTON: Apparently, you would agree that within a very brief period of time this resource will be utilized.

ROBINSON: Yes, I think speaking of it, yes, brief time.

CREIGHTON: Well, the figures that were given to us would indicate that if the use is, total use is 500,000 yards a year and this area can produce a million and three, that's about a 2-1/2 years' supply.

ROBINSON: Most of the sand is used, the 500,000 is used in concrete. We have successfully found a way not to use any. We haven't been on any of our beach sand for almost three years, but, be that it may, this is a good and maybe preferred source to a manufactured source.

SULLAM: You were talking about conserving for the use of man since there is a limited supply of this resource. You think we should start thinking in terms of allocating the uses of this sand to specific areas, that is....

ROBINSON: Such as beach restoration or something like that?

SULLAM: Yes, where manufactured sand could not be used or for purposes that are very necessary for society?

ROBINSON: It's worth consideration. I'm not prepared to comment on whether it should or shouldn't be done. I don't see it as a real....

SULLAM: Threat at the moment?

ROBINSON: A real terrible threat, but it's worth some consideration.

YAMABE: What is the capacity or capability of an operation such as yours to manufacture sand?

ROBINSON: We are producing about 150,000 tons a year.

YAMABE: What is that in cubic yard?

ROBINSON: You can figure 1.1 ton per cubic yard so it's almost comparable.

YAMABE: So it's 150,000 cubic yards?

ROBINSON: Yes. It's a little less. Maybe a 130,000 or something like that.

YAMABE: Can you increase that production?

ROBINSON: I can double that if there is a market. I'm meeting my own needs and something over that, and H.C. & D., has a very good product coming in from Molokai at the moment. When that is exhausted, I can increase my capacity substantially for concrete use. As I said, it's not a preferred thing on the beaches or golf courses but, a natural sand is a fine sand.

YAMABE: What is the reason for the industry not demanding more of this manufactured sand and preferring the natural sand, understanding your earlier statement made as far as economics, that it was comparable?

ROBINSON: Well, partially, somewhat prejudiced in certain areas for a product that has been used, recognized, and so forth. In the case of mortar sand, the natural sand doesn't dry quite as rapidly and this seems to be desirable in the use of troweling and mortaring for a block lane. On the other hand, for plastering such as to a concrete gun, I think our manufactured sand--to a plastering gun, our manufactured sand, I think is superior. It's somewhat a trade practice that's kept the thing going. Of course, our capacity to produce, we produce for our own use. H. C. & D., has a tremendous investment in Lono (?) Harbor and is going obviously to use their source as long as they have it. They've supplied Lone Star through the years. We are supplying somewhat and I think we could supply their need if it were required. I'm saying, this isn't the only source but a good source of natural sand.

YAMABE: I don't know enough about manufacturing of sand but would you be facing the same problem these people have in extracting natural sand in the future if manufacturing would be using some natural resources, extracting of....

ROBINSON: Yes. Our resources of limestone in Waimanalo are not unlimited. We figure maybe about 15 years left, then we will be going out scrounging too. Then we could go to blue rock manufacturing route

we could go to more distant sources, and there are other sources on this island for manufacture, but then you are adding substantial cost and apparently would not be competitive.

YAMABE: So there is the possibility, you may be running out of....

ROBINSON: Oh, yes, we will. It's not unlimited. I'm not saying 15 years then we'll be scrounging around too. So when I say resource planning, that's what I mean. It's planning out.

YAMABE: That would be blue rock? What is the base you used in your manufactured thing?

ROBINSON: We use limestone; however, blue rock can be used and technically, we are manufacturing some of it now out of blue rock. I really didn't want to get into the details of it. We could go a hundred percent blue rock if we had to. We find we like the limestone better. H. C. & D., seems to be producing 100 percent blue rock aspect of that thing so they must feel that it's more economical than going the natural route.

YAMABE: What other resources can you use to manufacture sand? Is blue rock and limestone the only....

ROBINSON: They are the only kinds of rock we have in the island. We have no choice.

CONNELL: Mr. Robinson, you mentioned the fact that the State and the County have not entered into resource planning. Has the industry entered into resource planning?

ROBINSON: By necessity we've done our own planning, yes.

CONNELL: As an individual company?

ROBINSON: Yes.

CONNELL: As a total industry?

ROBINSON: No. Really not. We are competiting with one another.

CONNELL: Also, it appears from what you are saying that you are also jointly competing for survival?

ROBINSON: I guess that's true.

CONNELL: So, at least it would seem, as a layman, that it would almost behoove your industry, perhaps, to work along with the County and the State in resource planning?

ROBINSON: That is a good thought.

CONNELL: Any further questions? Thank you, Mr. Robinson. Does anyone else wish to testify for this application?

(Someone from the audience, submitted two photographs of the subject site.)

The Commission took this matter under advisement upon the motion by Mr. Yamabe, seconded by Mrs. Sullam, and carried.

AYES: Yamabe, Sullam, Creighton, Kahawaiolaa, Connell;
NAYS: None;
ABSENT: Bright, Crane.

The Commission considered this matter later and noted four possible courses of action it could take: 1) Accept the Director's original report; 2) Modify that report and add additional conditions; 3) Deny the application; or 4) Follow the recommendation of the Director and keep the public hearing open. It further noted the statutory waiting period of 15 days after closing of the public hearing before it could take action.

Mr. Moriguchi explained that the Department's recommendation was in order to provide the Commission with the additional information received just this morning from the three State departments and not necessarily to receive further testimony from the general public. In view of the waiting period of 15 days, the Commission could close the public hearing and in the meantime, the staff would evaluate the comments received this morning and report back to the Commission.

MOTION: Mr. Creighton moved to close the public hearing and to hold the matter under advisement until sometime during the lapse of the 15-day period. The motion was seconded by Mr. Kahawaiolaa.

Mr. Creighton expressed his desire to receive all additional information received, particularly the statements received from the three State departments.

A discussion ensued whether the closing of the public hearing would preclude the Commission from receiving additional comments from the general public or for the applicant and the opponents from being apprised of any additional information received by the Commission.

Mr. Moriguchi stated that any information received is considered public record so that it would be available to whomever asks to see it. The staff will make Xerox copies of the letters received today and send them to the Commission. The three letters are from the Environmental Center of the University of Hawaii, the State Department of Transportation, and the State Department of Land and Natural Resources. The Department has also asked the Department of Social Services and Housing to clarify some of the comments made earlier and upon receipt of a reply would be reporting back to the Commission.

If it finds it necessary, the Commission stated that it could reopen the public hearing to receive additional testimony. The 15-day waiting period is the minimum, and it has sufficient time thereafter for deliberation before taking action.

ACTION: A vote was taken and the motion carried.

AYES: Creighton, Kahawaiolaa, Sullam, Yamabe, Connell;
NAYS: None;
ABSENT: Bright, Crane.

STATE SPECIAL USE PERMIT/CONDITIONAL USE PERMIT
KAHUKU
KAHUKU HOSPITAL ASSOCIATION
EXPANSION OF HOSPITAL USE
(FILE #72/CUP-20)

A public hearing was held and closed on January 3, 1973, to consider an application for a State Special Use Permit and a Conditional Use Permit to expand and add to the existing Kahuku General Hospital in Kahuku. Action had been deferred pending a statutory wait of 15 days after the close of the public hearing.

ACTION: Mr. Yamabe's motion to concur with the recommendation of the Planning Director and to recommend approval of the application was seconded by Mr. Creighton and carried.

AYES: Yamabe, Creighton, Kahawaiolaa, Sullam, Connell;
NAYS: None;
ABSENT: Bright, Crane.

MISC.
CHINATOWN GENERAL NEIGHBORHOOD RENEWAL PLAN AND PAUAHI URBAN RENEWAL PROJECT
HONOLULU REDEVELOPMENT AGENCY

Presented to the Commission for its information was the proposed Chinatown General Neighborhood Renewal Plan and the first project the Pauahi Urban Renewal Plan.

Mr. Moriguchi stated that the Planning Director has reviewed the plan and is recommending approval subject to the review of the necessary amendments to the General Plan and the Development Plan. The plan will now be transmitted to the City Council for a formal public hearing and action. Planning Commission action is not required; however, by being apprised of what is being proposed, the Commission may desire to convey its comments or recommendations to the City Council.

Mr. Willard Lee, Executive Assistant for the Honolulu Redevelopment Agency, presented the proposed Chinatown General Neighborhood Renewal Plan and the first increment of development which is the Pauahi Project. The total project area is bounded by Beretania Street, Nuuanu Avenue, Nimitz Highway, and River Street containing a total area of 36 acres. The General Plan changes for which they have submitted justifications to the Planning Department would be the parking facilities plus a proposed mall on Pauahi Street and a service alley because of the mall within the Pauahi Project.

Mr. Moriguchi confirmed the receipt of the application from the Agency. The Department is presently evaluating the changes to determine whether or not an amendment to the General Plan and the Development Plan is necessary.

The Commission received the report and had no comments or recommendations to offer. The Commissioners stated that they required a more detailed

review of the proposal before they could intelligently comment on it. They stated further that they would have an opportunity to comment on it at the time of the General Plan and Development Plan amendment review.

MISC. WORKSHOP SESSION GENERAL PLAN REVISION PROGRAM

The Commission was informed of a workshop session to be held on Thursday, February 8, 1973, starting at 1:30 p.m., in the Ala Moana Hotel Carnation Room to discuss the General Plan Revision Program with members of the Planning Department staff and other organizations invited to participate.

ADJOURNMENT:

The meeting was adjourned at 6:35 p.m.

Respectfully submitted,

Carole A. Kamishima

Carole A. Kamishima
Secretary-Reporter

Speaker
TADAO BEPPU
Vice Speaker
PEDRO de la CRUZ
Majority Leader
JAMES H. WAKATSUKI
Majority Floor Leader
CHARLES T. USHIJIMA

First District
JACK K. SUWA
Second District
WING KONG CHONG
STANLEY H. ROEHRIG
Third District
JOSEPH R. GARCIA, JR.
Fourth District
YOSHITO TAKAMINE
Fifth District
ARCHIE HAPAI, III
Sixth District
PEDRO de la CRUZ
RONALD Y. KONDO
Seventh District
ALVIN T. AMARAL
RICK MEDINA
Eighth District
DENNIS O'CONNOR
W. BUDDY SOARES
Ninth District
STEVE COBB
PATRICIA SAIKI
Tenth District
TADAO BEPPU
TED T. MORIOKA
Eleventh District
HIROSHI KATO
KEO NAKAMA
Twelfth District
JOHN S. CARROLL
JOHN LEOPOLD
HERMAN WEDEMEYER
Thirteenth District
ANSON CHONG
HIRAM L. FONG, JR.
CHARLES T. USHIJIMA
Fourteenth District
CLARENCE Y. AKIZAKI
JEAN SADAKO KING
Fifteenth District
ROBERT KIMURA
T. C. YIM
Sixteenth District
PETER S. IHA
RICHARD S. H. WONG
Seventeenth District
RICHARD GARCIA
KENNETH K. L. LEE
Eighteenth District
AKIRA SAKIMA
TED YAP
Nineteenth District
MITSUO UECHI
JAMES H. WAKATSUKI
Twentieth District
DANIEL J. KIHANO
TATS KISHINAMI
PATSY K. YOUNG
Twenty-First District
JAMES AKI
Twenty-Second District
OLIVER LUNASCO
HOWARD K. ODA
Twenty-Third District
PETER A. ADUJA
RALPH K. AJIFU
RICHARD H. WASAI
Twenty-Fourth District
JOHN J. MEDEIROS
ANDREW K. POEPOE
JANN L. YUEN
Twenty-Fifth District
RICHARD A. KAWAKAMI
TONY T. KUNIMURA
DENNIS YAMADA

HOUSE OF REPRESENTATIVES
THE SEVENTH LEGISLATURE
STATE OF HAWAII
STATE CAPITOL
HONOLULU, HAWAII 96813

RECEIVED
JAN 22 1973
State of Hawaii
LAND USE COMMISSION

January 19, 1973

Mr. Jacob Y. W. Ng
President
Waialua High & Intermediate PTA
67-160 Farrington Highway
Waialua, Hawaii 96791

SP73-146.

Dear Mr. Ng:

Thank you for your letter informing me of the proposed sand mining operations at Mokuleia. At the present, I am in agreement with the position taken by your organization.

The Department of Education and The State has done much to control the noise and traffic concerns at Waialua High and other schools throughout the entire state.

I would therefore further concur with you that more information be submitted to you by the interested party and openly discuss the measures and proposals made by both parties.

If I should be of any further assistance to you, please feel free to call upon me.

Sincerely,

Howard

Howard K. Oda
Representative
Twenty Second District

cc: ✓State Land Use Commission
Mr. Gordon Kuwada, Principal, Waialua High & Intermediate
Mr. Tim Hay, President, Waialua Community Association
Councilman Toraki Matsumoto
Representative Oliver Lunasco
Mr. William Araki, Superintendent, Central Oahu District
Mr. Allen I. Marutani

Operation Would Dig Up Polo Field

SB 1/18/73

Residents Object to Sand Mining at Mokuleia Ranch

By Jerry Tune
Star-Bulletin Writer

Residents of Mokuleia are massing in opposition to a proposed 152-acre sand mining operation on Mokuleia Ranch.

They spent nearly two hours yesterday telling the City Planning Commission why it should not grant the Mokuleia Ranch and Land Co. and the Warren Corp. a conditional use permit for the quarry.

During the testimony it was learned that the sand mining operations would eventually replace the familiar polo field and the Crow Bar Ranch, famed for its polo ponies and as the retreat of the late industrialist Walter F. Dillingham.

THE CITY Planning Department recommended approval of 50 acres for the sand mining operation on a trial operation, but with 17 conditions to protect surrounding residents from environmental problems.

The 50 acres would be on the Waialua side of the ranch. Sand mining for the polo field and the ranch would come later in the third and fourth stages of the project plan.

Any immediate plans for the polo field remain sketchy, although Gordon Cran, manager of the ranch, predicted the lease would be renewed after 1974 for "another five or 10 years."

Speaking on the long-term plans for Mokuleia, Cran was not encouraging for continuation of the ranch and polo field.

"The master plan calls for a hotel and a golf course," he explained. ". . . (urban zoning) will have to come sooner or later."

CRAN SAID income from the sand mining operations probably would be enough to sustain the makai property, while cattle ranching would produce enough income for the mauka lands.

But he painted a bleak picture of taxes forcing some future development on the property.

Cran also reminded residents that sand mining operations have been carried out "for many years in Mokuleia" but the 152 acres is the last remaining area for sand in Mokuleia.

The residents were not impressed with these arguments and pointed out the traffic problems with heavy trucks on the narrow two-lane highway, and the environmental problems with noise and dust.

They also said that other alternatives for sand should be explored, including sand mining in the sea. A bill is expected in the current State Legislative session to permit mining for sand in the ocean.

Jacob Ing, president of the Waialua Parent-Teachers Association, said the "magnitude of the project scares us." He suggested that the corporation air condition and soundproof the classrooms in Waialua if the sand mining is allowed.

Kathleen Maurer, speak-

Turn to Page A-4, Col. 3

Sand Mining Opposed at Mokuleia

Continued from Page 1

ing for Myron Thompson, director of the State Department of Social Services and Housing, called for more study on the impact of the sand mining.

SHE SUGGESTED examination of an environmental report prepared by Fred Hertlein III and presented to the State Office of Environmental Quality Control.

Most of the residents' objections were to the possibility of 80 truckloads of sand moving down the highway each day. The City Traffic Department reported concerns about the safety of this operation.

The City Planning Department restricted the movement on the highway of 20 truckloads per day, as one of the 17 conditions, but this did not satisfy the residents.

Hertlein, a consultant in noise, air and water pollution, defended his report which minimized any environmental dangers.

HE SAID a four-year history of winds in Mokuleia showed an average of 20 miles-per-hour and, at this rate, the dust only would be carried only 105 feet.

Under the Planning Department conditions, the sand mining could be conducted on only three acres at any given time. Land would then be filled and returned to its natural state.

Sediment basins to control soil erosion would also be required to avoid siltation into the ocean.

The Planning Commission did not close the public hearing, but will take more testimony next feek.

(1)

Meeting of the Planning Commission
Minutes
January 17, 1973

The Planning Commission held a meeting on Wednesday, January 17, 1973 at 2:10 p.m., in the Conference Room of the City Hall Annex. Commissioner Thomas N. Yamabe II served as Chairman Pro Tem in the absence of Chairman Rev. Eugene Connell.

PRESENT:	Thomas N. Yamabe II, Chairman Pro Tem Roy R. Bright Thomas H. Creighton Antone D. Kahawaiolaa
STAFF PRESENT:	Robert R. Way, Planning Director Andrew Sato, Deputy Corporation Counsel Tosh Hosoda, Staff Planner Hal Murphy, Staff Planner
ABSENT:	Rev. Eugene B. Connell, Chairman James D. Crane Fredda Sullam Paul Devens, ex-officio

The following three requests for construction activity within the Hawaii Capital District were considered simultaneously.

1. STATE DEPARTMENT OF TRANSPORTATION BUILDING (72/HCD-14)

   Tax Map Key: 2-1-31: 10 and 12
   Request: Repainting of Aliiaimoku Building

2. STATE TAX OFFICE BUILDING (72/HCD-25)

   Tax Map Key: 2-1-26
   Request: Repainting of State Tax Office Building

3. KAMAMALU BUILDING (72/HCD-28)

   Tax Map Key: 2-1-17: 10
   Request: Repainting of Kamamalu Building

Publication was made January 7, 1973 in the Sunday Star-Bulletin/Advertiser. No letters of protest were received.

Mr. Harold Murphy of the staff summarized the Director's comments on the three proposals:

1. State DOT Building (Aliiaimoku Bldg.) - The building exceeds the 65-foot height limitation of the Hawaii Capital District Ordinance

for the area by approximately 27 feet. The area is bounded by Ala Moana Boulevard, South Street, Punchbowl Street and Queen Street. Consequently, the visual prominence and the contrasting maroon colored concrete slabs and green tile trim work on the Punchbowl Street elevation would call undue attention to the building. A slightly darker tone of color than the existing paint on the building will harmonize the various architectural elements, and will reduce the visual impact of the multi-color elevation. This impact could be achieved either by sand blasting to expose the natural concrete color or by painting.

The Director recommends:

a. The applicant engage a professional design consultant to prepare at least four color samples ranging from pale to medium beige, and one sample area of sand blasting on the exterior of the building. The area samples should be approximately 60 square feet each.

b. The consultant select the final color or finish in compliance with the comments stated above, and with the approval of the Planning Director, and make a presentation to the City Council for its consideration.

c. An air conditioning unit and a solid window panel on the Punchbowl Street elevation be replacedwith clear glass or an interior cut air conditioner unit.

2. State Tax Office Building (Hale Ohau Bldg.) - This structure lies within an area controlled by a 150-foot height limitation with 50% coverage. Low single-story walls and structures that house transformers and mechanical equipment together with outside wiring and plumbing seriously detract from the architectural character of the building. Window panes that have been painted or obstructed by plywood panels, the window air conditioner units and the exposed air ducts are in conflict with the style of building and the overall setting of the area.

It is recommended that:

a. The removal of all structural additions to the main building (to house transformers and air conditioning equipment) and restoration of the building to its original architectural design be seriously considered prior to any repainting work.

The transformers and the air conditioning equipment could be placed inside the building or relocated to an underground housing, or eliminated altogether.

b. All exposed plumbing and wiring which visually detract from the character of the building be relocated inside the building or concealed.

c. The applicant engage a professional design consultant to prepare at least four color samples of 60 square feet each

for walls and three color samples for window trims.

The specific guideline recommendations to be considered by the consultant are as follows:

d. The colors to range from off-white/beige to very pale sepia tones for walls and medium to dark brown for windows and railings.

e. The consultant select final colors with the approval of the Planning Director and make a presentation to the City Council for its consideration.

f. The flagpole be repainted in off-white color.

g. The paint be removed from all window panes or the painted glass be replaced with clear glass.

h. All exterior precast panels be cleaned. No paint to be used on these panels.

It should be noted that the State Department of Accounting and General Services have proposed repainting of both the Transportation Building and the Tax Office Building in similar colors to what they are already.

3. Kamamalu Building - The Kamamalu Building, due to its height and prominent location (within the core of the Capital District), is very visible from the open spaces around the Iolani Palace and the Federal Building. The adverse visual impact of the building could be reduced through the use of the medium tone organic color instead of the existing pale gray finish.

a. The roof top cooling towner structure be repaired prior to painting.

b. The air conditioner unit and the solid window panel on the makai elevation of the building be replaced with tinted glass that matches other window panes on the building, or an interior type air conditioner unit.

c. The applicant engage a professional design consultant to prepare at least four color samples of 60 square feet each for walls and three color samples for window trims.

The specific guideline recommendations to be considered by the consultant are as follows:

d. The colors to range from pale to medium beige tones for walls and dark gray, dark brown and dark beige for trim work.

e. The consultant select final colors with the approval of the

Planning Director and make a presentation to the City Council for its consideration.

f. The dark stains on precast gray panels makai of the entrance on Richards Street be cleaned or panels replaced.

g. The temporary wooden ramp at the mauka elevation be removed, or replaced with a permanent ramp structure.

There were no questions oconcerning the staff's presentation.

No one spoke AGAINST the proposals.

Noticing the absence of a representative from the State Department of Accounting and General Services, there was question as to whether the state agency concurred with the Director's recommendations on these matters. Mr. Ali Sheybani of the staff indicated that copies of the report were sent to Mr. Char of the State Department of Accounting and General Services who did question the reason for the recommendations. Mr. Char pointed out that if they have to do anything in addition to just repainting the buildings, they would not have adequate budget for it, even to have a sample made for the selection of colors. DAGS does not agree with the Director's recommendations.

The public hearing was closed, and the matter was taken under advisement, on motion by Mr. Creighton, seconded by Mr. Kahawaiolaa and carried.

Discussion followed.

CREIGHTON: If DAGS indicates they don't have the money to make the physical changes that are recommended in your three recommendations, isn't that an empty gesture? Can anything be accomplished? I certainly feel these are good changes that are being suggested. It would improve the appearance of all of these buildings. But, can we act on the painting and some changing on structural changes which are not likely to be paint work. I raise this for point of information.

WAY: We thought it was important to bring those matters to the attention of the Commission and to the Council. I don't know that the proposals are all that extensive in terms of change. It may be that somewhere along the line of deliberating the question, DAGS might find a few additional monies to accomplish some of these changes.

I think we should probably expand on what our understanding of the comment is in this connection. Its simply that they don't even have the money to hire anybody but a painter. Frankly, I think that's a little outrageous that it isn't possible to engage the services of someone at least to look at these questions in a design way. It was our hope to improve the process a little bit for DAGS and help them improve it whereby they might hear, and in subsequent applications involving painting take a little broader view whenever they attempt to improve, one way or another, any of the structures that are in the Capital District. I don't know what the cost would be to engage

a qualified color consultant, if that's the right term, but it does seem to me that it would be relatively minimal even in terms of the total cost of simply painting these buildings, and at the same time he or an architect or staff architect from DAGS payroll look into the matter of making some of these other improvements. Maybe they can't be made at this time, but maybe the next step would be to request appropriation. I think in most cases it would be a fairly modest sum to improve the appearance of these buildings. So, that was sort of the thrust and a little bit more of the background. You may be quite right that its impractical, that there may not be an extra $5 in the whole state budget, or $10 or $500. I don't know what it would take. It seems to me that the very painting of these buildings would be very substantial construction cost items, and a few percentage added to that or taken from it might well do the job satisfactorily, at least to get an improved appearance from those buildings.

CREIGHTON: I certainly agree. I think the hesitation I have is hiring a color consultant would be absolutely essential. Perhaps it should not be put in the same category of making structural changes. May I try out a motion, Mr. Chairman.

CHAIRMAN: You may.

CREIGHTON: I MOVE THAT WE APPROVE THE PROPOSED PAINTING CHANGES WITH THE RESTRICTIONS AND CONDITIONS PROPOSED BY THE DIRECTOR, AND THAT WE RECOMMEND STRONGLY THAT THE STRUCTURAL CHANGES OR PHYSICAL CHANGES RECOMMENDED BY THE DIRECTOR BE UNDERTAKEN IF AT ALL POSSIBLE.

BRIGHT: SECOND THE MOTION.

CHAIRMAN: Discussion? All in favor?

(There was no discussion. The motion was unanimously carried.)

AYES - Bright, Creighton, Kahawaiolaa, Yamabe
NAYES - None
ABSENT - Connell, Crane, Sullam

PUBLIC HEARING
CONDITIONAL USE PERMIT
(SAND MINING OPERATION)
MOKULEIA
WARREN KOBATAKE DBA
WARREN CORPORATION
(FILE #72/CUP-12)

A public hearing was held to consider a request for a Conditional Use Permit to conduct sand mining operations on property located on both sides of Farrington Highway in Mokuleia, Tax Map Key: 6-8-03: 11, 15-17, 19, 20, 30, 33 and 35.

Publication was made January 7, 1973. Letters opposing the project were received. These comments are included in testimony AGAINST the application.

Mr. Carl Smith of the staff presented the Director's report of the proposal. The requested uses are proposed for sites at two different

locations. The sanitary landfill operation is proposed for the existing quarry at Puu Palailai located just on the Waianae side of Makakilo City. The proposed new quarry operation is for an area located approximately 1-1/4 miles on the Honolulu side of Makakilo City, makai of Puu Makakilo. Although the applicant has filed requests for the two proposed projects on a joint basis, the report discusses the sanitary landfill proposal and the quarry proposal separately. Contained in the report are comments from various public agencies that reviewed the proposal plus the Director's analysis of the proposal and other pertinent information. The Director makes the following recommendation of the requests:

1. That the request for a Conditional Use and Special Use Permit for the proposed sanitary land fill operation be approved subject to the conditions contained in the report.

2. Inasmuch as the proposed site has natural amenities highly desirable for residential development, and sufficient information has not been provided to evaluate alternative sites for a quarry, it is recommended that the request for a conditional use and special use permits to establish and operate a new quarry be denied at this time.

The Director also reported some concern with publication of this hearing. The matter was advertised on January 7 for today's hearing. It was subsequently advertised again on January 14. Initially, the notice that a Special Use Permit was also involved was not mentioned. Corporation Counsel advised the readvertisement. Some members of the public had not seen the earlier advertisement but did see the one of January 14th, and was concerned about the short notification.

Questions were raised by the Commission regarding the proposal.

CREIGHTON: What is the present use of the land?

SMITH: The land makai of Farrington Highway is utilized as pasture. The area in back is in cane, and there is a polo field.

CREIGHTON: What would be the total length of time for the total operation?

SMITH: The applicant is proposing a 15-year time period for the total operation. We do not have an estimate of how long it would take him to do these two increments, although those two increments amount to about one-third of the operation. Its perhaps a five-year operation.

CREIGHTON: Coming back to the present use, who operates the activities out there?

SMITH: Mokuleia Ranch Company.

CREIGHTON: Do we know what happened to the present uses while this is going on?

SMITH: The end use proposal is to return the lands to pasture land. The current uses, the applicant has given no indication as to what happens to the current use other than the fact that the polo field lease expires, and the Crow Bar Ranch lease expires both in 1974. Evidently, there is no intent of renewing those leases.

CREIGHTON: Is the Crow Bar Ranch in Increment 1?

SMITH: No.

CREIGHTON: Could you explain the reasoning behind Recommendation No. 1 to limit this to Increments 1 and 2?

SMITH: The reasoning there is we feel that by limiting it to Increments 1 and 2, we are removing it from close proximity to any Residential use. We can then monitor the operation and determine far better through experience, what limitation should be placed on the operation as it comes in proximity to the Residential uses.

CREIGHTON: Do you know what the reaction of the proposer is to this limitation to two increments, or would that come out later in testimony?

SMITH: I assume it will come out later in testimony; however, I did have an opportunity to talk to the attorney for the owner. He expressed some dismay at this. They wanted at least Increment 3 to be included.

BRIGHT: As an alternative to the entire acreage, has the staff come up with a recommendation as to a smaller acreage and as to location of same?

SMITH: Our recommendation is to allow them to pursue the operation in this portion of the total proposal.

BRIGHT: What acreage is involved there?

SMITH: There is approximately 50 acres involved, out of a total of 150.

BRIGHT: As an alternative, this could be scaled down to a 50-acre parcel more or less as the total extent of the Conditional Use Permit.

SMITH: More or less, yes.

CREIGHTON: May I pursue Mr. Bright's question a little further. As an alternative to mining this resource which apparently is becoming a necessity, have other sites and other locations been explored?

SMITH: No. The reason that this is being proposed is that the resource is there and the Dillingham Corporation which is the parent corporation of Mokuleia Ranch and Land has decided it is to their advantage to exploit this resource. We have not looked at other alternatives but we know other alternatives do exist along this coast, as evidenced by previous mining in the area.

Public testimony followed.

1. Mr. Jacob Y. W. Ng, President, Waialua High School PTA (Submitted letter dated January 5, 1973)

Mr. Ng's letter states in part:

"There seems to be an apparent lack of concern for the people of the Waialua Community by the sand mining company. An attitude of damn the community--get the sand out because industry needs the sand, seems to prevail.

The above observation was reached after reviewing the environmental assessment report and because of serious problems that will result from the proposed sand mining operation.

A. Disruption to Classroom Work. Waialua High and Intermediate School, consisting of classes from 7th to 12th grades, comprising some 1,050 students and 70 faculty and staff personnel, is located on 67-160 Farrington Highway. Most of our facilities are located adjacent to Farrington Highway, a busy highway which has high usage by heavy equipment. Some of our classrooms are located no less than 12 feet from the highway. The auditorium and cafeteria are located some 50 and 200 feet, respectively, from the highway.

With the anticipated increase in truck-trailer traffic on the highway, as the result of the sand operation, there will be severe disruption to classroom instructions and will create a potential health problem. The sand operation envisions 80 truckloads per day, with each truckload amounting to 20-25 cubic yards. This equates to approximately one truck passing the school each 7-1/2 minutes. This count would become even worse if we include the present traffic from the gravel hauling trucks.

Presently, everytime a large gravel hauling truck passes the school or stops at the Sagara Store for lunch or snack, all classroom instructions and oral classroom participation must cease until the noise of passing trucks abates. We cannot and will not tolerate any increase to classroom disruptions as education of our youths will be severely affected. It is respectfully requested that other alternatives or corrective actions be vigorously pursued by the Mokuleia Ranch and Land Company, Ltd., the City and the State before approval be granted.

Suggestions:

(1) That the Company absorb the cost to air condition and soundproof all classrooms immediately adjacent to Farrington Highway. This will minimize disruption to classes due to the noise problem. This suggestion is

not considered unusual because the noise problem is the direct result of the sand operation.

(2) That an independent study be made to determine if there is a potential health hazard due to dust particles in the air as the result of heavy use of the highway. Particular emphasis should be placed in the cafeteria area where food is prepared and consumed.

(3) That another route be used during school hours.

(4) That sand hauling be made only during night time hours, subject to adherence to noise pollution regulations during these hours.

B. Traffic Hazard. School hours are from 8:00 a.m. to 3:00 p.m. It is noted that the proposed hours of the sand operation are from 7:00 a.m. to 5:30 p.m. Obviously, there is or will be heavy traffic congestion on Farrington Highway during the morning and afternoon hours. Added hazards include students crossing the highway to go to Sagara Store.

Suggestion:

(1) That sand and gravel hauling trucks not be permitted to use the highway fronting the school one-half hour before and after the start and end of school. This suggestion is made with the assumption that suggestion A-1 in the previous paragraph is implemented.

C. Congestion on Kaukonahua Road. The Kaukonahua Road, which parallels the Kaukonahua Gulch and leading up to Schofield Barracks, is a two lane, narrow, winding, and rising highway. This highway serves as a major thorough-fare for many residents who commute to outlying areas. At the present time, gravel-hauling trucks travel up the highway at a speed of of 10 to 15 miles an hour, greatly impeding traffic and creating an extremely hazardous traffic condition for incoming traffic on hills and on curves. The proposed sand hauling operation will increase traffic substantially and if permitted to use Kaukonahua Road, will cause an untenable situation. It is envisioned that travel time to Schofield/Wahiawa will increase 100%. Such inconveniences cannot and should not be tolerated by local residents. Kaukonahua Road by design was not intended for heavy truck use. Since its origin some 50 years ago, Kaukonahua Road has not been improved.

Suggestion:

(1) That Kaukonahua Road be off-limits to all sand, gravel, and heavy hauling trucks and equipment. Instead, these trucks and equipment be required to use Kamehameha Highway.

D. Maintenance of Roads. Due to unusually heavy use of roadways, a maintenance plan be prepared by the City and the State to insure that all roads affected by this operation is adequately maintained. This should include the regular use of a Road Sweeper on the highway fronting the high school.

✓ 2. Mr. Fred Rodriguez, representing Mokuleia Beach Colony Unit Owners, 415 Mamaki St., Honolulu (Submitted written testimony dated January 17, 1973)

"...The principal thrust of my statement deals with the application of Warren Corporation to operate a sand mining operation. As you know, the area in question is essentially a recreational area, used as a polo field, but more important to the owners of residences at the Mokuleia Beach Colony, this recreational amenity also constitutes a view amenity which was the original purpose for the establishment of the residential development.

Warren Corporation is applying for a sand mining operation on this site. Does the planning commission incorporate as part of the conditional use permit under application the approvals necessary to conduct such an operation? Under the provisions of Act 100 enacted by the Sixth Legislature of the State of Hawaii, there are environmental considerations remaining unanswered by the applicant.

I address the Commission's attention to these points of interest:

A. As the quarrying operation takes place, what provisions are being taken to prevent or minimize the resulting noise and air pollution?

B. What will the applicant use to replace the sand in this 152± acre operation?

C. As a resource, will the sand removed from this site ever be replaced?

D. Has consideration been given by the applicant of the low water table and potential erosion problem which might and could arise from his quarrying of this area?

E. Should he choose to fill the sizeable hole with some material, has he been cleared by the appropriate government agencies, i.e., State Department of Health and City and County Department of Public Works?

F. What compensation is being considered for the residents who will watch this operation for the time period involved?

G. Will the general public have to endure noise levels of the quarrying operation as well as the trucks moving back and forth during the operations for an indefinite period of time?

H. If it is the intent of the applicant to fill the void with refuse, is it his intent to operate the subsequent land fill operation according to the rules and regulations of the City County Refuse Division?

3. Mr. Marcus M. Bright, representing Mokuleia Beach Colony, 3103 Pualei Circle

A. The proposal by the applicant for 80 more trucks creates a hazard on the two-lane roadway.

B. Regarding noise, they disagree with the comment that existing berms could buffer the noise of the operation.

C. Land values will depreciate

D. They disagree with the comment that 150 feet back from the ocean frontage is a safe distance for this type of operation. The water has gone in 150 feet during a storm.

E. If the permit is granted, it will start industrial organization which would change the whole aspect of this section of Oahu.

4. Miss Kathleen F. Maurer, State Department of Social Services and Housing

MAURER: The State Department of Social Services and Housing objects to the proposal. Our main objection is based on the fact that not enough study has been completed for the project. Our objections are based specifically on these points.

First of all, the detailed description of the project site which the State OEQC requires in every environmental impact statement is very poor. For example, the environmental assessment or impact statement there seems to be a question by the author which describes present vegetation in these terms:

(1) Present vegetation on the subject land includes various grasses which are no more than one foot, used primarily for grazing.

(2) Another is an inadequate appraisal of reclamation measures. The types of plants are listed which Warren Corporation intends to reclaim the land with; however, there's no discussion of experience with these plants in reclamation of beach areas such as Mokuleia would be. Further, there is no guarantee that such reclamation measures will be monitored by any state agencies or we are not guaranteed that such reclamation measures will in fact take place.

The second stipulation which this environmental assessment is required by OEQC is that alternatives to the proposed action be

listed. According to our state environmental policy, the proposing agency should consider the alternative of no project on this land which would be not mining the sand at Mokuleia. The Warren Corporation in their environmental assessment says that the applicant has no other alternative due to the scarcity of sand. That's not the point. The point is that the State of Hawaii has a vested interest in this area. Further, a particular alternative of sand mining from the sea is not discussed. There's presently a research leasage being undertaken at the UH under the Sea Grant Program which is coming up with an economically feasible method of sand mining from the sea.

Another stipulation with an environmental impact statement is the discussion of the local short term uses of the environment. This is the maintenance and enhancement of long term productivity. In this particular project, apparently sand mining is a short term use. According to a DPED study call "Tourism in Hawaii", Dillingham intends to develop this area of Oahu as a rather massive resort development. We believe that any type of massive development like this must be proceeded by a thorough and complete study of long term effects. In this case they involved, we feel, the effects of a tourism development at Mokuleia.

Furthermore, I'm distressed by what I consider a serious weakness in this impact statement or environmental assessment. Apparently Warren Corporation is not concerned with the aesthetic value of the beach, the ocean area. This is one of the few remaining undeveloped areas of Oahu. Its unfortunate that in Hawaii we sometimes put economics ahead of aesthetics, but we live by aesthetics as well as economics.

In conclusion, the DSS&H believes that this project requires much more thorough long range study before any decision be made, particularly the aesthetic consideration of the area.

Questions were raised by the Commission.

CREIGHTON: You speak of an Environmental Impact Statement. Who was that prepared by?

MAURER: It was prepared by a Fred Hertlein, III, President of Hertlein and Associates, Environmental Consultants.

CREIGHTON: Prepared by the applicant?

MAURER: Yes. Warren Corporation apparently commissioned Mr. Hertlein. It was submitted to OEQC by Warren Corporation.

CREIGHTON: Has OEQC commented on it?

MAURER: Yes. As a matter of fact, OEQC xeroxed copies. It was circulated to all state agencies which is standard procedure. OEQC xeroxed copies of the comments from those state agencies

that went into the environmental control office, sent them back to Warren Corporation, and only two to three days ago distributed to Warren Corporation their own summary of these comments.

CREIGHTON: Was it distributed by OEQC to civic groups?

MAURER: I except it went out. They distributed a hundred copies to various people.

CREIGHTON: May I ask the Planning Director whether that was taken into consideration in the report?

SMITH: This report being referred to was developed by the Warren Corporation at our request and was distributed by OEQC to various state agencies. We do have the report on file. We have made an evaluation of the report.

CREIGHTON: Presumably then the Planning Director's report answers the questions that were raised in this EIS?

SMITH: To the best of our ability, yes. Many of the governmental agencies' comments that are included in our report to you came as a result of this environmental report rather than the normal course of the public agency review committee (PARC).

CREIGHTON: It seems to me that some of the questions Miss Maurer raises on alternatives, for example, are not covered in the Planning Director's report. Am I wrong, Mr. Way?

WAY: What specific ones are you talking about? If you're talking about tourism for example, which I think was one of the alternatives in terms of land use, this is a matter that is covered in our General Plan. As you know, the policy of the area shows for some urbanization indicated in our report, and also Agricultural types of use. From the standpoint of the City's policy, the restoration of the land to an Agricultural type of use is quite in conformity with that Agricultural land use designation and Agricultural zoning. There is no proposal before the city for a tourism destination facility. There may well be such a proposal being considered by the owners but again, in the public policy arena, this is simply not there as an alternative at this time. It won't be until the General Plan is amended.

CREIGHTON: I was thinking rather the alternatives in sand mining alternative locations, alternative methods, the alternative of not sand mining and so forth. Frankly, I would have wished that the Commission members would have recieved a copy of this Environmental Impact Assessment. We've been wishing for such assessments by private developers and when we have one, I would have been very happy to see it. We know that they're required now by public agencies but not by private developers.

WAY: We could make it available.

CHAIRMAN: Did we hear from OEQC?

SMITH: OEQC as I mentioned did accomplish the distribution of this report throughout the state agencies. They forwarded the state agencies' comments to us. The OEQC itself did not take a position on this as far as our record shows.

(There were no further questions of Mrs. Maurer.)

5. Mr. Lorrin F. Thurston, Property Owner in Mokuleia (Submitted testimony dated 1/17/72)

"...The Environmental Assessment and Environmental Impact Statement as submitted by the applicant and prepared by F. Hertlein and Associates, Environmental Consultants is, in my opinion, grossly inadequate. It deals primarily only with on-site problems and gives no consideration to major peripheral problems which will be generated and their effects on the community. Since the City and County Planning Department imposed the requirement of an EIS as a part of the application, it follows that the EIS submitted should be comprehensive and meet the specific requirements of the Comprehensive Zoning Code, which in my opinion it fails to do....

The EA and EIS as submitted by the applicant provides no information on truck routing in hauling the sand from the site to its destination or effects upon health, safety or comfort of the residents, school students, or motorists along the routes the loaded and empty trucks will be traversing in delivering the sand to its ultimate destination.

I presume the to/from site truck routing would be east from the mining site on Farrington Highway through a residential area in Waialua and past the Waialua High and Intermediate Schools to Thompson Corner, mauka up Kaukonahua Road to the junction of Wilikina Drive, past Schofield Barracks and Wheeler AFB and into central Oahu through Waikakalau Gulch and Kipapa Gulch.

The effects of noise and safety of the students of Waialua High and Intermediate Schools must be considered.

The potential effects upon the safety, health and comfort of motorists using the existing highways, including the increased potential of injury and damage to property should be investigated in depth prior to granting a permit.

HPD's reply to requested comments on the EIS reflected only on-site traffic control and did not cover the to/from site traffic generation and resulting problems on roads to be used.

C & C Road Department made no comment, and State DOT representatives replied only verbally, to the best of my knoweldge, indicating minimal problems and that the roads could absorb the increased loads.

The most recent traffic survey on Kaukonahua Road by the State DOT was a manual count taken Thurs/Fri. February 10, 11, 1972, for a 12-hour period between 0600 and 1800. The location of this count was the UH Experimental Farm on Kaukonahua Road. This count was taken approximately one year ago:

Total vehicles: 3,570 all types
Percentage and number by classification:
82% or 2,927.4 were passenger vehicles
.3 of 1% or 10.71 were buses
9½% or 339.15 were light trucks, 2 axles (pick-up or van)
8.2% or 293 were heavy multi-axle commercial trucks

293 large commercial trucks passed this point a year ago in a 12-hour period from 0600 to 1800 which would correspond to the weekday hours of operation as proposed by the applicant. The applicant would be adding a maximum of 80 truck loads of sand per day to town and by including the round-trip factor, this would actually be a maximum potential of 160 passages at a given point for a total of 453 heavy multi-axle vehicles. This would be an increase of 54.6% in this category alone, based upon figures of one year ago. I also understand that the Hawaiian Bitumuls Plant at the Kawaihapai Quarry will be providing additional loads of asphalt to surface the reef runway.

The State Highways traffic count one year ago was only a "spot check". It could in no way give any idea to the average figures in a given month, nor reflect the fluctuation in production at the Kawaihapai Quarry in either rock, gravel or asphalt. Since the vehicle count was taken in Feburary 1972, it could not reflect the numbers of vehicles hauling bulk sugar and molasses from Waialua Mill as February is not the peak of sugar cane production.

Kaukonahua Road from Thompson Corner to the Wilikina junction is a C & C road and is narrow, winding, 2-lane, with an estimated average 5-6% gradient on the hill. It is lined with large ironwood trees along both sides, closely spaced, from within 2 to 8 feet of the pavement. Some portions of the road have a 2-3 foot deep ditch within 6-8 feet of the pavement. For practical purposes, this section of road is without safe shoulders on many passing zones. Loaded trucks crawl up this grade at speeds of between five to ten miles per hour and take 15 minutes to climb 2.8 miles. Traffic backs up behind these trucks and inevitably, attempts are made to pass by motorists, exposing both themselves and downhill traffic to extreme hazard. A runaway truck on this route without shoulders or escape routes could be as disasterous as the Likelike Highway disaster of last year or the recent Pali Highway disaster, since the gradients are comparable. At least the latter two routes are divided four-lane highways rather than arrow two-lane roads. Dust from sand and quarry mining operations are notoriously destructive to brake and hydraulic systems.

In summation, I believe that the City Planning Department has initiated excellent requirements of the applicant to protect the welfare of this community. I hope that the Commissioners will

require additional in-depth studies of the peripheral problems in routing, road capacilities, noise in residential and school areas and other environmental effects, and require satisfactory solutions to these problems before any permit for sand mining is granted.

There will be an alternate source of sand available in the near future from sand mining off-shore, resources estimated at one-half billion cubic yards of sand, near Oahu, Molokai, Lanai, and Maui. With those considerations in mind, I feel that any CUP for sand mining at Mokuleia should be limited to annual renewals only and not for a blanket long-term period when the future is unknown.

(There were no questions of Mr. Thurston.)

6. Mr. Jack Morse, Attorney for certain residents in the area, 1060 Bishop Street (Submitted Petition containing 30 signatures of residents in the area AGAINST the proposal, and an outline of his presentation)

MORSE: The application has two basic aspects. Number one is the need for the sand. The last part of this I will suggest that there is not the great need as has been put forth in the application.

The Warren Corporation also had sand mining in Haleiwa. There is a place right now, sunken land of acres that apparently was not fully filled in. This was on Bishop Estate land recently. I understand also that that experience ended up with a law suit with some of the adjoining landowners. I don't know what happened. The law suit apparently was over dust problems.

From Mr. Creighton's comment previously, I understand the commissioners have not seen the statements; number one an Environmental Assessment, and number two, an Environmental Impact Statement which was submitted by the Warren Corporation. Warren submitted something called an Environmental Assessment which I know is in the Planning Department's files. They had hired F. Hertlein and Associates, Environmental Consultants to write what is appended and called an Environmental Impact Statement. I'd like to say that in searching through that statement to find who F. Hertlein and Associates is, it doesn't say. It was signed by Fred Hertlein, III who lists himself as president. There is nothing in there as to his background and as to his qualifications. He may be the most qualified man in the world or he may not. The Commission of course is being asked to rely upon the facts and the generalities, and conclusions that he has in his report. I think certainly his background qualifications should come forth. I know the staff's report is based on many assertions and conclusions made from that report. I did personally try to find F. Hertlein and Associates. They are not listed in the phone book. They are not registered with the Department of Regulatory Agencies. It has no excise tax license. I don't know exactly what it is.

One issue brought up is the noise problem. In the statement from Warren Corporation and from Mr. Hertlein, they talk about noise pollution, they give some suggested cures for noise pollution such as in Mr. Hertlein's statement, he says that from the experience previously in Haleiwa sand mining, the noise created by the equipment which apparently will be the same equipment for Mokuleia, is not bothersome and does comply with the CZC if its at least 1200 feet away from the residences or from whatever it might be bothering. In Mr. Way's report, they talk about if any of this equipment is going to be less than 1200 feet from the residences, then there will be berms to deflect the sound. There's nothing in Mr. Hertlein's report or Warren's report or the Planning Department's report that refers to the problem of noise pollution other than the residences in the area. Nothing as far as people trying to enjoy the beach, people going along the highway. There's no provision for any protection there.

There is a letter in the Planning Department file from Mr. Hirata, the City and County Engineer and he says that in the application, he cannot determine the effect of noise as the location of the houses are not shown on the application at all.

Next problem is dust. I'd like to impress that the only consideration of dust pollution in this application either in the Hertlein statement or the Warren statement and I think also in the Planning Department report, the only thing that is considered is dust from the sand mining. I don't believe there's a word said about the problem of dust from the burrow pit and from the fill that is going to be put back into the hole that is dug in the area. I think with the experience in Haleiwa as I understand it strictly from hearsay, the law suit, the dust problems were created more by fill going in than by the sand being taken out. This is something again that needs to be researched. Warren Corporation does admit that there will be what they call fugitive dust. This is in their report.

Also in the dust, perhaps the basic problem is the wind direction and velocity in this area. Mr. Hertlein in his Environmental Impact Statement appends a table which is called Table 1 where he shows some average winds at various times of the day. He averages something between 6 miles an hour up to 11 miles an hour at different times. He extrapolates from that in his report and says therefore, it is clear that maximum winds of 20 miles an hour will be rare. I think I paraphrased him but that's the essence of what he says. I suggest to the Commission that it is impossible to take a table of mean wind values, average winds, and to extrapolate from that alone what the maximum wind is. We had a very bad experience on Maunakea. This happened where the contractor saw a table of mean wind values of between 20 and 30 miles an hour. He said it can't be too bad. When we got hit with 100 mile an hour winds, he was upset. I suggest the maximum winds here are quite a bit stronger than the 20 miles an hour that Mr. Hertlein thinks occasionally occur.

Again in the Haleiwa experience, the people who wound up suing

because of dust problems were on the beach side of the excavation. Apparently in that area, this means that the winds were blowing in a somewhat - from the southeast to get the dust out to the homes on the beach. Whether that same pattern is same in Mokuleia, I don't know but certainly as you go into the details in Mr. Hertlein's report, there is no backup from which you can guess what the winds will be.

Mr. Hirata the City and County Engineer again says that from the application, he cannot determine the effect of the dust on the homes as the homes are not shown on the application.

There is some discussion in the report of the growth presently on the premises. I think there's a minor error. They say Halekoa is not present and apparently it is present. In the application, the applicant says there will be no removal of pinewood which I assume means the ironwood trees. Yet, in the recommendation from the Planning Director, I think the recommendation is that only certain of these ironwood trees are to be saved.

The applicant says that after the new fill is put in and planted, that the result will be better aesthetically. That of course is a pure value judgment and I think the people who live there would contest that very violently.

Mr. Hertline also speaks on the possible problem of wave erosion. He admits in his statement that he has no facts to go on. He makes several assumptions arriving at the conclusion that a 150-foot setback from the ocean front is sufficient. I point out that Mr. Hertlein has no facts on which he makes his conclusion.

There is an area which is completely flooded and stagnant, which I understand was for the purpose of a silting basin. There is now a large stagnant pool which has created a new nuisance of mosquitoes that they've never had. Now they're apparently going to have a new mosquitoe pond in another area.

There are many unknowns which have been mentioned by the other people. I wish to point out that the Health Department says they are worried about the possible contamination of the ground water table because of the proposed fill material. In other words, its simply an unknown at this point.

In the recommendations of the Director, I believe it says that plans, topography, and so on for the burrow pit up mauka shall be subject to the Planning Director's approval. No offense but I wonder if that wouldn't be proper to again have the public have a chance to know what's going on up there. There's been no detailed plan at this point, rather than just simply having the Planning Director have the right to say how it shall be done. There may be environmental aspects of that also. I simply don't know at this point.

The Department of Transportation which did respond only orally

to the staff stated that they didn't see any problems with the road. There is a comment in the Director's report to you. You should not read that comment which is a little ambiguous, pages 6 and 7 of the report. You should not read that to mean that the DOT has any comment on the safety or hazards. They don't. All they're saying is they don't think this number of trucks will chew up the road too much. I did check that out with Mr. Kam at the DOT.

In the supplemental report dated today, there is a Recommendation 17. Again, this deals with traffic and gives the Planning Director the right to increase the number of loads per day after checking the operation. Again, I suggest this should not be the Planning Director's right without having the public in on such a decision.

Its been stated and described that the roads upgrade are very bad. Just to compare that because the comment has been made that the previous sand mining operation in Haleiwa, they had the same problems, the same two-lane highway going up to Wahiawa. Nothing could be further than the truth. They have a two-lane highway. That's the only similarity. Number one, the Haleiwa Road is straight. Number two, it has shoulders most of the way. Number three, it doesn't have ironwood trees every few feet along the sides. There's a tremendous difference in those two roads.

There is a comment in the original report to you from the Planning Director, "No governmental agency voiced any overwhelming objection to the proposal." I'd like to refer you to the letter from Myron Thompson, Director of Social Services and Housing dated November 3 where he says "We find the project environmentally destructive and aesthetically objectionable. Furthermore, Warren Corporation's impact statement is inadequate. Discussion of the project's wide ranging impact is incomplete." I suggest to you that may be an overwhelming objection.

Finally, the alternatives. In the Warren statement, they refer to a crushing process. They say this is more expensive. It may be very true but I wish to point out that there are no cost comparisons given to you. We don't know if its a penny a ton more or $10 a ton more. This you should have.

There is also reference to deposits on Molokai stating that they will run out shortly. This may be true. The Setback Act that goes into effect in 1975 will restrict some of the beach sand mining, only of course to the setback which is either between 20 and 40 feet as you know along the shoreline. Again, what are the facts on Molokai, I don't know. Molokai is about gone as far as a source for sand.

Finally, you have ocean mining which was briefly mentioned by Kathleen Maurer. I'd like to give to you a recent article from the UH, the Sea Grant Newsletter, January edition. The lead article talks about mining sand from the ocean. I talked to Mr. Kashiano who was one of the people named in this article and

who is doing some of the research in this area. One of the main problems is that we would need new legislation to be able to mine sand in the sea. He told me he understands a bill is going into the legislature this year to allow it. I don't know if its on an experimental basis or commercial basis. He made a statement to me and I quote: "If the legislation goes through, a contractor could be pumping sand for profit this summer." There's a lot of ifs, ands, and buts in this area. The Warren statement doesn't mention this. It says there are no alternatives. I don't think that's correct without some research.

In addition, to the conditions that have been suggested by the Director's report, I would like to suggest four more:

A. The areas that they plan to go into - you had Increments 1, 2, 3 and 4. Increment 1 is perhaps the least objectionable. Its mauka of the highway. It does not have the great number of ironwood trees. It is not close to the beach, of course, so if the 150-foot setback is not enough, you won't have this problem. I would strongly suggest that if you decide to issue the permit, that it be on an experimental basis in Increment 1.

B. The time of work. They have proposed six days a week, beginning at 7 in the morning. The report suggests 7:30 a.m. We would suggest 8:00 a.m. People who go into town would certainly be through by the time. I don't know what time the high school starts.

   I'm told by the residents that Saturday as well as Sunday are tremendously full of traffic in the Mokuleia area. You have the new park which is just on the Kaena side of the polo grounds heavily used on the weekends. That means Saturday, not only Sunday. It should be a five-day week and not on Saturdays also.

C. On the list, I've suggested a landowner's agreement to reimburse residents for damage. When dust and noise damages come along, the landowner, the person who is damaged, is forced into court to try to enjoin it and perhaps get any damages for it. Its a tough thing to go into court and to hire a lawyer. Its costly. If the Commission is going to issue a permit and will require a landowner's agreement to reimburse these residents for damage, which I'm sure the Attorney General or the Corporation Counsel could draft up for you, I think this might obviate some of the great costs in the damages that will inevitably come up.

(There were no questions of Mr. Morse.)

The testimony of the following people primarily concurred with the comments made by previous speakers AGAINST the proposal:

7. Mr. Sanford Parker, Property Owner, Unit 19-A Mokuleia Beach Colony
8. Mr. Charles Dean Reid, Property Owner, 68-709 Farrington Hwy.
9. Mr. George L. Sheetz, Property Owner, 68-687 Farrington Hwy. (Submitted Petition AGAINST the proposal containing approximtely 163 signatures)
10. Mr. Vincent Mazza, Property Owner, Mokuleia Beach Colony
11. Ms. Thelma Kihano, Property Owner, Mokuleia Beach Colony
12. Mrs. Allen Levear, concerned citizen (Submitted letter dated January 12, 1973)
13. Mrs. Theodore Wrobel, Property Owner, 68-615 Farrington Hwy. (Submitted letter date January 14, 1973)

Testimony in SUPPORT

1. Attorney Allen Marutani, representing Warren Corporation

Mr. Marutani explained that Mr. Gordon Cran, Manager of Mokuleia Ranch; and Mr. Fred Hertlein who prepared the Environmental Statement, would testify today primarily in the area of noise, dust, and overall conditions of the land. Inasmuch as the hearing will be kept open, additional testimony regarding the overall proposal will be presented at the next meeting.

2. Mr. Gordon Cran, Manager, Mokuleia Ranch

CRAN: I've managed Mokuleia Ranch for almost 14 years. There are very few people that live in the community that have been there longer than I have. There are some and I think I know most of them. I'll speak a little about the history of the area, some of the things that maybe people here don't realize as to what has gone on in the past, and how the same thing is going to go on possibly in the future, and how the past has made the future possible.

The area at Mokuleia Ranch Company extends from Kaena Point to the proposed sand mining area. Its not a continuous area. Its broken by several other uses.

The ranch has been in the sand mining business for many, many years. In the old days, it was on the railroad and through Dillingham Corporation. Another thing, I'd like to clear up is that Mokuleia Ranch is not a part of Dillingham Corporation. They do own shares in Dillingham Corporation; however, the Mokuleia Ranch is not a subsidiary of Dillingham Corporation. It is separate. The books are not overlapping at all. We do pay Dillingham Corporation for some services, engineering and legal services.

The ranch has had the history way back in the railroad days of digging sand. We would like to have the permit to dig sand on ranch property again. In the last 7 or 8 years, we have not needed the income and we have not been digging any sand. It

wasn't necessary, and other things being what they were, we were busy. At the present time, it would be very advantageous for the continued maintenance of this beautiful site to have the income.

The property that we have marked here is essentially all the area where there is any sand left at Mokuleia Ranch. All we're asking for is permission to continue what we use to do. Its kind of a different concept. The trucks use to haul sand years ago. I'm one that complained about the sand blowing off the top of the trucks. We use to haul the sand from down the end of the air strip. Now, we're asking for approximately the same thing. We take the sand from another point off of approximately 3 acres at a time. That's been discussed already.

Now, why the big pitch on the sediment basin. We know right away that we have more to lose in this area than anybody. The ranch owns the land. The land is appreciating everyday. The idea is to hang on to it and turn it into something good for everyone. Naturally, the landowner doesn't want to lose money doing it.

The area that the backfill material will come from is from this (pointing to map) canefield. Its a marginal canefield and will not be put into pasture. The soil is rocky. The rocks are about 6 inches in diameter which I'm guessing - but its about 30% lose stone and 70% dirt. You might say how can 30 acres fill 150 acres. Well, we're applying for all the available area where sand may be found, where it wouldn't be digging the entire 150 acres. The other thing is that the depth of the material is substantially deeper. We will only be taking out about 2 yards of depth in the other areas. We recognize that when we start taking dirt from an area where streams come down, we're going to be in an ocean pollution problem.

As someone mentioned earlier, we have a sediment basin here (pointing to map). We had a little trouble with it when we first put it in. It kept breaking the bank. This year it has worked fine and the soil is now packed and its now vegetating very well. The last big rains of 4 inches plus, overflowed with very little silt into the ocean. As those of you who know the area can remember when we had the overflow years ago, the red dirt ran out into the ocean and extended all along past the polo field, and along behind the reef out there like a big arch in front of the houses. The water would be brown and lay there for as much as 4 months at a time. We're attempting to prevent that with a sediment basin that is experimental. The area feeds the stream so we are planning to put the sediment basin to prevent any larger particles from going down to the ocean. There are some particles that will be supported; however, with the success I've seen in the first place, I'm anticipating that there will be a large degree of success.

The material from the berm or backfill area will be hauled on ranch property and would cross the highway at one point to fill makai. There would be a minimum of trucks or no trucks involved

in the sand hauling at any point past the polo field entrance or the Crow Bar entrance.

The mention earlier of highwater. Highwater comes in during storm periods all along the coast. During the heavy seas that went into the Beach Colony, the highwater did not get past these trees (referring to map).

On the point of vegetation, someone mentioned that we didn't seem to have adequate information as to what we're planting. We will replant essentially the same things except we will put some improved varieties in. There are three very large monkey pod trees that will not be disturbed. The rows of ironwood will be left along the beach and along the old railroad. The keawi trees will be removed to get the sand, and some ohai trees also.

The Commission questioned Mr. Cran.

WAY: Mr. Cran, would you care to comment on your opinion on the future of the ranch? You're undertaking some changes to the operation as we see it, as we view your presentation.

CRAN: The area has a master plan as has been previously mentioned. There was one way back that I don't know about. There's been another one made by ABM two years ago. We keep planning the area for overall development. Up till the present time, it hasn't penciled out. The people who seem to be authorities on it say that it is not possible to put it into a higher use as yet. However, this is changing. Its changing fast as we all know. We are continuing with our operational pasture plan. The lands that were in cane are being put into pasture so that it will not affect an overall operation. We can withdraw two to three acres for a development from pasture and not affect the overall operation; where with cane, you have to have it tied up with a lease with the plantation. There is usually a term of a lease which would then prevent any movement of the landowner to use his property. The time when a development is to take place, there will be no time to remove this asset of sand. The cost of holding land is getting to be so high that we need all the income possible to hold this property so that we may some day put it into the higher use.

It is ridiculous to have land of this value being used for agriculture as it is on all of Oahu. So, you say what is the long term plan? The long term plan has to be some higher use or no one will afford it. This is the trend now but we have to keep in business and make ends meet until that time comes.

WAY: Following up that question, would you say that the ranch operation in terms of the future is going through some conversion from the cane to pasture land?

CRAN: That's on the makai land. We've had cattle on the mauka land all the time.

WAY: Is there some economic function? Are you in fact still in the area of economic soundness operating that way?

CRAN: Yes. As cane, we lease the property. As cattle, we take profit. I shouldn't say its substantially more but we can hold it together equally as well with cattle as we could by leasing it out and not having control of the property.

WAY: The problem of mosquitoes in the vicinity was mentioned in the existing silting basin area. Has this come to your attention as a problem and has there been any corrective measures taken?

CRAN: Yes. it is a problem. The problem is not new. Back years ago before the silt filled the mouth of the stream up, there was a pocket there, a basin much smaller than what we've constructed. In the flooding that took place in 1963 due to the construction on the road at Mt. Kaala, this material all came down and filled up the mouth of the stream. So, the natural basin that was there was filled. The area, as long as I've been there, we've had years of lots of mosquitoes and years of relatively few mosquitoes. I put this basin in as an experiment. The Board of Health says we have to put fish in it to keep the mosquitoes out. I said that we had planned to put a drain in it so that it would drain slowly. They say then the fish die, but when the big rains take place, the mosquitoes come down and they will be there. Its best to leave it sealed and let the fish live in it. That's the best that we know right now.

WAY: Would that condition be different in the new basin?

CRAN: We anticipate putting a drain in it so that it drains completely out. It will be just that surge of water that comes down when we have a seven-inch rain in an hour and a half or something like that, will be slowed, puddled, silted. The silt will fall and overflow. On those types of rain, it would go to the sea. After the main flow is slowed, a drain would then carry the remainder of the water that's standing back there slowly out over the next several days.

WAY: In developing the plans for the mauka area with the silting basin concept, what kind of consultation had you on this? Where did you get your advice?

CRAN: I worked quite closely with the Soil Conservationist, Les Williams.

WAY: Did they find that to be satisfactory? Was it their plan? How did the plan evolve?

CRAN: There is no such plan. They recommend silting basins but there's no given set of plans. Its the principle that they okay. In addition to this, until the end of this year I've been on the State Committee of Agriculture Stablization and Conservation which is quite closely involved with this type of thing.

WAY: How about the extraction area? Was the Soil Conservationist consulted in that operation as well, along the beach where sand is being taken out?

CRAN: No.

CREIGHTON: With the scheme you presently have in mind of preparing one acre, working in one acre and selling an acre, what length of time does mining from one acre take, just in general?

CRAN: I guesstimate that there's approximately an average of about 10,000 yards to an acre. That's just my guess having some idea what the area is like, and we've dug a few holes around. I couldn't say. It would depend upon sales, available trucking and available equipment. On my knowledge of farming, I know we're broke down half the time. Just how fast an acre of sand would go down the road, I can't answer.

CHAIRMAN: There's several suggestions made, one of them where you might have a smaller area to see whether some of the concerns expressed by the community people might become so detrimental that the city may decide that they don't wish to continue this type of mining operation. If this recommendation is made, in anyway would this hinder your operation as far as sand extraction is concerned?

CRAN: Well, Warren Corporation is making the application because he's in the business of hauling and handling dirt and sand. The ranch really couldn't get into this business because of the great expenditure necessary in machinery. Its not our line of work. It would be like someone with a carpenter's kit going out to build a skyscraper. We'd have trouble. We are not in the quarrying business. If Warren would see his way clear to moving in all the equipment and getting the set up necessary for a trial without any definite term, it would be his okay. I really couldn't say whether he could justify that or not.

WAY: The connection with the polo field, what are the arrangements that you have with them? Any discussions of continuation of that?

CRAN: Well, the reason the polo field is included is as I said earlier, we have all the lands where there's available sand included in this. It is the fourth increment. The polo field has a lease which is expiring soon; however, they will probably have it renewed to the best of my knowledge. The likelihood of taking sand from that is way down the road. However, in the meantime should the polo field go out of business, should things change, we would like to have this included in the initial studies.

WAY: In connection with that, what are the present terms of the lease? I think it was to 1974 that the lease expires, is that correct?

CRAN: Someone said that.

WAY: Yes, its in our report. Beyond that, what would be the

terms and conditions you might foresee if you can answer that question at this time?

CRAN: I can't answer for our Board of Directors; however, I would guess that he would be there for five or ten years more.

WAY: On what arrangement, year to year?

CRAN: I can't answer for the Board of Directors.

WAY: I recognize that but I think its one you will be facing very shortly. 1974 isn't that far away.

CRAN: Well, I do know that they're planning a renewal but the term I do not know.

MARUTANI: Mr. Chairman, may I ask several questions of Mr. Cran?

CHAIRMAN: Surely.

MARUTANI: You testified that you will rely primarily on the income realized from the sand mining operations which Warren Corporation will pay you for the extraction of the sand. Now, if the application is denied, does this mean that the plans for Mokuleia Ranch Company to make the land to a higher and best use be accelerated so that the pasture operation will probably be that much shortened or completely eliminated?

CRAN: That's a very good question and a very broad one. That's kind of like what's going to happen next year in island economics. But, as I said a while ago, the overall plan is for a higher use. Our master plan calls for hotel on the area shown with the trees. The surrounding area, the master plan calls for a golf course. But, how soon that will take place is really an unknown. I really can't say. Right now, ABM is penciling out some 2 acre lots. Scheduling for that is in our master plan. I personally think that unless somebody comes up with a magic wand, its going to price itself out of existence. The cost of putting in water, roads, and meeting all the requirements just puts the cost per lot out of sight.

Now, beach property is easy. Cesspools are easy to put in. The highway is close. We supply water to all the area down below. We already have a Board of Water Supply - meets their main line. We fill it from a well. As you can see, we have the water and its on the highway, and cesspools are cheap. Its easy to build along the beach. But further back, it becomes more costly all the time. How soon any of this will be put into housing depends on the figures.

Now, if we don't have the income from the sale of sand, we'll have to make our money some other way. We're not in the business of digging sand out of the ocean. As much trouble with the reef

runway, I doubt if we would ever get a permit to dig sand out of the ocean. The housing in that area will be a number of years away. As far as financing it, we're trying to hold the land together as best we can. At the present time, its with cattle and other investment. The biggest thing is the sale of land. We keep selling a parcel all the way along. Every few years we sell a parcel to stay ahead of it, trying to hold together that nucleus that is destined for the overall development.

MARUTANI: Let me rephrase the question then. Is it your testimony that you intend to use the income to hold your present use or continued use in the foreseeable future as a pasture operation?

CRAN: The income is necessary to hold the property with the high real property taxes along makai of the highway. The income generated from the livestock business is adequate to hold the rest of the ranch property mauka of the highway.

MARUTANI: You have no cost estimate as to how long you can hold this in the face of rising costs?

CRAN: No. It gets more and more difficult every year to meet your budget. I think everybody is in that problem.

CREIGHTON: I think in a sense that question and your answer is posing a threat. Either we permit this use or there's going to be urban development on this land. This land is zoned Agriculture, I believe.

CRAN: Its an odd situation. We pay taxes on the beach property for Urban land. The state has it zoned Agriculture. No, we're not trying to threaten anybody. This is just the facts of life and trying to run a ranch.

CREIGHTON: But, when you speak of ultimate plans for highest and best use, you're assuming then rezoning from Agriculture to Urban on the part of the State and the City and County. That's a pretty big assumption, I think.

CRAN: It would have to come sooner or later.

CREIGHTON: I think there are some people in the community who are likely to disagree with you.

CRAN: Well, the only solution I could say is that they'll have to somehow take over the taxes that we're paying on that same property.

(There were no further questions of Mr. Cran.)

3. Mr. Fred Hertlein, Head, Hygiene Division at Pearl Harbor Naval Shipyard.

HERTLEIN: I am the Head of the Industrial Hygiene Division at Pearl Harbor Naval Shipyard which is a full-time 8-hour job. Since 1970 and the very end of 1969, I've been conducting more and more of these environmental surveys, specializing primarily in air pollution, dust, gases, vapors, and noise measurements in their evaluation and control. As a result of this, I have begun my own company which is called Fred Hertlein and Associates, Environmental Associates. We don't have to be listed by the Department of Regulatory Agency which is why you won't find me listed there. I don't know who checked into my gross excise tax listing but whoever they talked to at the Tax Department must not have conducted a very thorough search because I've been paying those excise taxes since the beginning of 1970. I suggest the people that investigated it do a more thorough job in their documenting of the evidence from now on.

Concerning the fact that I'm not listed in the phone directory, I hope most of you can understand why I am not. I don't go out of my way to advertise my services primarily because I am employed otherwise full time. I'm afraid if I advertise, I would become so inundated and landslided with work that I may not be able to keep my commitments and not provide a service that apparently is very badly needed here in the community. This I don't want to do.

The other aspect brought up was my background. I have a degree in Chemistry from the University of Nevada. I conducted graduate research training at the University of Hawaii in the Department of Chemistry. I spent two years on board the Department of Interior Oceanographic Research Vessel as a Scientist of the crew. We spent two years at sea conducting intensive physical, biological and chemical analyses of sea water. I have extensive background in the measurement and conducting of air pollution with the Trousdale Laboratory during those years also. In addition to this, my past 14 years at Pearl Harbor Naval Shipyard, I feel has put me in a position to become very capable of conducting almost anything you can measure that is a contaminate in air or in water. When it comes to noise, its just one of our specialties that we're very, very familiar and competent with. Knowing which regulations apply, and which authorities apply is very important. None of these were overlooked here. I hope to bring that out in some of my testimony. I hope to be as brief as I can.

In addition to this, I am certified by the Amercian Academy of Industrial Hygiene in the Comprehensive Practice of Industrial Hygiene which is the scientific evaluation of workers environment. With that as a background, why, I guess we can get to some of these particular aspects of this problem before us.

This report that has been referred erroneously in the past as an Environmental Impact Statement, an Environmental Impact Assessment, is not that at all. I don't pretend it to have gone into any depth. He was not required to go into very broad general

implications. He wanted me to investigate and study the area under consideration, look it over, and concentrate on those aspects which would be detrimental to the environment in a long term future, at the site. This is what we did. I'm sorry you members did not get a copy of this report because many of your unanswered questions would have been very well taken cared of by now. I'm not going to pretend to go through it either because its a fairly lengthy report. I will hit some high spots and summarize it briefly for you.

The three aspects that we finally agreed to comment on were the potential of creating air borne dust on the site by the operation, the noise created by the operations on the site, and the beach erosion of natural and some of the more spectacular type of tsunami and irregular wave action. Let me mention right off before going into any of these in detail, that I did not mention anything about vehicular traffic, the noise resulting from vehicular traffic, primarily because not of an oversight, not by any means. There's a very strict code on vehicular noise control. I think mostly everyone is fully aware of now. Any complaints coming from communities, residents or children, schools or principals or anyone who has complaints along these lines, I don't feel has any recourse if they aren't getting these regulations enforced. The police are enforcing them because I have two current clippings from the newspapers indicating that. Twenty-nine vehicles have been cited for noise violations already. This is only in one week. So, you can't say its not being enforced. I overlooked it on purpose because I could have spent several more pages detailing the noise levels of the trucks, and why they won't be constituting a noise hazard. They will not. I can guarantee you that because of this thing being in effect, they can't go over these levels. Otherwise, they become cited. They're in violation and the police can cite them. That's the purpose for overlooking that aspect of it completely. There won't be any noise from those trucks. They'll comply or they'll be cited. Its as simple as that.

On looking the area over, its apparent that most of this material that will become air borne is not in a size to be of concern because laboratory analyses of the material out there on the beach indicates that the smallest particle out there in a distance are 150 microns in diameter. That's a very, very small particle. Actually, when they talk about particulates, its a very large particle. What I did in this report is to calculate how far a maximum velocity wind would transport such a particle after being air borne from a maximum conceived of height. Their sand mining operations have equipment consisting of conveyor belts, hoppers, and things like that. Using a conservative estimate of 20 feet above ground level, we then determined what the settling velocity of that particle was, by using a physically known law (Stokes Law) which gives you the velocity of which that particle settles in still air. After this velocity is determined, we then put a wind velocity of 20 miles an hour normal to that, exactly perpendicular to that fall to see how far it would push that particle before it hits the ground again. After working these calculations out using the 20-foot

height, using a sand density of 2½, again all from laboratory analysis. This isn't something I pulled out of the air. These are verified laboratory measures. The distance this particle will fall to the ground becomes 105 feet. It was then apparent that you would have to locate this operation at least 105 feet inside your boundary. I am told this can easily be done. As a matter of fact, the sand is usually moist. This will also lend to the characteristics of not enabling it to become air borne because noise particles tend to aggragate or conglomerate into even larger masses. So, this 150 micron particle would be magnified by a much larger grouping, and crawl out even sooner.

Where I got the 25 mile wind was from four years of steady weather observations by the U. S. Weather Service. These admittedly are means, but they are obtained from sampling every single hour, for approximately 4 steady years. You can't tell me that in four years you're not going to get all the dust and the velocity wind that you're going to experience in this area. That's just not conceivable. People may laugh when they say 20 miles an hour winds, but the fact of the matter is this is documented information. Unless someone has measures that go to the contrary, I'm afraid I'm going to have to stick by these. When I see these measurements documented by an authoritative source, I'll update my calculations from 20 miles an hour to whatever velocity they find and see where this puts the sand particle.

This then is the aspect of the dust pollution. We indicated that on this basis, we felt that you would not have a dust pollution problem, mostly because these particles will all fall out in the perimeter of the area. However, there are very well known engineering control methods available consisting primarily of water sprays on conveyor belts and into the entrances of hoppers which will effectively control dust. This I indicated in here probably won't be necessary, but should it be, it is available. Its not going to be left to chance. If dust is being created, it will be controlled by known and approved engineering control methods.

The predicted noise levels were discussed on the basis of two previous operations using the same equipment that will be located at the other site. So again, we're not guessing. We're not extrapolating from other types of sand mining equipment. We're using equipment that the owner has used in other areas on this island. We know the levels of it. We know the distances at which those levels were obtained, very accurately and very carefully. What I did simply was to use the spherical spreading law which indicates that you have a gain of six decibels of noise intensity for every halfing of the distance. So, if you know the intensity of a certain distance from the source and you want to find out what that intensity will be at half that distance, all you do is add six decibels to the reading you have out here. That is a physical law that varies only very, very, little by even fractions of decibels at the very, very most, depending on air conditions, humidity, wind velocity, pressure, things of this nature. You can almost go by that as a very good rule of thumb, the six decibel reduction increase as you're

halfing the distance closer. As you're going double the distance back, you lose six decibels by the same way.

Using this law, we found out very rapidly that in some instances, you don't have any problem with residents nearby. But, when you come to the area near the Mokuleia Ranch property, near the colony, you very definitely will have problems. You can't afford to think and consider them ahead of time. Using measurements that I've conducted previously on the attenuation of sound in all its frequencies by the means of heavy earthen berms - that is nothing more than big mounds of dirt that are 15 to 20 feet high - I indicated that you're going to have an additional reduction in intensity anywhere from 4 to 12 decibels. As a matter of fact, almost all the frequencies are reduced an average of 10. This is a fairly conservative estimate. Most of them are between 9 and 11. The highest frequency, 8 decibels, 8,000 herts is only reduced 4. Using these experimental findings together with that spherical spreading law, we found out that we can construct these berms and have your noise-making machinery 300 feet away from that berm and comply with the Comprehensive Zoning Code. By the way, I think most of you are aware that the noise code in the CZC is extremely stringent. Anyone that can meet this, I can assure you is going to have a quiet operation. You won't get citizen complaints if they comply with this. The usual problems with complaints is that they aren't complying with this. These calculations indicate that if you keep that noisy machinery 300 feet on the side of the operator's berm, you won't generate noise complaints on the other side of the berm because you'll be in compliance with these measurements.

Let me point out also that Environmental Impact Statements don't require classifiable data as I've given in this report here. I've had others review these reports. They feel that the quantification of data which I put in here is much, much more than what is normally required for an Environmental Impact Assessment. We felt it was incumbent to us because of the people in the area. Their complaints notwithstanding, we feel we've covered the ground very thoroughly here. So, if you can position the equipment within 300 feet of the berm, you should be all right, no matter where you operate. In this report I've indicated where the strategic location of these berms must be, where they have to be put up. The equipment can be as close to that or as further away. I think most of you can see that 1200 feet is a little too restrictive. So, we can't do that without berms. That's the meat or the gist of the noise assessment in this particular area.

The last section I considered was the effect of the wave action on the areas to be mined. I've been criticized for not having factual data. The reason I don't have factual data is because a survey of the scientific literature in this area is very scarce. I'm not making excuses. I have not positioned myself on that beach for the last 15 years. I haven't walked where the high tide mark is. I don't know where the low tide mark is. But, I have seen the characteristics of the wave action there over a short period of time. I've seen roughly how far this action can be produced inland.

I also have the observations of Mr. Cran, the previous testifier, who indicated 15 years of observation for him to indicate where the high water mark has been. Its been no where near 150 feet past the vegetation mark in there as been previously reported by the opposition testimony. The water just never goes in that far.

In this report, I've indicated the normal wave action probably goes up something like 3 or 4 feet which is the normal range of the tide here. After that, the slope becomes a little more flat going inland. Rough waves or heavy weather out at sea perhaps generate very, very rough seas and waves that come in a bit further. This is not uncontested. A tsunami or tidal wave would inundate the entire area makai of the highway and perhaps even flood the highway and go mauka of the highway. There's no question about that. Much damage would perhaps occur. But, what effects a sand mining operation would have should something like this occur is really almost just speculation, because as you've been shown, you're only going to be mining one acre at a time using the other two as standbys, one to be filled and one to hold the equipment. So, three acres total being gouged out during the time of a tsunami, I just don't see what sort of an impact you're going to have on the environment in this case.

Most of my observation comes from the people who have been living in this area that are being realistic and objective in their appraisal of the actual wave height, and the inundation of the land back there.

This pretty much summarizes the report that you did not receive. I hope it clarifies that the Warren Corporation is not really just flying by night. We're investigating every possible aspect they could. The traffic on the highway was not obviously in my domain but some of these other points that have come up, I think now have probably been answered. The dust and the health, for example, is completely erroneous because we know from an analysis of the composition of that dust that will become air borne and generated, that no known health hazard can possibly result. This material is classified as a nuisance dust, sand is. No health department official I assure you is going to indicate to you that you're going to have health hazards out there, notwithstanding the testimony of the opposition again. You simply have no documentation of this. Its an inert nuisance type dust. Its a particulate. By the way, the noise can easily be monitored at any time you or other regulatory agencies desire by measuring the noise levels at the boundary as specified by the CZC. The same goes for the air pollution by fugitive dust which this will be called. From the Health Regulations, Chapter 43, has air pollution control regulations. For those of you who aren't familiar with it, this particular instance of fugitive dust requires that the person generating the dust can do no more than add 150 micrograms per cubic meter of air to the upwind concentration before they come on his property. Again, this can be very easily monitored. I've been doing this for several years for various companies and corporations. There's no big problem on that. Should these questions and complaints

arise, its a simple matter to station your equipment and monitor the area.

The Commission questioned Mr. Hertlein as follows:

CREIGHTON: Mr. Hertlein, what are the noise producing factors in a sand mining operation of this kind? What equipment or what activity?

HERTLEIN: Mr. Kobatake could tell you better from past experience of his equipment. He has a front-end loader. This is a diesel operated tractor-like vehicle which scoops up the sand and dumps it into hoppers or storage bins. The required power for the operation of the various components in the conveying system, the screeners come from probably a diesel operated generator which has to be fitted with a muffler, the trucks coming and going on the property are sources of noise. The screeners that screen themselves operating produce minimal noise. We have not individually pinpointed the various sources. We ran the entire complex as a fully integrated unit.

CREIGHTON: You measured the actual decibel results of an operation precisely similar to this?

HERTLEIN: That's right, and there's two reports out on that. In both instances they usually comply with the daytime values of the CZC.

CREIGHTON: Do you know of any instances where noise produced in industrial operations have exceeded the CZC noise levels has been stopped successfully by the City? My impression is that in most cases these violations are very, very difficult to prevent once they're in operation.

HERTLEIN: The Halawa Rock Quarry was threatened with it but they have not been required to stop. I can speak from other operations but I don't think it'd be professionally honest to do that because I have other clients. Well, when adverse conditions come up, they stop the operations of their quarry. This is not exactly being required to close it down but they're doing this out of no real reason. Because, when the Kona winds develop, there is no increase in noise levels at their boundaries anyway. So, its difficult to say why they should have to but they feel its their obligation. To answer your question, I don't know of any single industrial operation that's been closed down because of the CZC.

WAY: Just to comment a little further on that. While not closing down operations, we have had instances of causing the operation to come into compliance under the threat of being closed down, exactly a sand mining situation where the requirement was to improve the machinery to the extent of providing mufflers and sound baffles and other sound-pressing gadgetry that brought it

into compliance with the CZC. In fact, we've had one other instance with that.

Mr. Hertlein, in your judgment professionally, do you think the standards for the vehicle noise law are acceptable? Are they in your judgment sort of minimal, below minimal or optimum or better? This is purely your own judgment I'm talking about. There might be some of us in our professional capacity that are not entirely satisfied with. Its in that vein that I raise the question.

I might also add that we've seen you testify before. You've expressed concern about vehicle noise in other instances. Keep that in mind when you respond.

HERTLEIN: Yes. As a matter of fact, the vehicular noise control law that has been passed for Oahu, is perhaps one of the most stringent vehicle noise control regulations in all of the U.S. This is easy to say because well, I attend conferences on the mainland and associate with people who are intimately concerned with the drafting, the promulgation, and the establishment of such ordinances and such laws. The people in California for example, at the most recent conference in Washington, approached me when they found out we were from Hawaii, and indicated that they were very interested in what the effects of the enforcement of these things are going to be. They're watching ours as an example. We're sort of a showcase.

As a matter of example, the State of California has vehicle code laws which that are much simplified compared to ours. But, they are much less stringent also. You have here a noise code which strikes a happy balance between what industrialists would like who have to operate this heavy equipment, and who have no choice to operate it, and the citizens who require quiet and who insists on quiet. To balance those two extremes and reconcile them is a very difficult situation. But I can guarantee you and assure you that the people you have on your staff headed by Dr. John Burgess from the Mechanical Engineering Department of the University of Hawaii, have done an excellent job. Professionally, I can wholeheartedly recommend these laws. They are not too loose. They are not too tight. As time goes on, undoubtedly they can stand tightening up because people will require more quiet.

As a matter of fact, federal legislation is entering into this area to put this on the manufacturing of all equipment. This is where it should be to make the equipment quieter to begin with. This is the forefront of it now. You and I will end up paying for this in a higher cost for the equipment.

In short, you have very effective laws here for vehicles.

WAY: I happen to be a little bit more familiar with the CZC noise requirements than the vehicle code requirement. Could you give some comparison in a technical sense of the relative relationship there? I do know or feel I understand the CZC

requirements in terms of industrial operations. How does this compare with the vehicle noise level standards assuming a situation of a residential property adjoining a roadway where the types of vehicles that will be hauling sand might be using such a roadway and what would be the sound relationship there.

HERTLEIN: Your comprehensive noise code is one of the most strict ordinances in the country. The reason we don't have better protection against noise is simply because its not being enforced. To compare this with what you have in vehicles is, well not exactly unfair, but I think you understand, you don't take a single measurement like you do on vehicles in your CZC. You break the sound spectrum up into its components. You measure each of them. Each of them have a set intensity. You can't exceed that. As you go into your higher frequencies, the levels become much more restrictive than the lower frequencies. If I took all of those frequencies and summed them up and added them so to speak, you'll come up with an average of about 62 decibels on an A scale reading. I think you can compare this as well as I can to the 86 that's allowed for trucks on the A scale. You can see the very vast discrepancy between that.

The vehicle noise code does not protect all citizens against noise all the time because as I indicated before, they had to strike this happy balance. They're tightening up as the years go along. This is in the vehicle noise code. So, to compare these two, your CZC is a much more restrictive code. I think you can see that now.

WAY: Turning to another point, a problem of the dust situation. If the winds exceed a certain velocity, let's say 20 miles an hour, would it be your recommendation that the operation shut down because of inconveneince, possible additional hazards as a result of higher velocity winds? Have you considered that possibility?

HERTLEIN: Perhaps not as thoroughly as I could have. Yes, I have given that some thought. I would be reluctant to personally because you have to appreciate the difference of the nature of what we're talking about here. We're talking about sand, which is dense. Its no small material that becomes air borne and carries miles and miles before it settles to the ground. So, I personally, my considered professional judgment on this matter is that I would have to do some more calculating and figuring before I would give you a yes and no answer on that. I personally feel that may be a little too restrictive especially if you're going to be much further than 105 feet from your boundary anyway. If you're in 300 to 500 feet, why a much higher velocity wind would project it so much further but it still would be within the boundaries. I haven't figured this out.

WAY: Another point related, and I think you actually brought it up. When we're talking about sand, how about the examination of the potential dust problems related to the burrow area, the area where the filling basin is to be constructed? That's of a different material, we've been lead to believe, with different

characteristics. I have no idea how it relates to the sand but what about that?

HERTLEIN: That would appear to be an oversight on our part. We thought of it but we didn't investigate it in detail because of several reasons.

First of all, that burrowing pit as you can see up there is in the foothills of the mountain area there. There are no residents anywhere near downwind or even the full range of the wind. We felt there would be no residential complaint coming from that sort of an operation down there. On the other hand, when that material is transported back to the site for fill, it comes out of a truck. Because of its low elevation to the ground, you're not going to have a possibility of getting it too air borne. Water sprays can easily take care of this. As you have indicated, I have no analytical data either as to the articulate size of the material we're filling in with. My guess is it perhaps could be smaller than sand.

WAY: Also, might there not be a problem in transporting that material depending on the type of equipment used, from the burrowing site to the fill site, as you backfill the excavation?

HERTLEIN: Yes.

WAY: I find that trucks, for example, always travel in a cloud of dust.

HERTLEIN: Yes, this could become a problem. However, I've been assured by the contractor that such loads prior to being hauled will be wetted down. There will be no insurmountable problem to assure at least the surface layer of the load on the truck is damp. This will aggregate it, pull it together, so that while its being conveyed, you don't have the problem. Discharging it is something else.

WAY: Did you have an involvement in that law suit referred to earlier in connection with the property down at the Bishop Estate tract, Haleiwa, as a professional in anyway involving dust, the noise.

HERTLEIN: Not legally, no. I've conducted noise studies simply to assure that they were complying with the CZC. I know nothing else outside of that.

WAY: You had no involvement in litigation then as to testimony pertaining to noise levels or dust problems.

HERTLEIN: No, I haven't.

WAY: Possibly one of the other representatives might comment if in fact there was such a law suit since the question has been raised. I haven't heard of it.

MARUTANI: To directly answer your question, I believe there has been a complaint that has been filed by a nearby resident. To my knowledge, that litigation has not come to pass as far as the trial aspect is concerned.

WAY: What was the nature of the complaint? Do you recall?

MARUTANI: No. I'm not participating as an attorney for the applicant or for the plaintiff.

CHAIRMAN: Mr. Hertlein, you mentioned earlier in making reference to the CZC if it enforced. You find any problem in this area?

HERTLEIN: Well, when I talk about the enforcement, I'm talking about my personal experience in the past with this. I've noted that there's an abundance of measurement. These can be obtained with almost absolute scientific accuracy. But once you've got the documented results, it happens after that is where the whole process bogs down. Agencies are reluctant to enforce it. There's a lot of buckpassing. The person making the noise should be given a chance to comply with it and correct the problem. This is only fair, I think. This sometimes drags on and on to a point where its almost ridiculous, where you know the person is not trying to correct the problem. That is unjust. If you're complying with it, you more than likely will not have any complaints. A person who would force a complaint, and we find it is in compliance with the codec is an ultra sensitive person.

CHAIRMAN: Well, if you had any information of improving or assisting any of the agencies, we would like to have this information for the overall correction if correction is needed.

HERTLEIN: I think part of the problem is they don't have the people to send out to obtain the measurements themselves. They sometimes have to rely on private consultants like myself who have to be hired by the person making the noise. The enforcing agency takes this data as fairly true. I don't have any reason to suspect that they shouldn't be able to do that.

(There were no further questions of Mr. Hertlein.)

This concluded testimony for the day.

The public hearing was kept open for one week.

The Commission requested the presence of Mr. Aoki from the State Department of Health at the next meeting. Mr. Bright stated, "As I recall at a recent meeting where we had discussions on quarry pollution on the Shelter Corporation project, Mr. Aoki expressed very, very much concern about the proximity of operations such as this to housing areas. He did indicate there was a dust pollution problem. It may be well to get some additional testimony on this."

PUBLIC HEARING
ZONING CHANGE
P-1 PRESERVATION TO
R-6 RESIDENTIAL
KAILUA
PLANNING DIRECTOR
(FILE #72/Z-84)

A public hearing was held to consider a request for a zone change from P-1 Preservation to R-6 Residential District in Kailua, portion of Kaopa Subdivision, Tax Map Keys:
Area I: 4-2-88: portion of 29, 30, 31, 32 & 33 (Land Area: .5 acre)
Area II: 4-2-04: portion of 1 (Land Area: 33.792 acres)
Area III: 4-2-90: 6-20, 37-46, 51-54, 71 and portions of 1, 5, 21-23, 63-69.

Publication was made January 7, 1973 in the Sunday Star-Bulletin/Advertiser. No letters of protest were received.

Mr. Tosh Hosoda presented the Director's report of the application. The request is to resolve an apparent confict between the City's Preservation District zoning, the City's General Plan usage for Residential, and the State's Urban classification. The change is in consonance with the present land use policy established by the State and City. Areas I and III are bordered by residential development zoned R-6 Residential, and are already subdivided and fully developed with single-family residences under R-6 Residential regulations. Area II is currently vacant and was being reviewed as a subdivision application. The existing P-1 Preservation District makes the subdivision invalid. Because of excessive grades, the parcel is not entirely suitable for residential development. Because the staff has not been able to examine Area II in terms of its extent and proper type of development, a recommendation on Area II cannot be made at this time. The Director recommends that the zoning for Areas I and III be changed from P-1 Preservation to R-6 Residential.

There were no questions of the staff.

No person was present to speak either for or against the request.

The public hearing was closed, and the matter was taken under advisement, on motion by Mr. Crane, seconded by Mr. Kahawaiolaa and carried.

ACTION: The Commission concurred with the Director's recommendation and recommended approval of the request, on motion by Mr. Creighton, seconded by Mr. Kahawaiolaa and carried.

AYES - Bright, Creighton, Kahawaiolaa, Yamabe
NAYES - None
ABSENT - Connell, Crane, Sullam

STREET NAMES

The Commission recommended approval of the following staff recommendations, on motion by Mr. Kahawaiolaa, seconded by Mr. Creighton and carried.

The street names for the various new streets situated within the following subdivisions are recommended for adoption:

1. Mokauea Subdivision, Kalihi Valley, Kalihi, Oahu, Hawaii:

EMA PLACE	A cul-de-sac situated on the northwest side of Kalihi Street
Meaning:	Amy

2. Sunset Beach Lots Subdivision, Kaunala, Oahu, Hawaii:

MAMAO STREET (Road "A")	A dead-end roadway situated on the mauka side of Kamehameha Highway.
Meaning:	Distant or distance.
MAMAO PLACE (Road "B")	A cul-de-sac off Mamao Street.

3. Waiau Gardens Kai Subdivision, Phase I, Waiau, Ewa, Oahu Hawaii:

NOELANI STREET (Road "A")	Extension of existing Noelani Street terminating at Kaahumanu Street.
NOLA STREET	A dead-end roadway off Noelani Street.
Meaning:	Nora.

4. Kaopa Subdivision, Unit 3-A, Kailua, Oahu, Hawaii:

KEOLU DRIVE	The portion of Keolu Drive extension between the proposed Kaelepulu Elementary School and Akiahala Street.
AKIAHALA STREET	Extension of an existing street between Akipola Street and Akimona Street.
AKIMONA STREET	Extension of existing Akimona Street, connecting with Akele Street.
AKELE STREET	Roadway off Akiahala Street and traversing through Akipohe Street and dead ending off Akimona Street.
Meaning:	Acre.
AKEA PLACE	Cul-de-sac off Keolu Drive.
Meaning:	Starboard or outer hull of a double canoe.
AKIPOHE STREET	Roadway traversing in a westerly direction between Keolu Drive and Akiahala Street.
Meaning:	Round, compact, concise.

5. Waialae-Iki View Lots Subdivision, Unit IV, Waialae-Iki, Honolulu, Hawaii:

HANAHANAI PLACE	Cul-de-sac off Kihi Street.
Meaning:	Edge of slope.
ALAWEO STREET	Roadway off Laukahi Street, traversing in a northwesterly direction.
Meaning:	Hawaiian shrub.
LAUKAHI STREET	Extension of existing Laukahi Street to the upper limits of Unit IV.
HAWANE PLACE	Cul-de-sac off Laukahi Street.
Meaning:	Hawaiian palm.
LALEA PLACE	Cul-de-sac off Laukahi Street.
Meaning:	Prominent object or landmark.

ADJOURNMENT: The meeting adjourned at 6:05 p.m.

Respectfully submitted,

Henrietta B. Lyman

Henrietta B. Lyman
Secretary-Reporter II

WAIALUA HIGH AND INTERMEDIATE SCHOOL PTA

SP-73-146

January 5, 1973

RECEIVED
JAN 10 1973
State of Hawaii
LAND USE COMMISSION

Mr. William E. Wanket
Assistant Planning Director
Planning Department
City and County of Honolulu
629 Pohukaina Street
Honolulu, HI 96813

Dear Mr. Wanket:

Thank you for your immediate letter of response dated December 11, 1972 regarding the Waialua High School PTA's concern over the Proposed Sand Mining Operations at Mokuleia, Oahu.

Please permit the PTA to state some of its views relative to the impact of such an operation to the children and youths of the community and just as important, to the community itself. In general, the magnitude of the proposed sand mining operations scares us. We would have been more at ease, if the PTA, the Waialua Community Association, the Waialua Lions Club, and other organizations were notified and briefed as the nature of this operation. There seems to be an apparent lack of concern for the people of the Waialua Community by the sand mining company. An attitude of damn the community--get the sand out because industry needs the sand, seems to prevail.

The above observation was reached after reviewing the environmental assessment report and because of serious problems that will result from the proposed sand mining operation. Our concerns are delineated below:

A. Disruption to Classroom Work. Waialua High and Intermediate School, consisting of classes from 7th to 12th grades, comprising some 1,050 students and 70 faculty and staff personnel, is located on 67-160 Farrington Highway. Most of our facilities are located adjacent to Farrington Highway, a busy highway which has high usage by heavy equipment. Some of our classrooms are located no less than twelve feet from the highway. The auditorium and cafeteria are located some fifty and two hundred feet, respectively, from the highway.

With the anticipated increase in truck-trailer traffic on the highway, as the result of the sand operation, there will be severe disruption to classroom instructions and will create a potential health problem. The sand operation envisions 80 truckloads per day, with each truckload amounting to 20-25 cubic yards. This equates to approximately one truck passing the school each 7 1/2 minutes. This count would become even worse if we include the present traffic from the gravel hauling trucks.

Presently, everytime a large gravel hauling truck passes the school or stops at the Sagara Store for lunch or snack, all classroom instructions and oral classroom participation must cease until the noise of passing trucks abates. We cannot and will not tolerate any increase to classroom disruptians as education of our youths will be severely affected. It is respectfully requested that other alternatives or corrective actions be vigorously pursued by the Mokuleia Ranch and Land Company, Ltd., the City and the State before approval be granted.

Suggestions:

1. That the Company absorb the cost to air condition and soundproof all classrooms immediately adjacent to Farrington Highway. This will minimize distruption to classes due to the noise problem. This suggestion is not considered unusual because the noise problem is the direct result of the sand operation.

2. That an independent study be made to determine if there is a potential health hazard due to dust particles in the air as the result of heavy use of the highway. Particular emphasis should be placed in the cafeteria area where food is prepared and consumed.

3. That another route be used during school hours.

4. That sand hauling be made only during night time hours, subject to adherence to noise pollution regulations during these hours.

B. Traffic Hazard. School hours are from 8:00 a.m. to 3:00 p.m. It is noted that the proposed hours of the sand operation are from 7:00 a.m. to 5:30 p.m. Obviously, there is or will be heavy traffic congestion on Farrington Highway during the morning and afternoon hours. Added hazards include students crossing the highway to go to Sagara Store.

Suggestion:

1. That sand and gravel hauling trucks not be permitted to use the highway fronting the school one-half hour before and after the start and end of school. This suggestion is made with the assumption that suggestion A-1 in the previous paragraph is implemented.

C. Congestion on Kaukonahua Road. The Kaukonahua Road, which parallels the Kaukonahua Gulch and leading up to Schofield Barracks, is a two lane, narrow, winding, and rising highway. This highway serves as a major thorough-fare for many residents who commute to outlying areas. At the present time, gravel-hauling trucks travel up the highway at a speed of 10 to 15 miles an hour, greatly impeding traffic and creating an extremely hazardous traffic condition for incoming traffic on hills and on curves. The proposed sand hauling operation will increase traffic substantially and if permitted to use Kaukonahua Road, will cause an untenable situation. It is envisioned that travel time to Schofield/Wahiawa will increase 100%. Such inconveniences cannot and should not be tolerated by local residents. Kaukonahua Road by design was not intended for heavy truck use. Since its origin some fifty years ago, Kaukonahua Road has not been improved.

Suggestion:

1. That Kaukonahua Road be off-limits to all sand, gravel, and heavy hauling trucks and equipment. Instead, these trucks and equipment be required to use Kamehameha Highway.

D. Maintenance of Roads. Due to unusually heavy use of roadways, a maintenance plan be prepared by the City and the State to insure that all roads affected by this operation is adequately maintained. This should include the regular use of a Road Sweeper on the highway fronting the high school.

In conclusion, we appreciate the opportunity for bringing the concerns of the local PTA to this honorable body. We know that you will agree that the welfare of the children and youths of the community is of paramount importance to the City as well as the community. The aforementioned views represent our thoughts on the Sand Mining Operation and should be used in any subsequent public hearings.

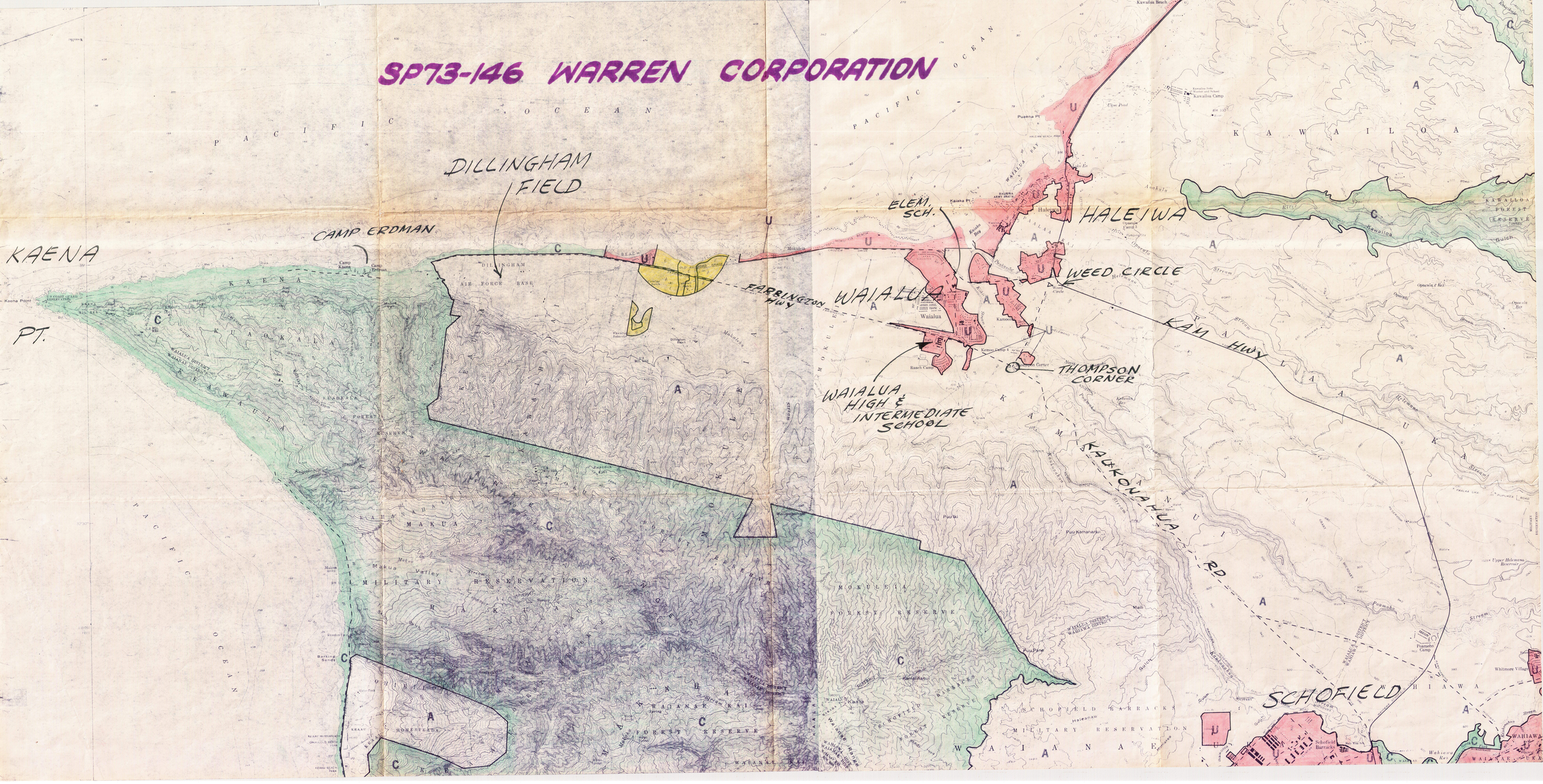
Sincerely yours,

Jacob Y. W. Ng

Jacob Y. W. Ng
President

ck

cc: State Land Use Commission
Mr. Gordon Kuwada, Principal, Waialua High and Intermediate School
Mr. Tim Hay, President, Waialua Community Association
Councilman Toraki Matsumoto
Representative Howard Oda
Representative Oliver Lunasco
Mr. William Araki, Superintendent, Central Oahu District
Mr. Allen I. Marutani


SP73-146 WARREN CORPORATION
DILLINGHAM FIELD
CAMP ERDMAN
KAENA PT.
ELEM. SCH.
HALEIWA
WEED CIRCLE
WAIALUA
FARRINGTON HWY
KAM HWY
THOMPSON CORNER
WAIALUA HIGH & INTERMEDIATE SCHOOL
KAUKONAHUA RD.
SCHOFIELD
PACIFIC OCEAN
KAENA
KUAOKALA
MAKUA
MILITARY RESERVATION
MOKULEIA
FOREST RESERVE
KAWAILOA
SCHOFIELD BARRACKS
MILITARY RESERVATION
DILLINGHAM AIR FORCE BASE
Kaena Point
Camp Erdman
Kawailoa Beach
Pupukea Camp
Kawailoa Camp
Puaena Pt.
Kaiaka Pt.
Waialua
Kamananui
Ranch Camp
Kemoo Camp 4
Puu Kamanaiki
Puu Pane
Kamooiaiui
Schofield Barracks
Whitmore Village
Poamoho Camp
Upper Helemano Reservoir
Kawailoa Gulch
Kawailoa Forest Reserve
Opaeula Res
Helemano
Anahulu
Waialua District
Waianae District
Barking Sands
Kaena Point U.S. Coast Guard Loran Station
Waianae Kai
Waianae Forest Reserve
Waianae Range Reserve
Waianae Homesteads
Waianae Valley
Makua Valley
Waialua Forest Reserve
Waialua Homesteads
Waialua Sugar Mill
Waialua Agricultural Co. Ltd.
Waialua Beach Park
Haleiwa Beach Park
Haleiwa Camp 3
Kaiaka Bay
Waialua Bay
Kawailoa Bay
Kaena Point Trail
Kaena Point Road
Farrington Hwy
Kam Hwy
Kaukonahua Rd.
Waialua Beach Road
Haleiwa Road
Weed Circle
Thompson Corner
Waialua High & Intermediate School
Elem. Sch.
Dillingham Field
Camp Erdman
Schofield
Haleiwa
Waialua
Kawailoa
Makua
Kaena
Pt.

CORRECTED
NOV 28 1938
1938
SEP 1 1947
APR 1951
APR 9 1951
JAN 2 1952
NOV 24 1952

6, 20 & 21

Bishop Corp.
Clovis E. Blomquist &
Richard E. Midkiff - Tr/e
Alexander Pogrebniak Et ux
Delores M. - Tr/Sole

18 Joseph L. Sylva Trust Estate
(Mary Y. Delpach) Te.

True North
1" = 100'

Joseph L. Sylva, Trust Est.
(Mary Y. Delpach) Te.

Highwater Mark as of March 1961

Rose A Sylva
23,545 ☆
2550

Edward N. Sylva (2)
20,734 ☆
2550

Highwater Mark as of January 1961

Albert F. Wulfekuhler Jr. & wf Margaret E. -T/E

Mokuleia Properties, Ltd.
Westwood Equities Corp. -T/C

20 Foot Right of Way

DRIVE

CROZIER

PLAT 03

PLAT Q4

Lot 1 App. 609

242

Gr.

INSET

SEE (2)

Mokuleia Properties, Ltd.
Westwood Equities Corp. -T/C
28.879 Ac.

(8.853 Ac.)

(18.723 Ac.)

(10.394 Ac.)

(2.387 Ac.)

To Kaena

Mokuleia Properties, Ltd
Westwood Equities Corp-T/C
Waialua Sugar Co. Inc. Tr/e.

112.880 Ac.
(40.00 Ac.)

(72.880 Ac.)

To Kawaihapai

GRANT 273 PLAT 03

GRANT 340

GRANT 242

GRANT 502

Road

Castle & Cooke, Inc.

Waialua Sugar Co. Inc. Tr/e

325.606 Ac.
(319.663 Ac.)

GRANT 239

GRANT 341

Road

The Hawn Elec. Co., Ltd.
16,104 ☆ or
0.37 Ac.

(5.943 Ac.)

GOVERNMENT MAIN ROAD

PLAT 07

GRANT 503

To Waialua

1,400

1,600

1,700

5'-5"

Water line easement

APPLICATION PLAT 05.

PLAT 04

COURT

CROZIER LOOP

WAIALUA BEACH ROAD

Castle & Cooke, Inc
(5.284 Acs.)
2.106 Acs.

PLAT MOKULEIA F.

PLAT SUB'D 863

BEACH PARK

SEC. 7 - PLAT 13
L. C. App. 1089
Parcel 28:
Frank W. C. Loo & wf. Florence T. -T/E-1/2

276' GR.

16 George F. Schnack
11,618 ☆

22 Frederick B. Forbes & wf. Eureka B. -T/E-1/2
John H. Midkiff, Jr. & wf. Annie B. - T/E - 1/2
Robert S. Ishikawa & wf. Harriet E. - T/E - 1/2

23 William R. Norwood & wf. Katharine - T/E - 1/2
Nellie B. Wilson Gen. Trust Est. - 1/2
Masuji Fujiwara & wf. Haruko M. - T/E - 1/2
Richard H. Keppeler & wf. Gail B.
12,200 ☆ - T/E - 1/2

24 Frank W. C. Loo & wf. Florence - T/E - 1/2
Ione Coutts, Wiede - 1/2
Helen R. Yarbrough) 1/2

Erick C. Hinrichsen & wf. Lunice C. - T/E - 1/2
John P. Dyer - 1/2
10,800 ☆
Laura E. Sorensen - 1/2

25 Thomas M. Flynn & wf. Ruth D. - T/E - 3/4
Tsutomu Fujioka & wf. Toshiko - T/E - 1/4
3,200 ☆

Mary S. Miura - 1/2

26 James G. Parker & wf. Marion L. - T/E - 1/2
Edith M. Longley - 1/2
Warren A. Rodewald & wf. Rosemary L. - T/E - 1/2
12,000 ☆

Warren A. Rodewald & wf. Rosemary - T/E - 1/2
Paul Evaleff & wf. Jill L. - T/E - 1/2 - 10/83
Vernon L. Smith & wf. Jacqueline A. - T/E - 1/2
William H. Hilkmann & wf. Estelle M. - T/E - 1/2
9,600 ☆

28 See Above - 1/2
James N. Matsuura - 1/2
Lee K. Komori - 1/2
Harry Alameida & wf. Elizabeth K. - T/E - 1/2
Howard S. Hisamoto & wf. Alice H. - T/E - 1/2
12,000 ☆

29 Timothy I. Wee & wf. Miriam K. - T/E -
9,539 ☆

SECTION 1 PLAT 01

True North
1" = 300'

NOTICE: Owner's, lessee's and vendee's names recorded on this tax map print may not be current.
Administrative Directive 24-68 (Rev.) dated November 21, 1968

Dropped parcels: 8, 10,

FIRST DIVISION		
ZONE	SEC.	PLAT
6	8	06
CONTAINING		PARCELS
Scale: As noted		
PRINTED MAR 13 '73		

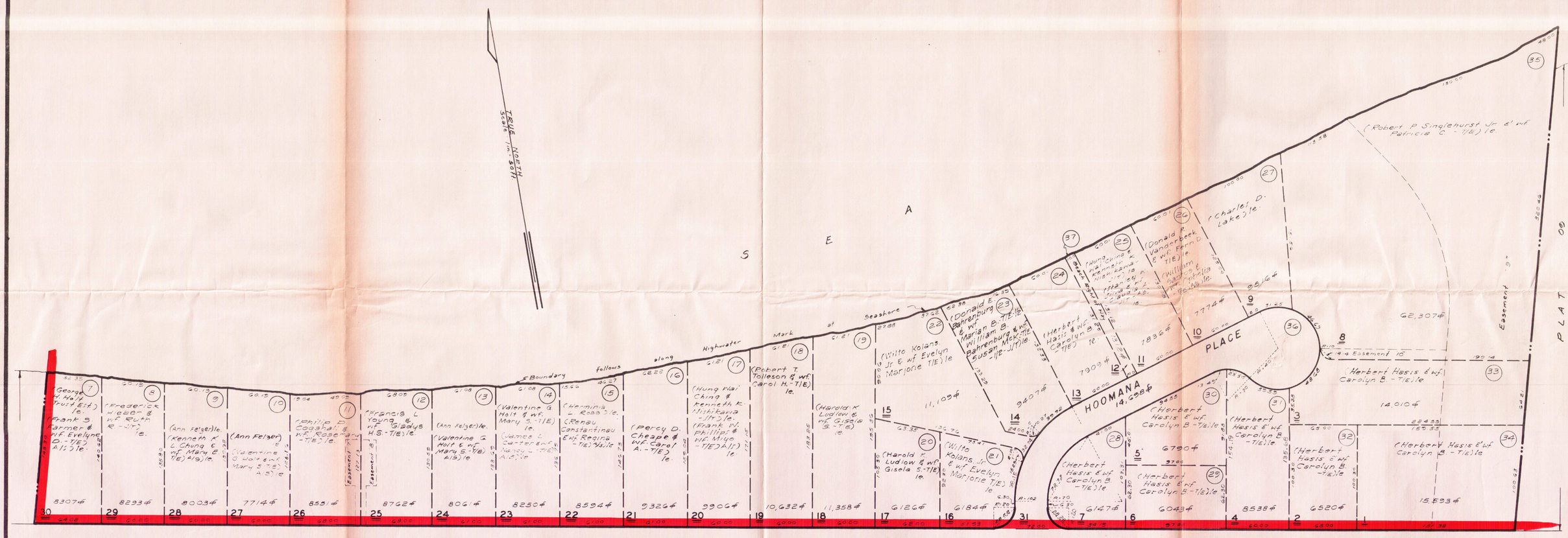
MOKULEIA, WAIALUA, OAHU

ADVANCE SHEET - SUBJECT TO CHANGE

SP73-146 Warren Corp.

Dwg No. 16.10
By: T.A. - T.A.K. - July 15, 1933
Source: Tax Maps Bureau 0516 Map

Appr. by:
Revised by:
Appr. by:



DWG NO. 4751
SOURCE F.P. 688
BY JLS/RU
DATE September 16, 1960

MOKULEIA BEACH HOMES, SEC. I, MOKULEIA, WAIALUA, OAHU. Ld. Ct. App. 1810 Map 4 (form por. of --8-03)

NOTE: All lots owned by Mokuleia Ranch & Land Co. Ltd. and leased as noted.

NOTICE: Owner's, lessee's and vendee's names recorded on this tax map print may not be current. Administrative Directive 24-68 (Rev.) dated November 21, 1968

FOR REAL PROPERTY TAXATION PURPOSES
SUBJECT TO CHANGE

DEPARTMENT OF TAXATION
TAXATION MAPS BUREAU
STATE OF HAWAII
TAX MAP
FIRST TAXATION DIVISION

ZONE	SEC.	PLAT
6	8	10

SCALE: 1 IN. = 50 FT.

SP73-146 Warren Corp

MAR 19 1973

6 8 09

Dwg No : 36
Source : Taxation Maps Bureau & FP 458
By : J.H.H. Traced by SL - Sept 7, 1949

FOR MOKULEIA, WAIALUA, OAHU

SUBJECT TO CHANGE

SP73-146 WARREN CORPORATION MAR 13 1973

NOTICE: Owner's, lessee's and vendee's names recorded on this tax map print may not be current. Administrative Directive 24-68 (Rev.) dated November 21, 1968

Parcels Dropped: 4, 22.

TAXATION MAPS BUREAU TERRITORY OF HAWAII		
FIRST DIVISION		
ZONE	SEC.	PLAT
6	8	09
CONTAINING PARCELS		
SCALE: 1 IN. = 50 FT.		

S E A

Mokuleia Pole Farms, Inc.
"MOKULEIA BEACH COLONY"
6.107 Acs.

346.21

21 Various Owners see TMK 7762-51

83.74

Mark 83.18

High Water

207.47

Robert N. Kuracka & wf. Edith C. - T/E

George K. Ohara & Wf Shigeko T/E

Donald K. & wf Harriet T. - T/E

Raymond K.C. & wf Leong N. - T/E

Kameo Shintani & wf Chisato N. - T/E

11,345 ± sq ft

11,550 ± sq ft

5033 ± sq ft

5783 ± sq ft

12,287 ± sq ft

TERRACE 450

Ralph Leue

Miriam K. Wee

7550 ± sq ft

Aileen M.L. Lau

8182 ± sq ft

Miriam K. Wee

8182 ± sq ft

Miriam K. Wee

8370 ± sq ft

6038 ± sq ft

6343 ± sq ft

6204 ± sq ft

Robert E. Peters & wf Donna J. - T/E

7771 ± sq ft

Thomas K. Kota & wf Barbara T.E.

8727 ± sq ft

Dai Chee Yuen & wf Jeannie A. - T/E

8727 ± sq ft

Dai Chee Yuen & wf Jeannie A. - T/E

8727 ± sq ft

Harry T. Kawamura & wf Marion M. - T/E (Robert A. Burke Estate Diane K. - T/E) A15

8727 ± sq ft

Kenneth A. Cleare & wf Elaine V. - T/E

Willard E. Keating & wf Kathleen K. - T/E

1886 sq ft (1.734 ac)

PLAT 10

STREET

PLAT 03

LAAU PLACE

FILE

WAIALUA BEACH ROAD

To Kaena Pt.

To Waialua

164.80

(0.152 Ac.)

154.80

GRANT 2710

POR.

BORROW AREA

Sediment Settling Basin

Dike & Spillway

Mauka Boundary of Sand mining

50' setback

INCREMENT #1

AREA 1

30' Setback

AREA 2

30' Setback

INCREMENT #2

INCREMENT #3

AREA 3

AREA 4

INCREMENT #4

TREES TO BE PRESERVED

150' Shoreline Setback

TRUCK ROUTES

AREA 1

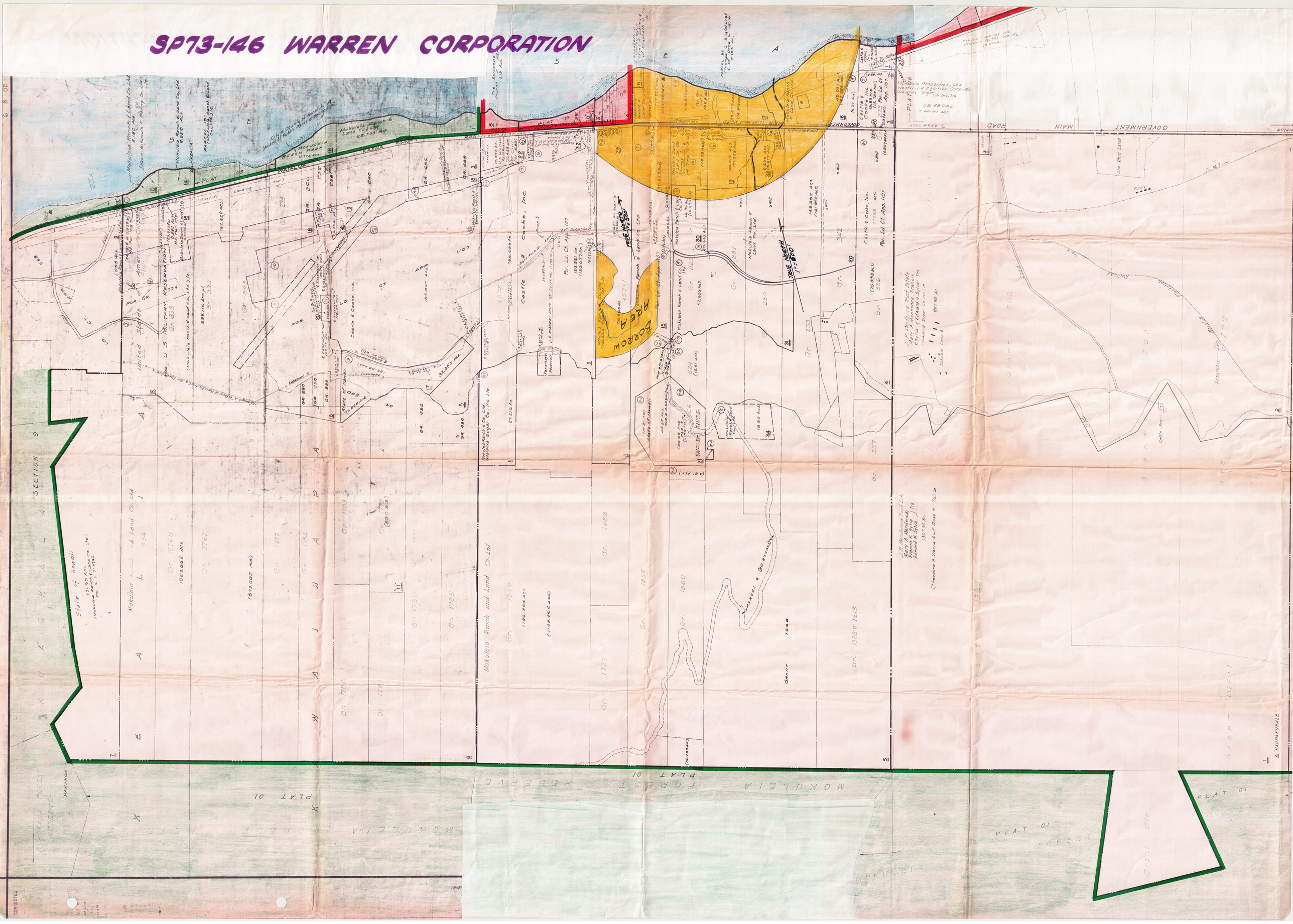
AREA 2

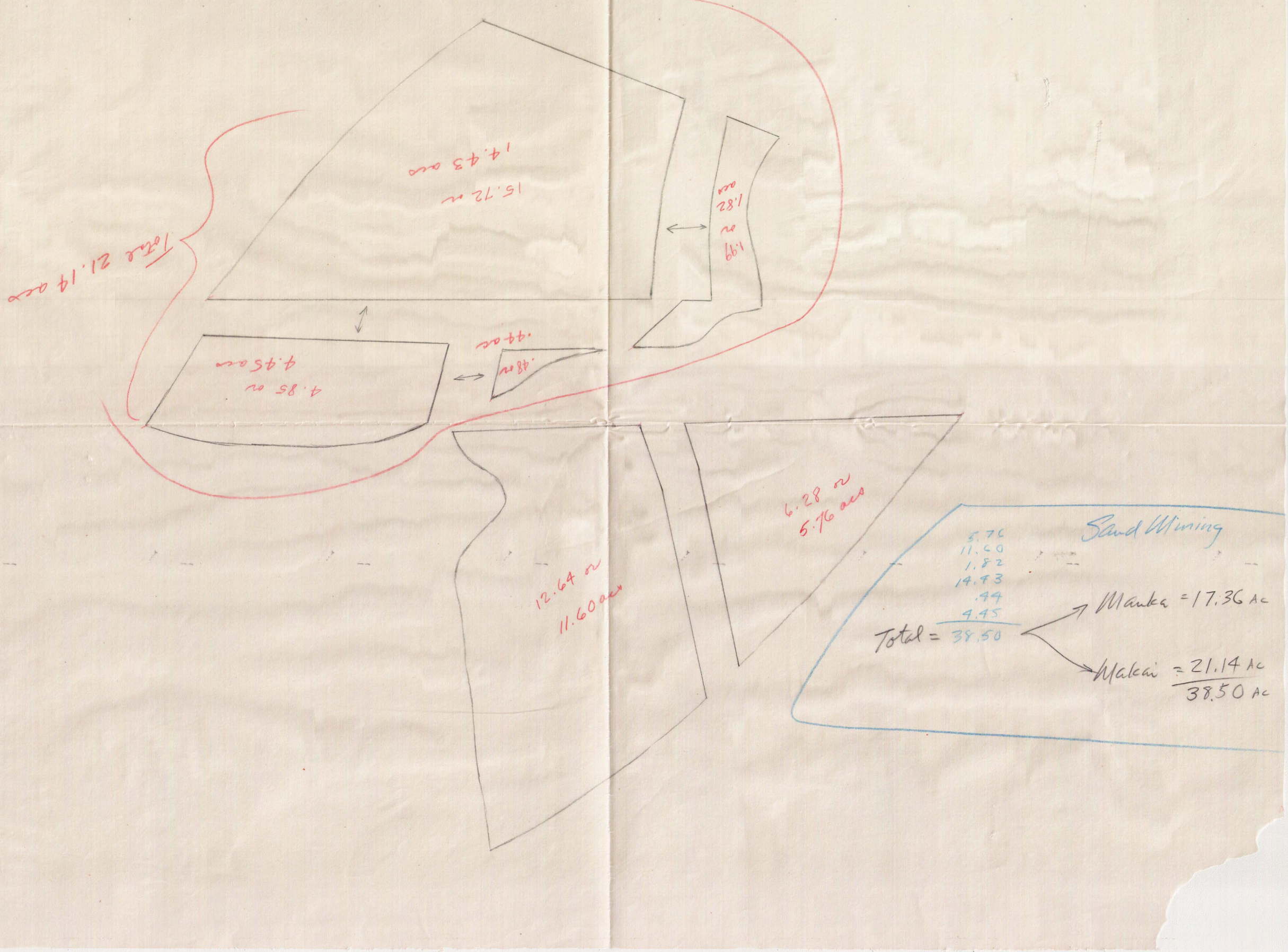
AREA 3

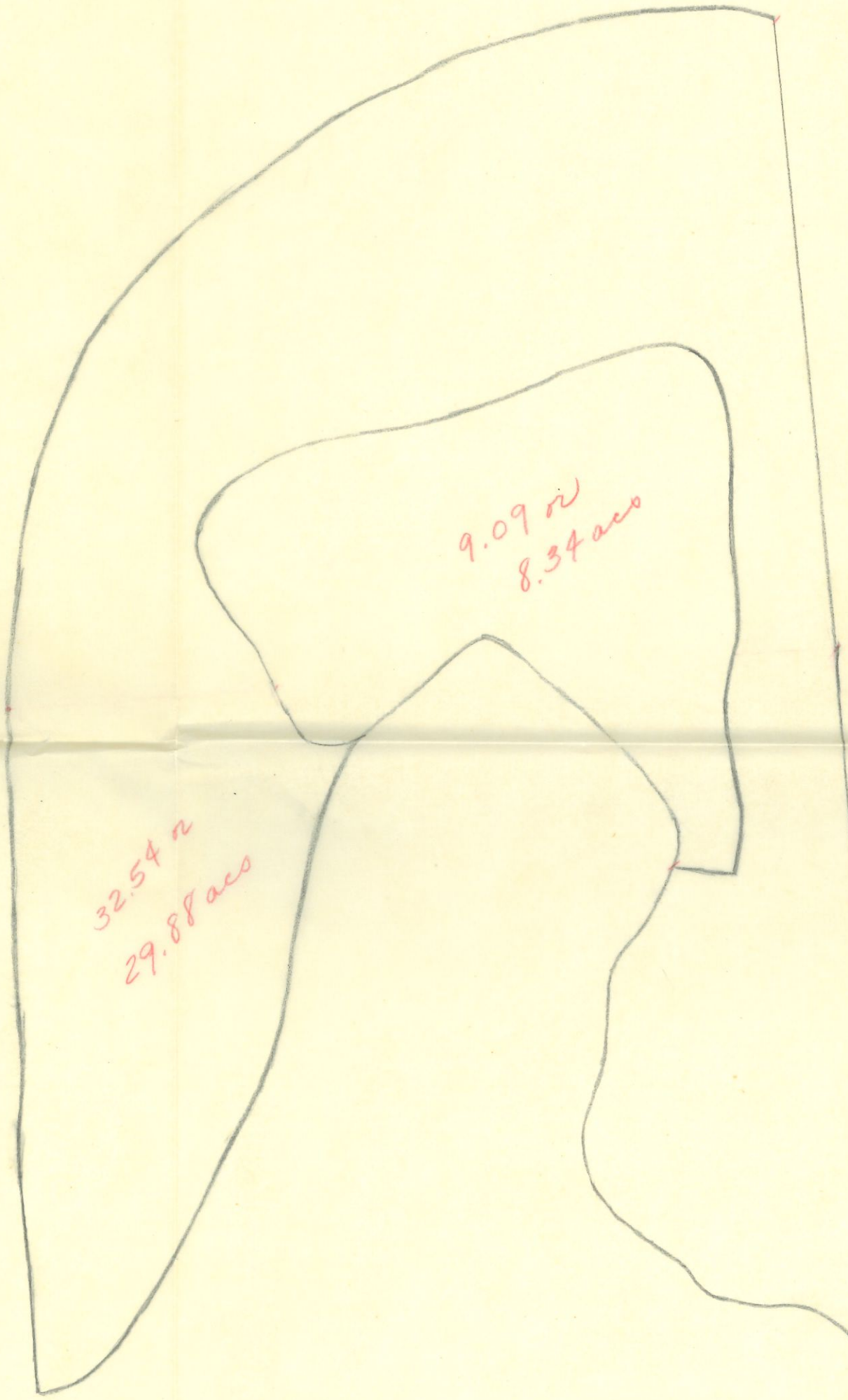
AREA 4

APPROX. SCALE : 1" = 200'

SP73-146 WARREN CORPORATION

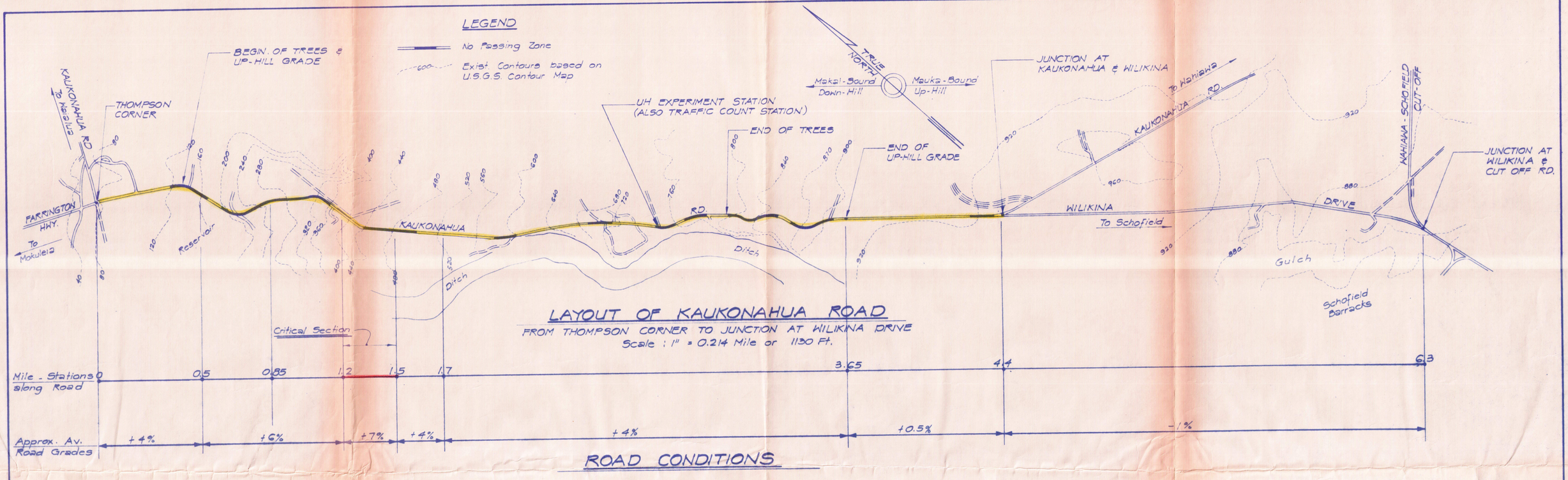

AREA A
BORROW
TRUE NORTH 1,100'
TRUE NORTH 1,050'
MAKAKOA
KAENA POINT
MAIN GOVERNMENT ROAD
Makua'ia Properties, Ltd.
Westwood Equities Corp.-TC
Hawaiian Sugar Co. Inc. 1/e
112.980 Ac.
(+ 30.00 Ac.)
Castle & Cooke, Inc.
(10,785 Acs.)
Por. Ld. Ct. App 1107
Mokuleia Ranch & Land Co. Ltd.
Mokuleia Ranch & Land Co. Ltd
Hawaiian Sugar Co. Inc. 1/e
State of Hawaii
1750 Ac.
Mokuleia Ranch & Land Co. Ltd
Por. 5
Por. Ld. Ct. App 107
(98.881 Ac.)
(100.077 Ac.)
Castle & Cooke, Inc.
Mokuleia Ranch & Land Co. Ltd
(57,636 Acs.)
Mokuleia Ranch & Land Co. Ltd
(142.852 Acs.)
(141,825 Acs.)
Castle & Cooke, Inc.
(76.658 Acs.)
Por. Ld. Ct. App 1107
J.P. Mendonca Trust Est.
Mary A. Mendonca, Trustee
Estate of Edward N. Silva
Hawaiian Sugar Co. Inc. 1/e
87.50 Ac.
Mokuleia Ranch & Land Co. Ltd.
(27.610 Ac.)
Mokuleia Ranch & Land Co. Ltd
(4.81 Ac.)
Mokuleia Ranch & Land Co. Ltd
(15.50 Acs.)
Mokuleia Ranch & Land Co. Ltd
(1,100.804 Acs.)
(1,100.804 Acs.)
Mokuleia Ranch & Land Co. Ltd


Total 21.14 acs
15.72 ac
14.43 acs
1.99 ac
1.82 acs
4.85 ac
4.45 acs
.48 ac
.44 acs
12.64 ac
11.60 acs
6.28 ac
5.76 acs
Sand Mining
5.76
11.60
1.82
14.43
.44
4.45
Total = 38.50
Manka = 17.36 Ac
Makai = 21.14 Ac
38.50 Ac



Borrow Pit Area

29.88
8.34
38.22 = ⓐ

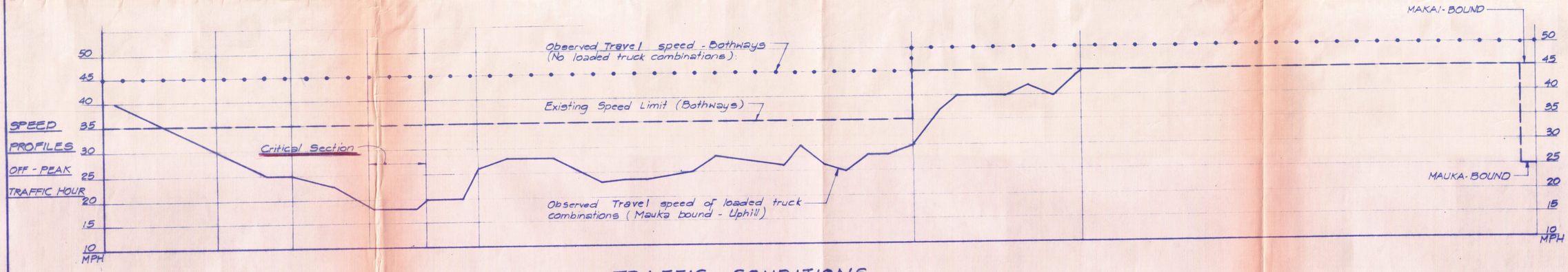


LAYOUT OF KAUKONAHUA ROAD

FROM THOMPSON CORNER TO JUNCTION AT WILIKINA DRIVE

Scale : 1" = 0.214 Mile or 1130 Ft.

ROAD CONDITIONS



TRAFFIC CONDITIONS

RECEIVED
MAR 23 1973
State of Hawaii
LAND USE COMMISSION

FIGURE 2

ROAD & TRAFFIC CONDITIONS

KAUKONAHUA ROAD
FROM THOMPSON CORNER TO JUNCTION AT WILIKINA DRIVE

PREPARED FOR:
WARREN CORPORATION

PREPARED BY:
WILLIAM C. HONG, CONSULTING ENGINEER

Date: Jan. 22, 1973 Scale: As shown

FIGURE 2

March 27, 1973

City Planning Commission
City and County of Honolulu
629 Pohukaina Street
Honolulu, Hawaii 96813

Attention: Mr. Robert R. Way
Planning Director

Gentlemen:

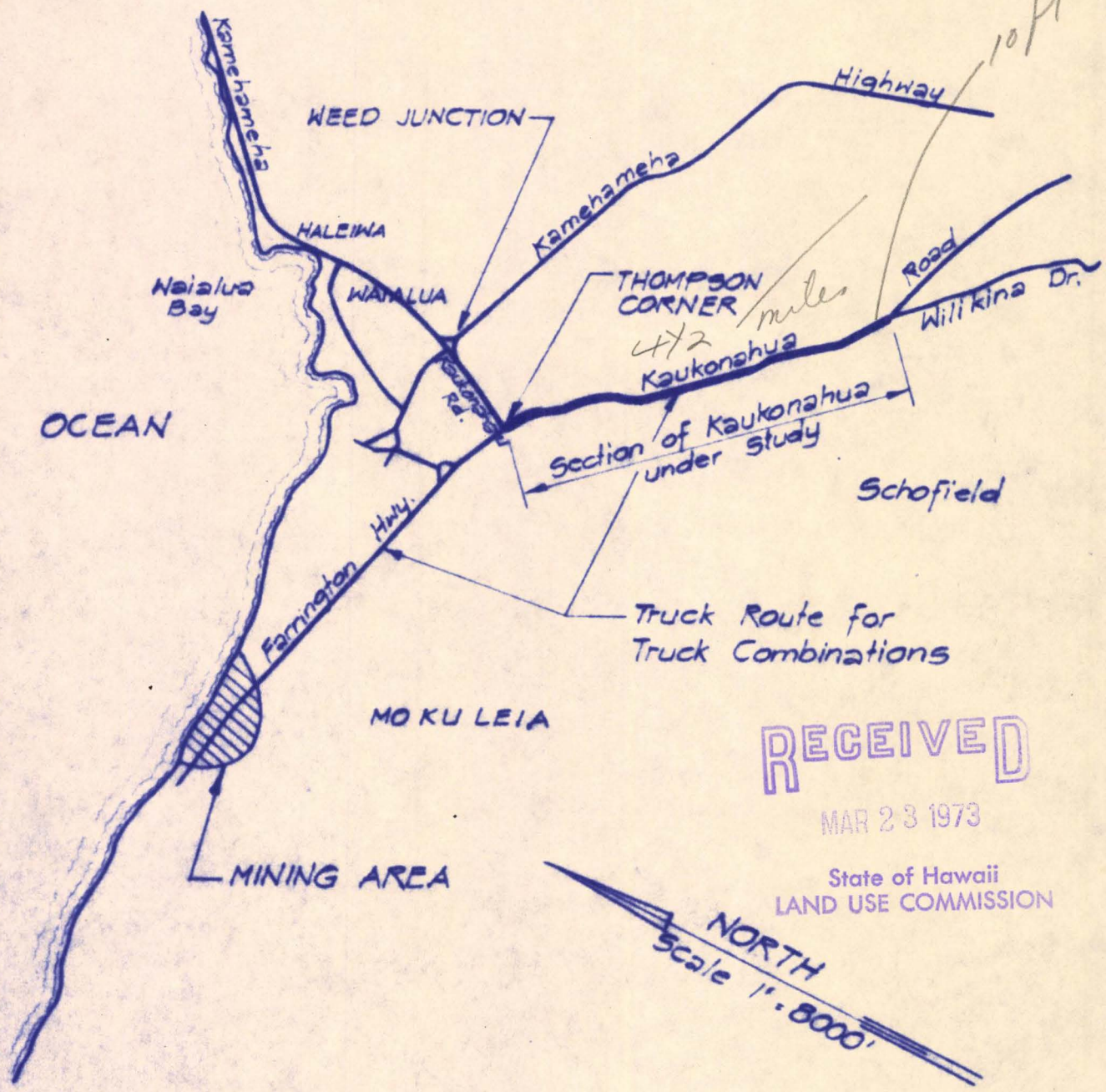
At its meeting on March 23, 1973, the Land Use Commission voted to approve a special permit to Warren Corporation (SP73-146) to conduct sand mining and borrowing operations on land identified as Tax Map Key 6-8-3: 33 and 35; and portions of 11, 15, 16, 19 and 20; situated within the State Agricultural District at Mokuleia, Oahu; subject to the conditions stipulated by the Planning Commission of the City and County of Honolulu.

A copy of the staff report is enclosed for your information.

Very truly yours,

TATSUO FUJIMOTO
Executive Officer

Encls.
cc: Warren Corporation
Allen Marutani
Property Technical Office, Dept. of Taxation
Tax Maps Recorder, Dept. of Taxation
Real Property Tax Assessor, Dept. of Taxation



RECEIVED
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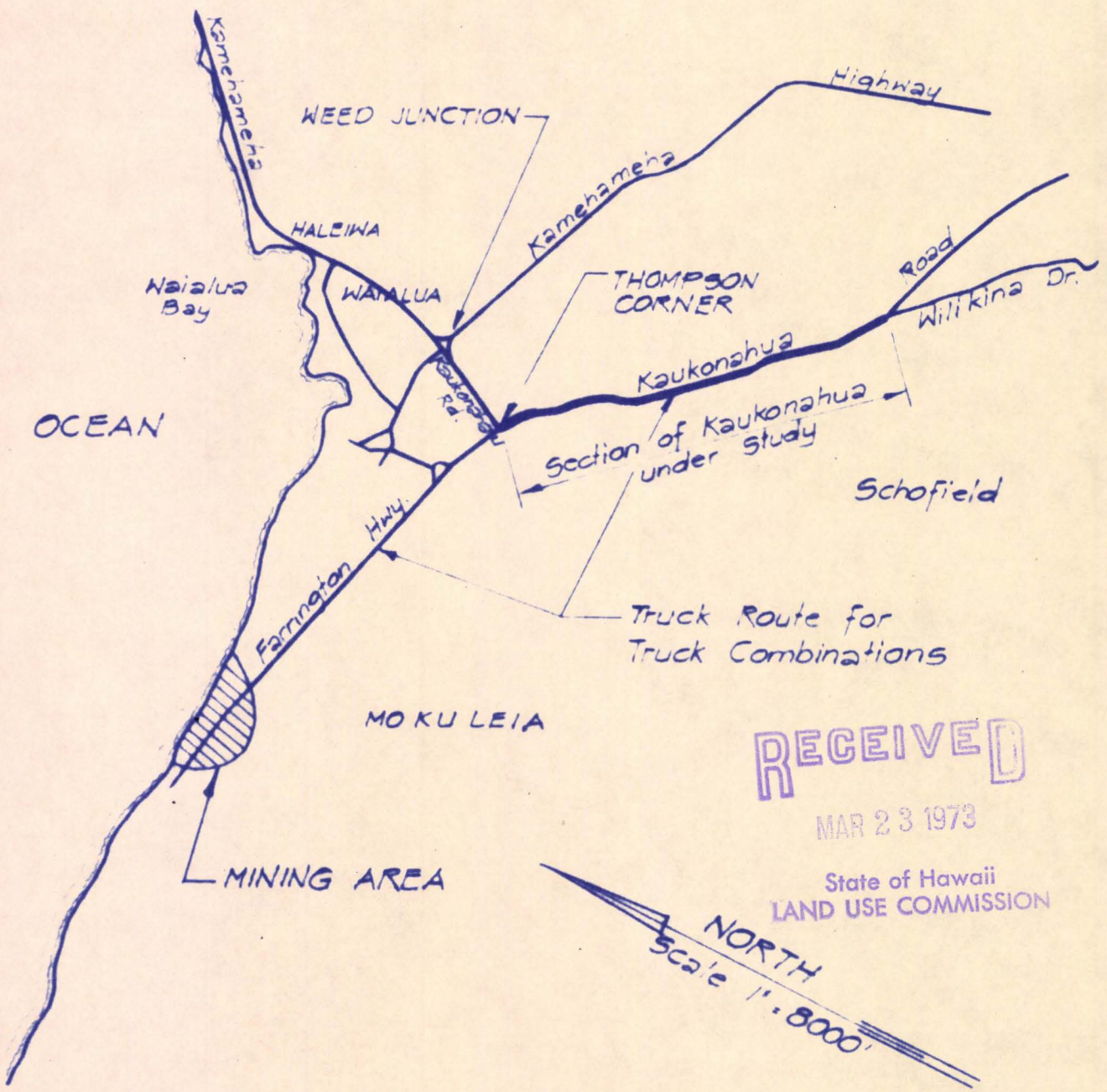
State of Hawaii
LAND USE COMMISSION

FIGURE 1

GENERAL LOCATION MAP

Graphic Scale in Feet



RECEIVED
MAR 23 1973
State of Hawaii
LAND USE COMMISSION

FIGURE 1

GENERAL LOCATION MAP

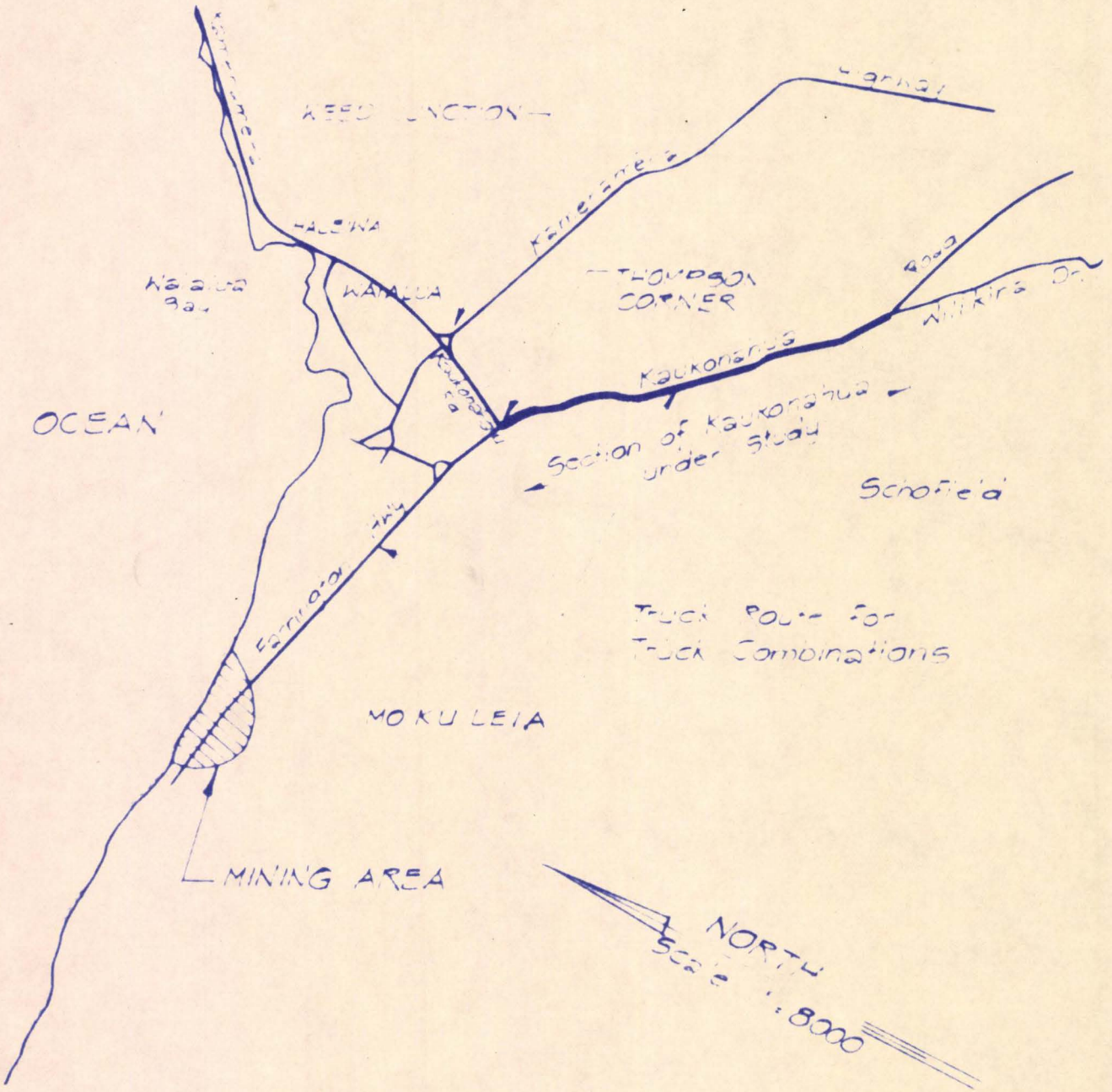


FIGURE 1

GENERAL LOCATION MAP

Graphic Scale in Feet

FIGURE 1

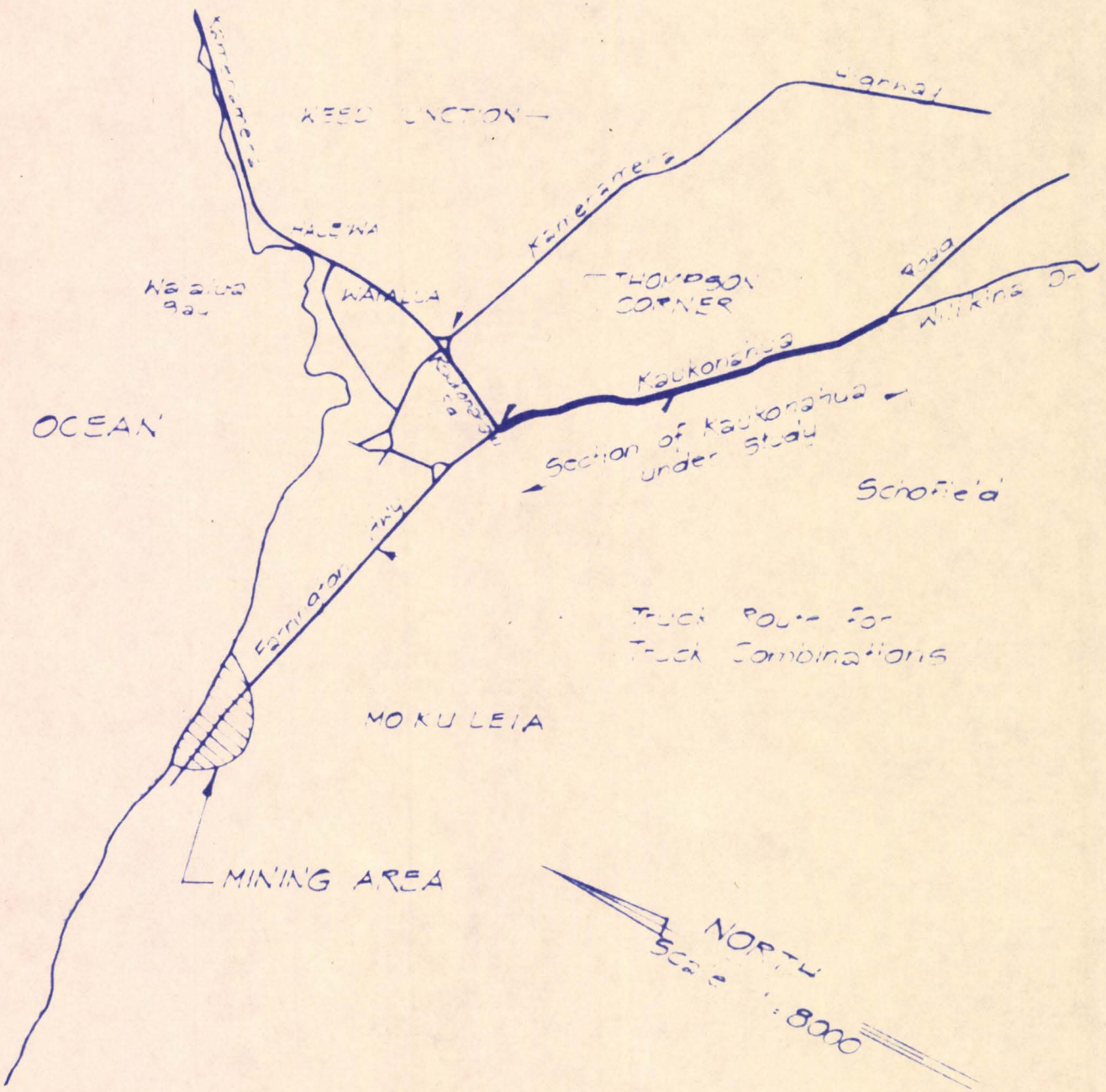


FIGURE 1

GENERAL LOCATION MAP

Graphic Scale in Feet

FIGURE 1

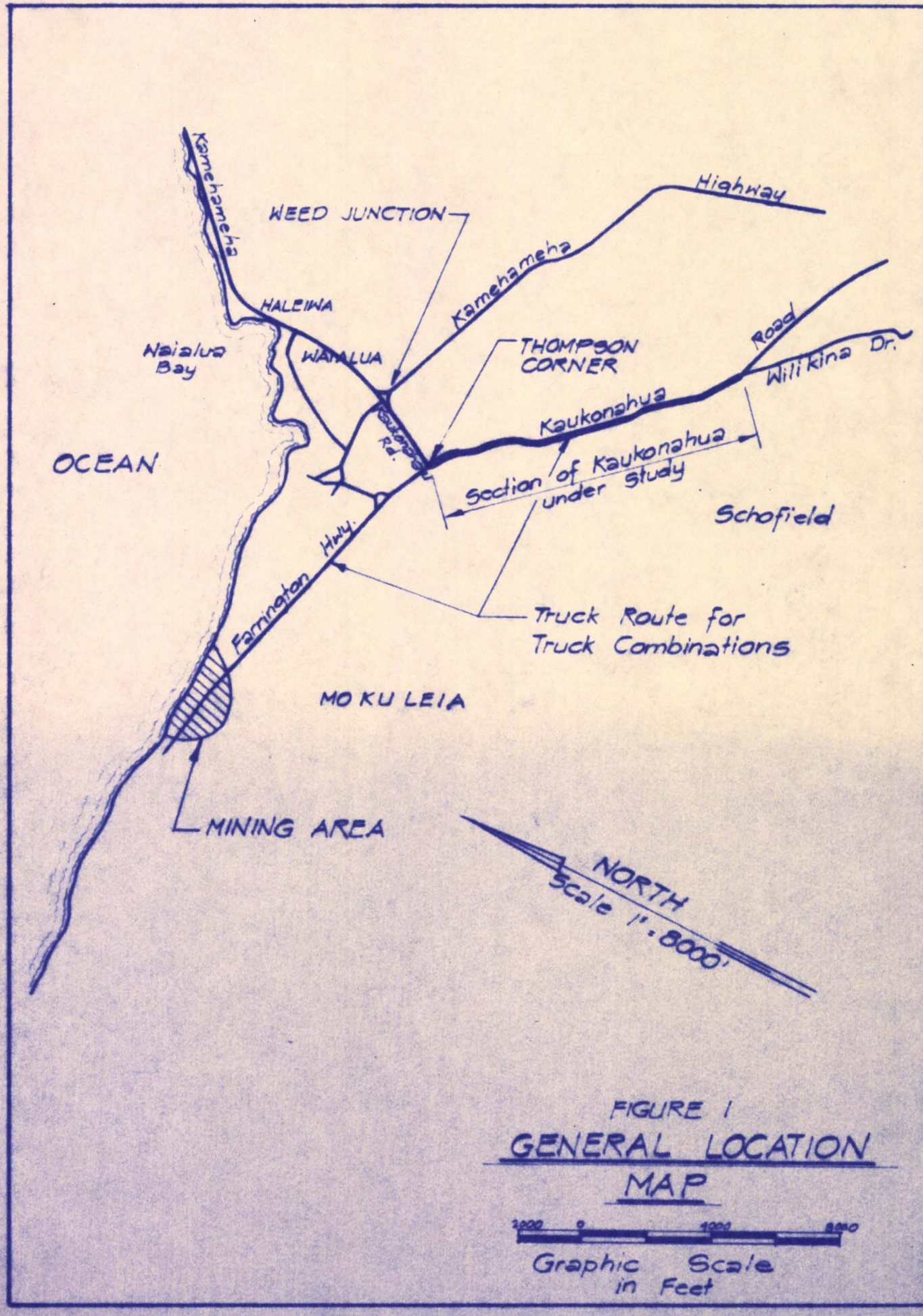


FIGURE 1

GENERAL LOCATION MAP

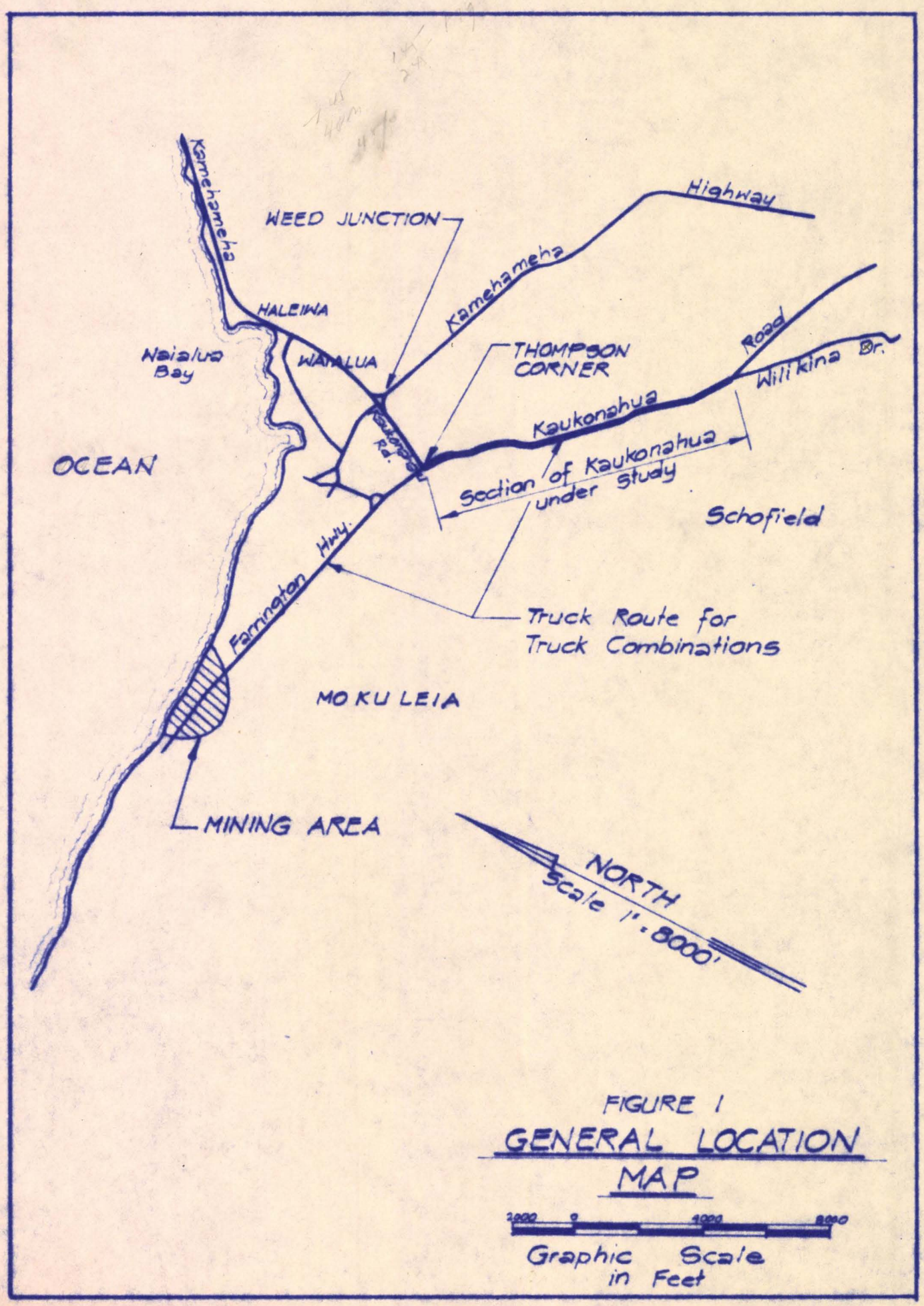


FIGURE 1

GENERAL LOCATION MAP

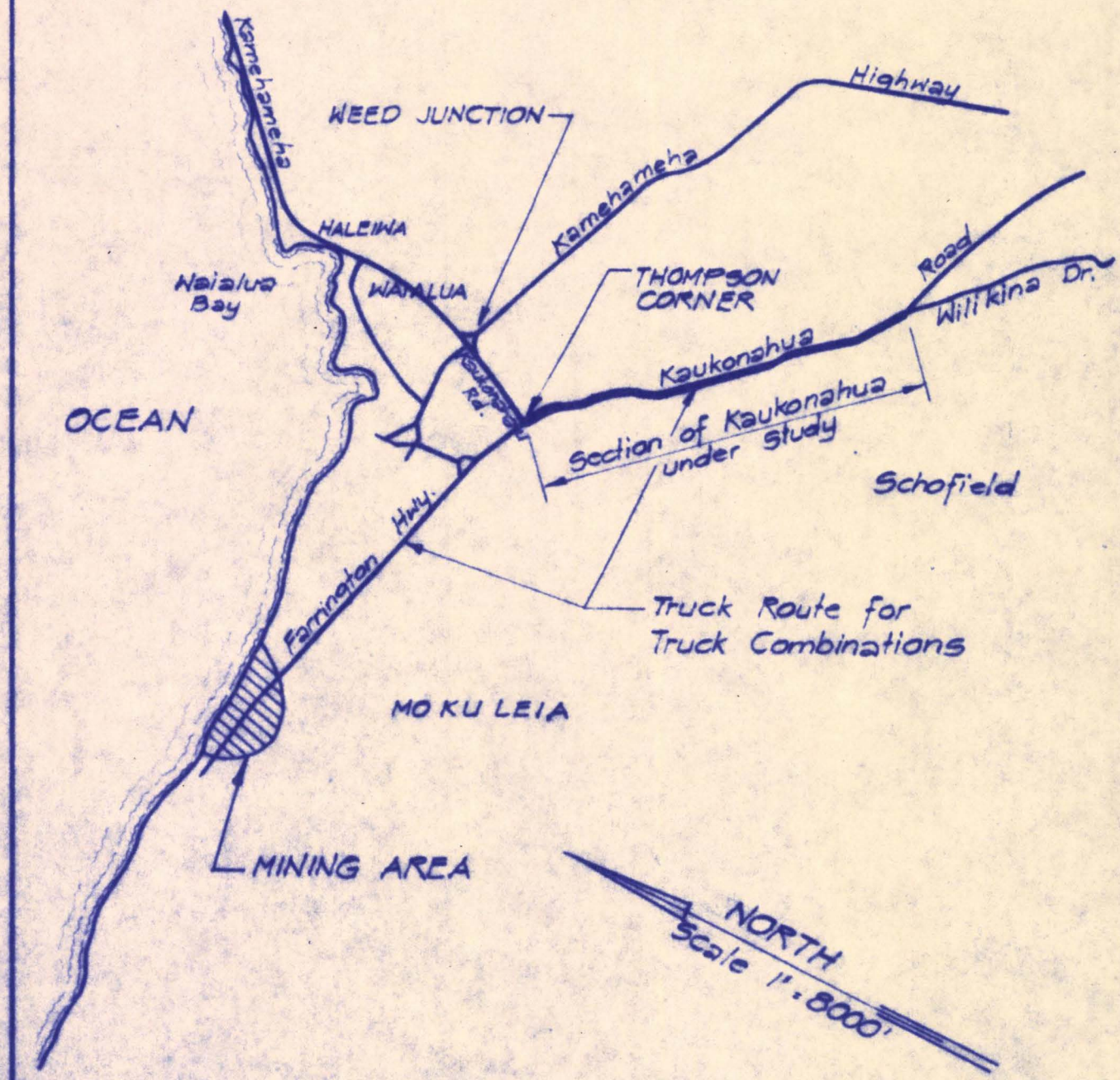


FIGURE 1

GENERAL LOCATION MAP

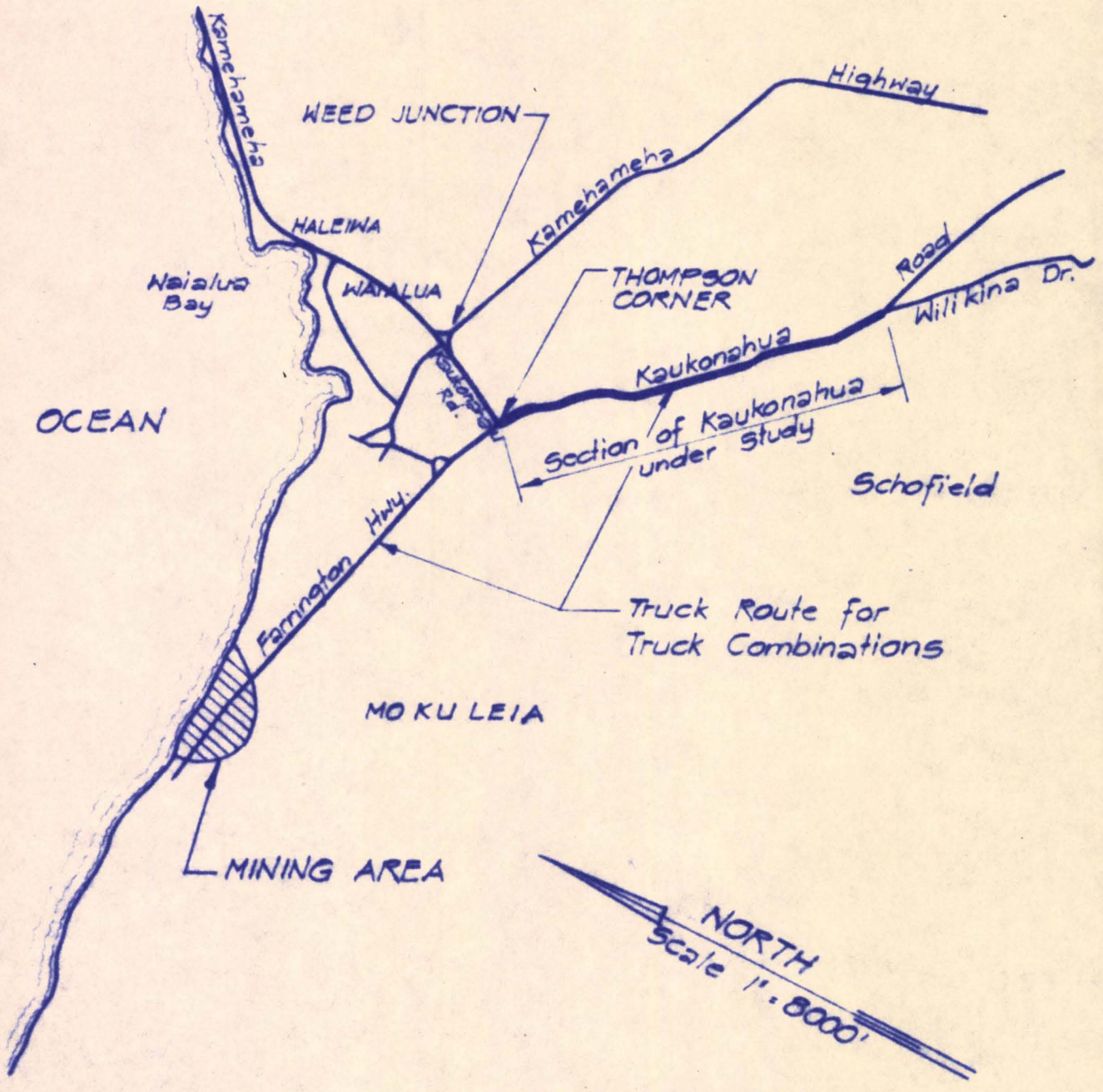


FIGURE 1

GENERAL LOCATION MAP

2000 0 4000 8000

Graphic Scale in Feet

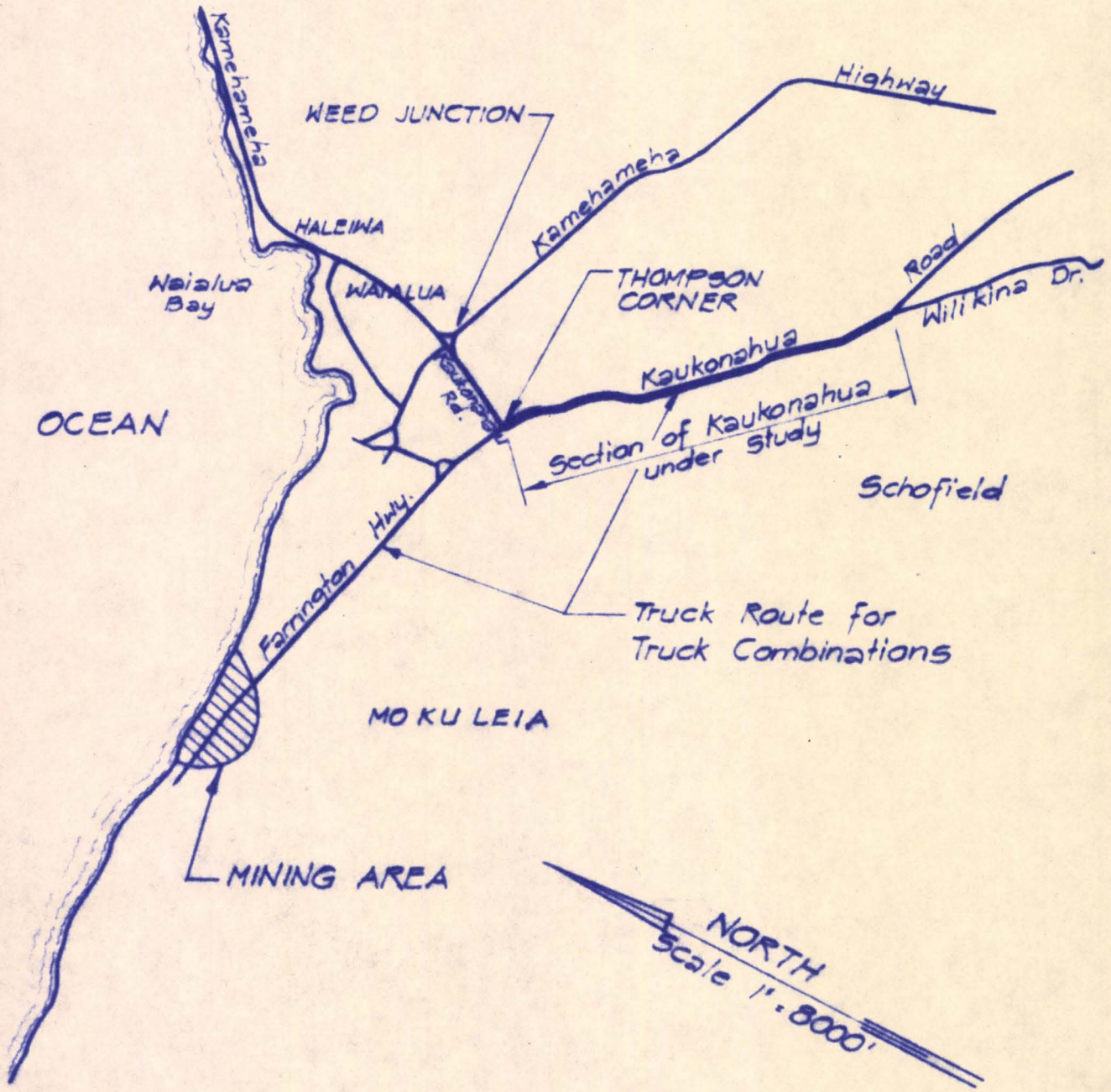
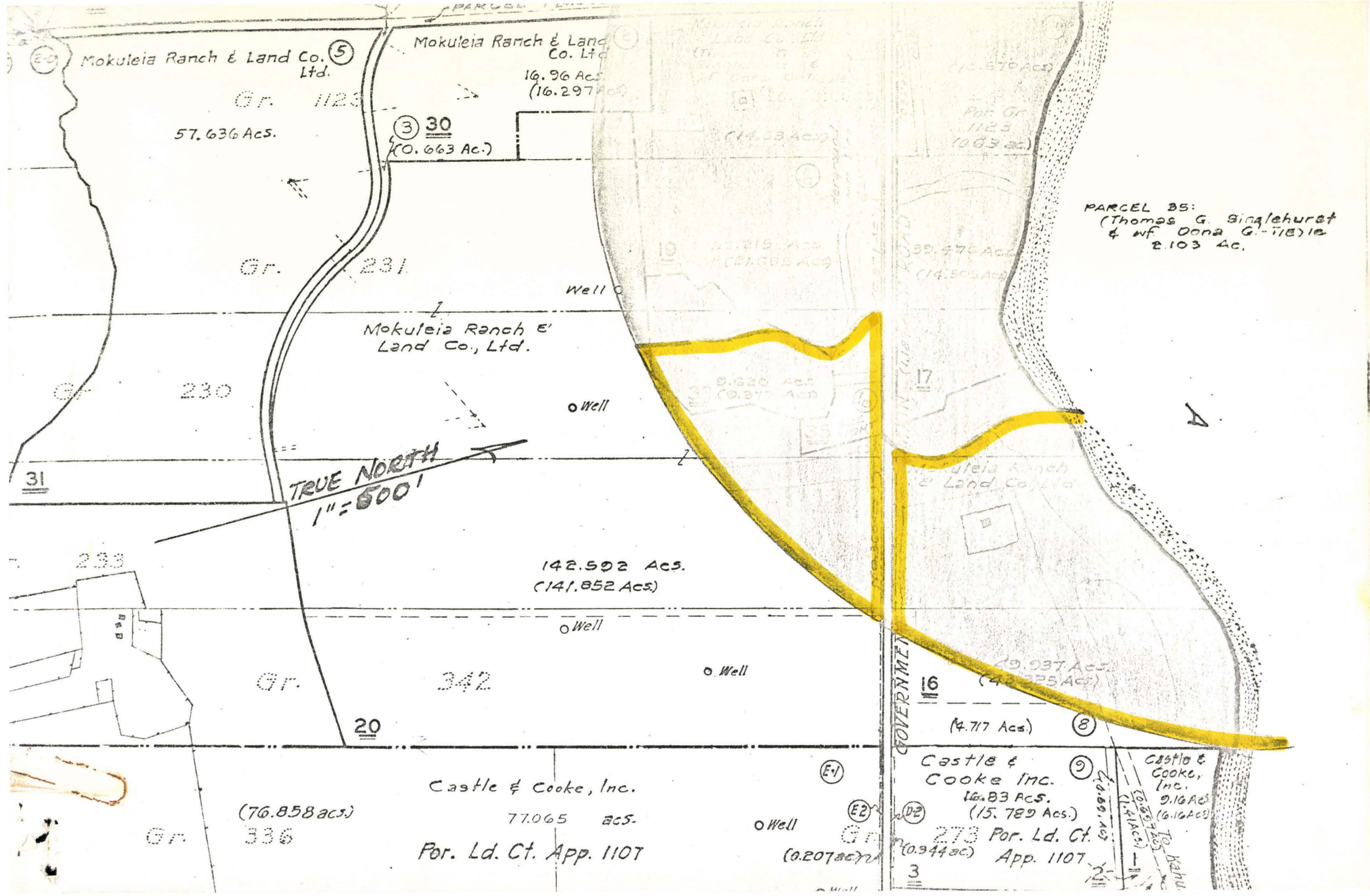
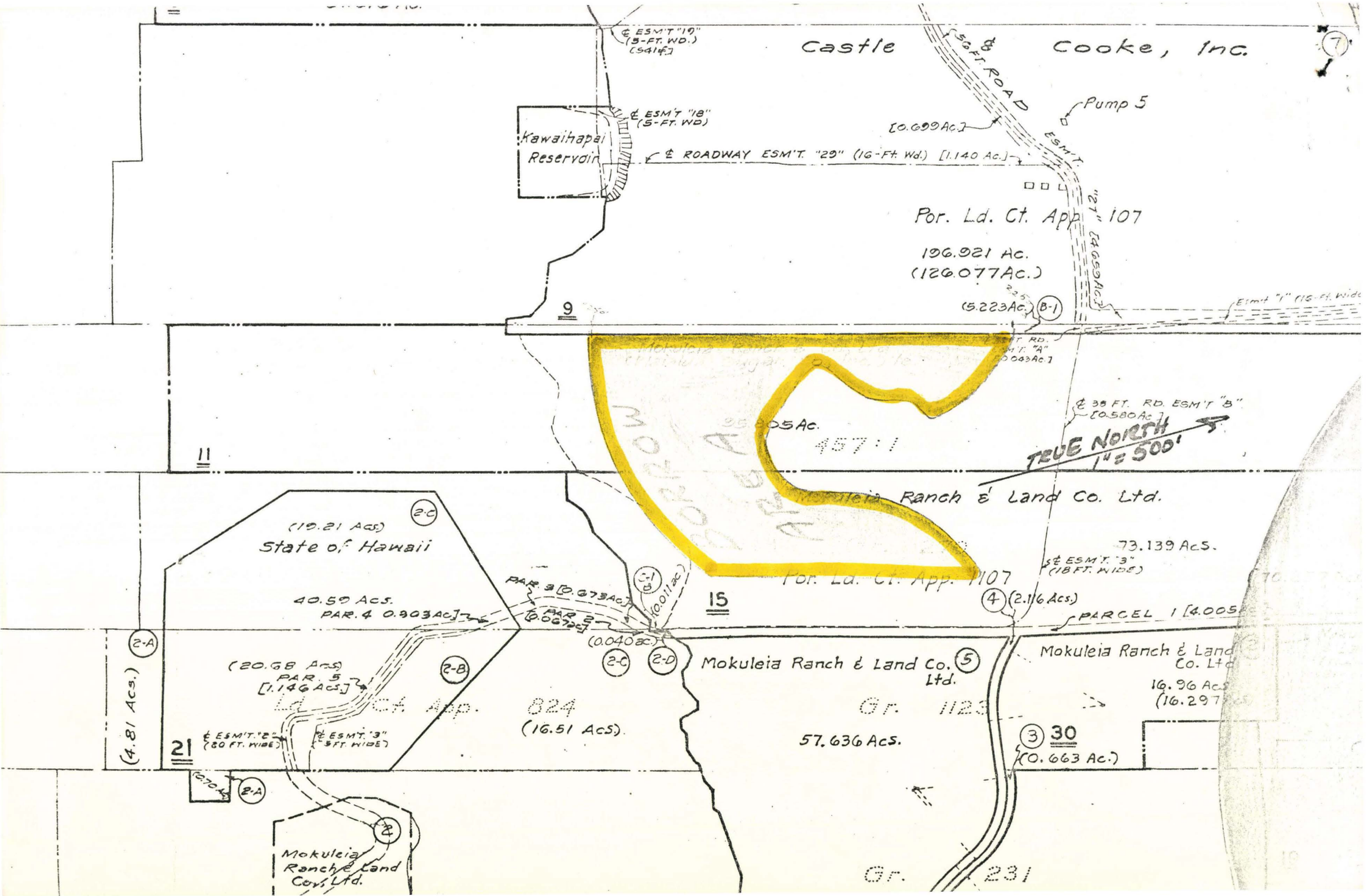


FIGURE 1

GENERAL LOCATION MAP


Mokuleia Ranch & Land Co. Ltd.
Gr. 1123
57.636 Acs.
Mokuleia Ranch & Land Co. Ltd
16.96 Acs
(16.297 Acs)
30
(0.663 Ac.)
Gr. 231
Well
Mokuleia Ranch & Land Co., Ltd.
Gr. 230
Well
TRUE NORTH
1" = 600'
31
142.502 Acs.
(141.852 Acs.)
Well
Well
Gr. 342
20
Castle & Cooke, Inc.
77.065 acs.
Por. Ld. Ct. App. 1107
(76.858 acs.)
Gr. 336
Well
E-1
E-2
Gr.
(0.207 ac)
PARCEL 85:
(Thomas G. Singlehurst & wf. Oona G. Tiele)
2.103 Ac.
17
16
(4.717 Acs.)
8
GOVERNMENT
Castle & Cooke Inc.
16.83 Acs.
(15.789 Acs.)
273 Por. Ld. Ct.
(0.344 ac) App. 1107
3
Castle & Cooke, Inc.
9.16 Acs
(6.16 Acs)
To Kahu


Castle & Cooke, Inc.
℄ ESM'T "19" (5-FT. WD.) (541 sf.)
℄ ESM'T "18" (5-FT. WD)
Kawaihapai Reservoir
50 FT. ROAD
Pump 5
[0.699 Ac.]
℄ ROADWAY ESM'T. "29" (16-Ft. Wd.) [1.140 Ac.]
ESM'T. "27" (44.69 Ac.)
Por. Ld. Ct. App. 107
196.921 Ac.
(126.077 Ac.)
(5.223 Ac.)
B-1
9
Esm't "1" (16-Ft. Wide
℄ 30 FT. RD. ESM'T "A" [0.063 Ac.]
℄ 30 FT. RD. ESM'T "B" [0.580 Ac.]
95.905 Ac.
457:1
TRUE NORTH
1" = 500'
11
Mokuleia Ranch & Land Co. Ltd.
73.139 Acs.
℄ ESM'T. "3" (18 FT. WIDE)
Por. Ld. Ct. App. 1107
4
(2.116 Acs.)
PARCEL 1 [4.005
15
PAR. 3 [0.073 Ac.]
PAR. 2 [0.067 Ac.]
(0.011 ac.)
(0.040 ac.)
3-1
2-C
2-D
(19.21 Acs.)
State of Hawaii
40.50 Acs.
PAR. 4 0.903 Ac.]
(20.68 Acs.)
PAR. 5 [1.146 Acs.]
2-A
2-B
(4.81 Acs.)
Ld. Ct. App. 824
(16.51 Acs.)
℄ ESM'T. "2" (30 FT. WIDE)
℄ ESM'T. "3" (5 FT. WIDE)
21
(0.70 Ac.)
Mokuleia Ranch & Land Co. Ltd.
5
Mokuleia Ranch & Land Co. Ltd.
16.96 Acs.
(16.297
Gr. 1123
57.636 Acs.
3
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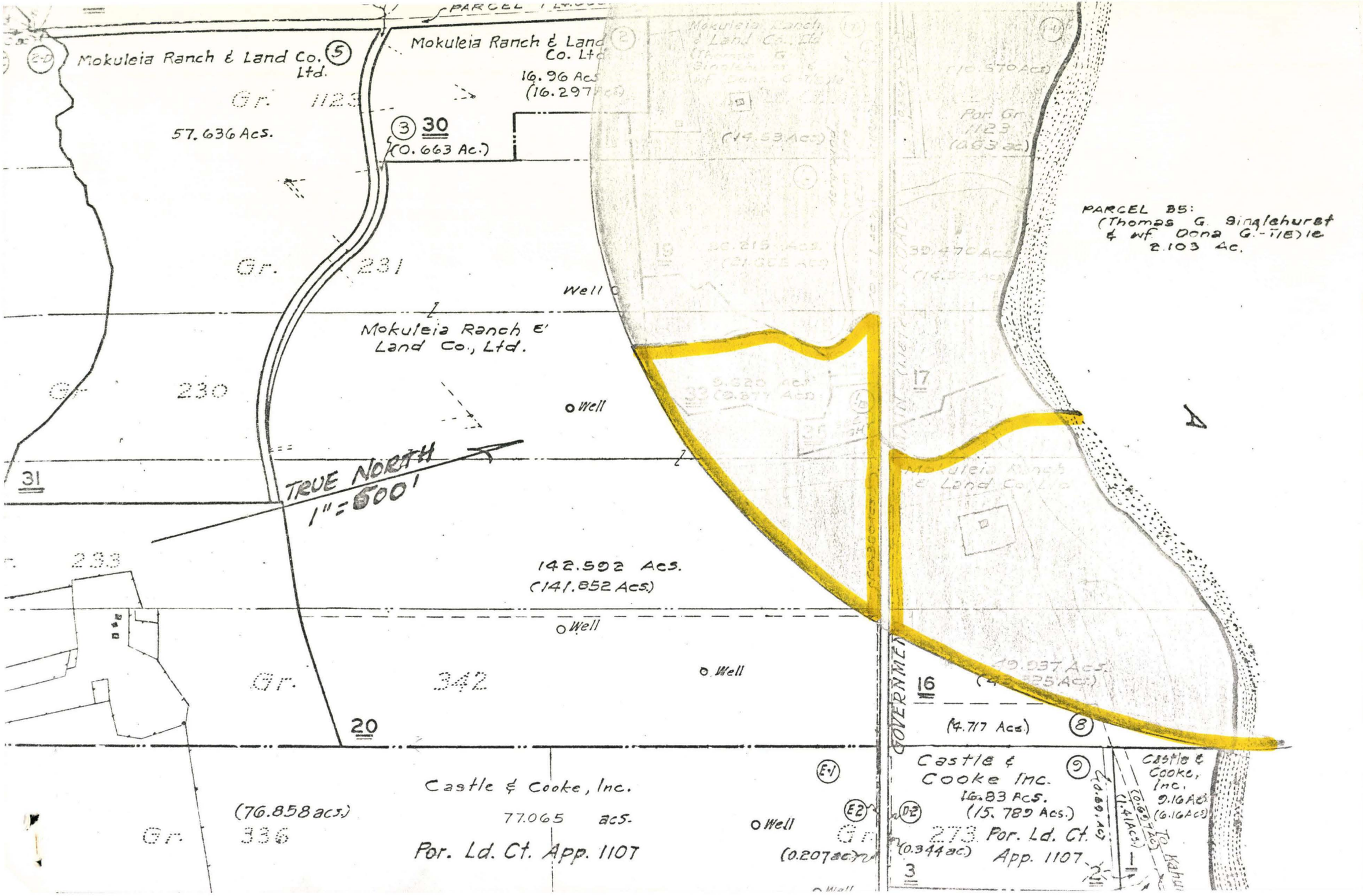
Gr. 231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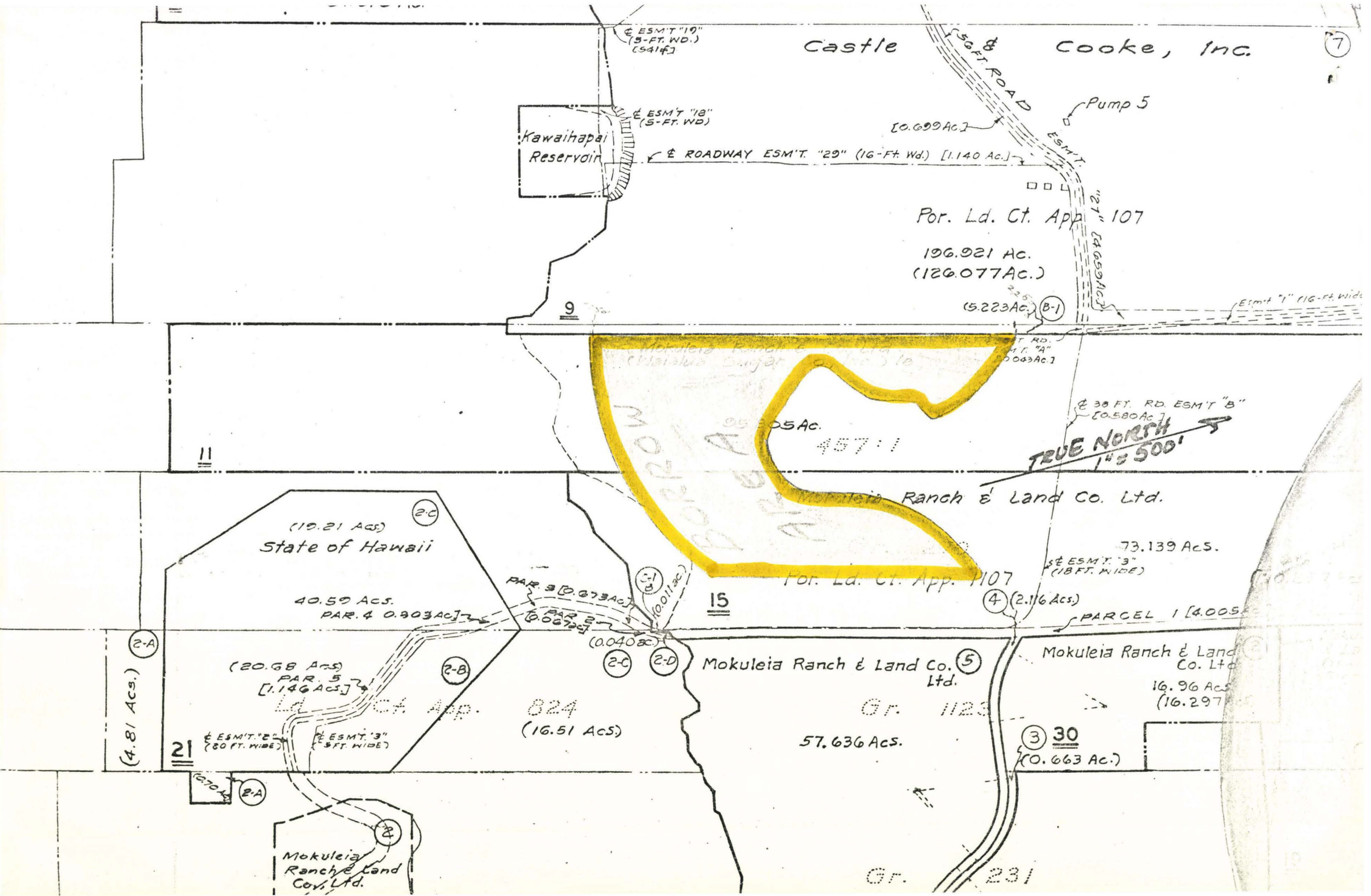
Castle & Cooke, Inc.
7
50 FT. ROAD
Pump 5
[0.699 Ac.]
ESM'T. "21" [4.699 Ac.]
℄ ESM'T "19" (5-FT. WD.) [5414]
℄ ESM'T "18" (5-FT. WD)
Kawaihapai Reservoir
℄ ROADWAY ESM'T. "29" (16-Ft. Wd.) [1.140 Ac.]
Por. Ld. Ct. App. 107
196.921 Ac.
(126.077 Ac.)
9
(5.223 Ac.)
B-1
Esm't "1" (16-Ft. Wide)
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4
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TECHNEWS HAWAII

Department of Planning
and Economic Development

Hawaii Technological Information Center
Room 725, Kamamalu Building
Honolulu, Hawaii 96804

Telephone: 548-4622,
548-3058, and 548-3059

Number 14 *Edited by David L. Jones, Manager, HAWTIC* **March 1973**

This issue of **TechNews Hawaii** is to be devoted largely to the reporting of technically innovative products which are either manufactured in Hawaii or distributed through local firms. These items are not intended as advertisements, but are mentioned editorially because of their unique qualities which we believe merit your attention. If *you* have such a product, we should be happy to learn about it and to mention it in a future issue of this newsletter, if it is of general scientific or technical interest. In this way we hope to provide encouragement for businesses in Hawaii. Moreover, from time to time we also mention really innovative products or ideas from outside Hawaii. When this is done, our motives are any or all of the following: first, it will alert you, the reader, to a potentially useful product or method; second, it might stimulate a local company to manufacture, represent, or stock such items, making them available locally; third, it may cause a reader to bring to our attention a similar product or service already available in Hawaii; and finally, it may encourage the manufacturer or originator of such an item to seek Hawaiian marketing and/or manufacturing facilities, thus furthering the economic development of Hawaii. *Please note* that it is *NOT* our intent to create mainland or foreign competition for local businesses, and we shall always welcome any information on local products or services of which we are not now aware.

Telephone/Intercommunications System: One of the most innovative and comprehensive telephone systems being produced anywhere in the world is now available here, from **Executone of Hawaii**. The present system capacity is 100 stations and up to 24 trunk (outside telephone) lines, and installations are expected to begin by June. Larger systems should be available early next year. Some of the most significant features of this new system are: (a) instruments are of the pushbutton rather than dial type, a time-saving and convenient feature which may be used regardless of whether you are in a "touch-tone" area. (b) Transfers: any incoming *or outgoing* call may be transferred to any other party in the system, or incorporated in a multi-station conference call, *without losing the original party in the process, even for a moment.* A "hold" button is provided for use when privacy is desired, but its use is optional. (c) Call forwarding: any station may have its calls automatically forwarded to another station simply by dialing that number and a code; for example, if Bill is going to be in Tom's office for awhile, he dials Tom's number and the "forward" code, and any calls coming in on Bill's phone will ring Tom's extension until the code is cancelled. (d) Remote call pickup: Larry is on vacation, and you hear his phone ringing. You don't need to dash across the hall to his office to answer it; just pick up your phone, dial Larry's number, and take the call. (e) Station camp-on: if the station you dial is busy, touch a button, and you will be called back when the line is free; moreover, the party on the other station is alerted by a signal that someone is trying to reach him, although the signal cannot be heard by anyone to whom he is talking on an outside line. (f) Call override: selected stations may be equipped to break into existing calls in emergency situations; in such an event, only the "inside" party hears the break-in message. For privacy, any station may be programmed to reject the use of this mode. (g) Location of personnel: a series of automatic location methods is available to find someone who is not at his station. When the person hears such a signal, he simply picks up the nearest phone, dials his own number, and is connected to the calling party.

A number of optional features are also available with the system, including hands-free operation, multiline "key" telephones, private outside lines in addition to the local station lines on one instrument, off-premises extensions, voice paging through the "hands-free" speaker in the set, and associated wireless pocket paging devices. The attendant's console contains features as innovative as the rest of the system; here we shall only say that it is designed to enhance the "total communications" concept with a minimum of time and effort. While the system's own features are its most convincing sales points, one would naturally conclude that such versatility would be expensive. Not so, according to the distributor; indeed, if your system requirements are for more than about 15 phones, it is quite possible, we are told, that the cost would be less than for ordinary switchboard and telephone equipment. To learn more about the system, call Roger Baker at Executone of Hawaii, Ltd., 533–3604.

Sand Mining: Under sponsorship of the Sea Grant Program, University of Hawaii researchers have developed a submarine sand recovery system, by means of which offshore undersea deposits of sand may be used for construction and for replacement of beach sand. Preliminary testing of the system has been done, with pumping of 50 cubic yards of sand per hour. Full-scale testing is scheduled for early this summer, provided the necessary permits and clearances can be obtained. Legislation is also pending to modify existing law to permit the mining of offshore sand under certain conditions. If all of these efforts are as successful as the equipment itself, the shortage of sand caused by the prohibition of beach sand mining should be alleviated. The system consists of a suction head connected by flexible hoses to a hydraulic power unit mounted on shipboard. Details of the system may be obtained from Frank Casciano of the University's Look Laboratory, 811 Olomehani Street, Honolulu 96813 – telephone 538–3381.

Specialized Typing Elements for Selectric Typewriters: Doubtless almost everyone who reads this newsletter is familiar with the IBM Selectric typewriter in one form or another, whether as an office typewriter, composing machine, or computer input/output device. The unique feature of the Selectric is its golf-ball-like typing element which can be changed in an instant to give the user a choice of many typing styles and sizes. IBM itself, of course, produces dozens of standard typefaces and special-purpose symbol elements for the Selectric, but there are instances in which more specialized needs occur. This is where a Honolulu firm, **Camwil, Inc.,** enters the picture. Its business is the production of special typing elements for Selectric typewriters, and the modification of existing Selectric elements to insert one or more special characters such as a logo or trademark. Stock Camwil elements include Cyrillic (Russian), Greek, Katakana (Japanese), a special element with many accent marks with which most European languages may be written, an element for the construction of organic chemistry symbols, fonts for computer use and optical scanning, and even an element for typing electronic symbols. The latest stock element from Camwil is a check-writing head; used in combination with a cushioned backing sheet, it enables the user to emboss checks with perforated numerals to prevent alteration of amounts. An element is also being produced with rearranged characters to enable users of the Dvorak Simplified Keyboard (DSK) system to use the Selectric typewriter. For more information, or to discuss your special needs, call or write Camwil, Inc., 835 Keeaumoku Street, Honolulu, HI 96814 – phone 955–0766.

Illuminated Display Boards: Wherever the need exists for large, illuminated, highly legible displays which can be continuously updated, a local firm, **Trans-Visual Electronics,** can supply them. These displays are difficult to describe in words, so make a point of seeing them if you can. Typical applications would be at airports for announcing flight departure and arrival times; in shopping centers, fairs, amusement parks, and similar crowded areas for displaying announcements, advertising, news bulletins, bus departures, and the like, or for helping locate lost children; and in schools or universities for announcements and news bulletins. These displays are brightly illuminated even in high ambient light conditions, and at first glance appear to consist of innumerable small lights. Closer examination shows that the letters and numerals are made up of a matrix of small discs, magnetically positioned, which fluoresce in ultraviolet light provided by a row of tubular lamps below the display. There are therefore no lamp replacement problems except for the few relatively long-lived UV tubes, and no banks of high-current motorized switching contacts. The information may be entered in the display and updated by means of punched tape, Teletype keyboard, or other method, from a remote location. The equipment is manufactured in the United States, and parts and service are readily available. For specifications and further details, get in touch with Trans-Visual Electronics, Inc., 1600 Kapiolani Blvd., Suite 1317, Honolulu 96814 – telephone 946–1681.

Pocket Calculators with a Difference: One of the newest and hottest products to appear in recent months is the pocket calculator. Ranging in size from smaller than a cigarette pack to dimensions that would stretch even an overcoat pocket, most of the miniature marvels are capable only of the four basic arithmetic functions plus a few added refinements such as floating decimal, constant storage, and even printed results. However, in the true pocket-size category there are two calculators which differ very significantly from the rest. Made by **Hewlett-Packard,** the HP-35, designed for the engineer or scientist, and the HP-80, developed for the business and financial world, have features rivaling many large desk calculators in their 6'' x 3.2'', 9-ounce compactness. The HP-35 has single-key operations for +, −, ×, ÷, square root, trig functions, log10, log$e$, powers, and reciprocals. It also has π and e to 10 significant digits, a storage register, automatic decimal point positioning, and true floating decimal operation giving dynamic range from 10^{-99} to 10^{99}. The HP-80, like the HP-35, has the basic arithmetic operations, roots, powers, and storage, but instead of trig and log functions, it features such operations as percentage, standard deviation, rate of return for compounded amounts, future value of annuities, amortization schedules, yield to maturity of bonds, linear regression analysis, accrued interest, and other business and financial calculations. One of its features is a 200-year calendar stored in memory. Both calculators operate on AC or rechargeable battery pack. For additional details, write or call the Honolulu office of Hewlett-Packard at 2875 S. King St., Honolulu 96814; phone 955–4455.

Hawaii Technological Information Center
DPED – P. O. Box 2359
Honolulu, Hawaii 96804

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Honolulu, Hawaii
Permit No. 1104

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3598

'R SUPPL.
NOLULU

ROBERT H. ROTZ, Chairman
RICHARD H. COX, Vice Chairman
GEORGE APDUHAN, Secretary
JOHN HENRY FELIX
EDWARD Y. HIRATA
FUJIO MATSUDA
STANLEY S. TAKAHASHI

GEORGE A. L. YUEN
Manager and Chief Engineer

March 20, 1973

RECEIVED
MAR 23 1973
State of Hawaii
LAND USE COMMISSION

Mr. Tatsuo Fujimoto
Executive Officer
Land Use Commission
State of Hawaii
P. O. Box 2359
Honolulu, Hawaii 96804

Dear Mr. Fujimoto:

Subject: Notification of Special Permit Applications

1) Applicant: Warren Corporation
File No.: SP73-146
Tax Map Keys: 6-8-03:11, 15, 16, 17, 19, 20, 30, 33 & 35

2) Applicant: Pacific Concrete & Rock Co.
File No.: SP73-147
Tax Map Keys: 9-1-16:pors. 4, 6 & 20
9-2-03:por. 2

Thank you for referring the subject applications to us for comments. The Board has no objections to the sand mining operations by Warren Corporation.

With respect to SP73-147, we did comment previously on its Environmental Impact Statement. We are attaching copies of our November 27, 1972 letter to the Office of Environmental Quality Control and the December 11 reply from Pacific Concrete and Rock Company. We have no objections to the proposed uses provided the applicant adheres to those conditions agreed upon in his December 11 letter.

Very truly yours,

Masami Iwamura

Masami Iwamura
Land Administrator

Attach.

3574

WEST OAHU SOIL & WATER CONSERVATION DISTRICT

P.O. Box 610 Wahiawa, Hawaii 96786 - Telephone: 622-4185

March 20, 1973

RECEIVED
MAR 21 1973
State of Hawaii
LAND USE COMMISSION

State of Hawaii
Land Use Commission
P. O. Box 2359
Honolulu, Hawaii 96804

Attention: Mr. Tatsuo Fujimoto, Executive Officer

Dear Sir:

The Directors of the West Oahu Soil & Water Conservation District have reviewed the Land Use Commission Agenda for March 23, 1973 and wish to express our positions as follows:

Ltr fr. West Oahu Soil & Water Conservation District stating that they have

1. SP73-146 - Warren Corporation

   We have no opposition to this as we recognize the need for such an operation and, if conducted properly, it will cause no serious problems.

2. SP73-147 - Pacific Concrete & Rock Co., Ltd.

   This has been reviewed by our board previously (see attached letter) and we have no major objections.

Sincerely,

R. D. Wiemer

R. D. Wiemer
Chairman, West Oahu SWCD

RDW/eb
attached

And Dept of Ag. informed this office verbally that they have no objection to the Special Permit request.

STATE OF HAWAII
LAND USE COMMISSION

MEMORANDUM

March 23, 1973
2:30 p.m.

TO: Land Use Commission

FROM: Staff

SUBJECT: SP73-146 - WARREN CORPORATION (Mokuleia)

The City Planning Department has transmitted the records and proceedings of a special permit application by Mr. Warren Kobatake, President of Warren Corporation to conduct sand mining operations on land identified as Tax Map Key 6-8-3: 11, 15, 16, 17, 19, 20, 30, 33 and 35, situated within the State Agricultural District at Mokuleia, Oahu.

The subject property comprises approximately 152 acres and is situated along both sides of Farrington Highway about 1/2 mile east of Dillingham Airfield at Mokuleia. Presently, the land includes uses such as cane and pasture lands, the Crowbar Ranch and polo field. With the exception of a group of single family residential units known as Mokuleia Beach Estates on the makai side of the highway, the surrounding area is characterized by ranch and cane lands.

Warren Corporation proposes to conduct their sand mining operations in a 152 acre area which contains a sand deposit lying 6 to 12 inches below the ground level which ranges from 6 to 8 feet in depth. The topsoil will be stripped and stockpiled in 1 acre increments. The sand will be retrieved and processed, and the mined area will be reclaimed. No more than 3 acres (one acre each for extraction, working area and reclamation) will be utilized at any one time for the operation. Equipment such as front end loaders, water trucks, conveyors, a bulldozer, screener and generator will be used on site. Up to 8 semi-trailer dump trucks of between 20 to 25 cubic yard capacity will be used for hauling from the site. It was estimated by the petitioner that up to 80 truckloads per day would be taken from the mining operation. However, according to the City Planning Department, the estimated daily operation will only yield from 36 to 46 loads per day. Tradewinds from Waialua to Kaena Point prevail 80 to 90 percent of the time, thus minimizing "discomfort to the homes in the immediate vicinity". The operation is estimated to span a 15 year period, averaging 10 acres per year and about 112,000 cubic yards per year. In total, approximately 1.7 million cubic yards of sand will be excavated and the same amount of fill material will be utilized.

Fill material for reclamation of the areas which have been mined will be obtained from a 36 acre area situated approximately 3/4 mile

mauka of the sand mining operation. The borrow site will be leveled and a silting basin of 10 to 15 acres will be created in order that silt from the 2 streams passing through the borrow site may settle before it reaches the ocean.

Hours of operation proposed by the petitioner are:

7:00 a.m. to 5:30 p.m.	Monday thru Friday
8:00 a.m. to 4:30 p.m.	Saturdays
No operations	Sundays and driving adverse weather conditions

The petitioner advises that there are only 2 major suppliers of sand: 1) HC&D, which supplies 90% of all concrete sand and which utilizes natural beach sand, and 2) Pacific Concrete and Rock Co. which uses the more expensive manufactured sand. Approximately 600,000 cubic yards are needed annually by the concrete industry. HC&D's source of beach sand will end by 1974. In the past, the applicant has supplied sand to public beaches such as Kuhio Beach, Hanauma Bay, Magic Island and Fort DeRussy.

At the public hearing of January 24, 1973, Dr. Goro Uehara of the University of Hawaii, Department of Agronomy and Soil Science testified that there are 3 major sources of sand in Hawaii:

1. Beach sand - which is visible along all the beaches of Hawaii and of which the major source is at Molokai.

2. Deep sea sand - the mining of which is not an alternative at this time because of the consequences on the reef environment. Dr. Uehara quoted the following from "A Literature Review of the Effects of Sand Removal on a Coral Reef Community" by James Levin:

   "1.5 Summary and Recommendations

   Sand mining and other dredging activities alter the reef environment by producing suspended and deposited sediments, removing the original bottom-water interface and deeper substrate material, creating new deep water areas, and possibly causing the release of chemicals from the sediments. All of these conditions can adversely affect the life of a coral reef community. In some instances the effect may be of short duration with the rapid re-population of an area; in others the effects may be of long duration with the ultimate degradation of the reef community."

3. Sand deposits on land - these deposits are beach sand located inland and not on the beach and represents an old relic

shoreline which developed nearly 30,000 years ago. This is the type of sand found in the subject area, at Bellows Field, Waimanalo, and Kailua, where the sandy areas extend quite far inland. However, most of the areas where these deposits occur have been urbanized and the largest remaining area which is relatively open is at the Mokuleia-Kaena Point area.

Submittal by Petitioner:

1. Letter dated April 28, 1972 from Mr. H. E. Anderson, Vice President and Secretary of Mokuleia Ranch and Land Co., Ltd. authorizes the petitioner to act as agent on behalf of that firm to apply for and procure a Conditional Use Permit for the sand mining operations.

2. Letter dated October 11, 1972 from Warren Corporation, in part advising the City Planning Department that there are 2 outstanding leases which will expire before mid 1974 involving the Crowbar Ranch and the polo field operation. However, these areas "will be affected long after 1974". The ultimate use for the Mokuleia Ranch property will be for grazing dairy calves.

3. Letter dated December 7, 1972 from J. Gordan Cran, Ranch Manager of Mokuleia Ranch and Land to the petitioner transmitting a Backfill Material Plan for the Proposed Sand Mining Operation. This plan indicates that most of the 36 acre borrow area is in cane cultivation but that the land has a high percentage of rock. A 10 to 15 acre sediment basin will be constructed when 2 streams meet in order to prevent silt from flowing out to the ocean. At the outlet, a dike will be constructed to prevent erosion by overflow water. The end result will be "increased agricultural productivity from the land involved, reduction or erosion and sediment reaching the sea, plus the economic benefit to the County and State".

4. Letter dated October 6, 1972 from Attorney Allen I. Marutani, Warren Corporation to the Office of Environmental Quality Control transmitting copies of Environmental Assessment and Environmental Impact Statement prepared by F. Hertlein and Associates, Environmental Consultants.

   In summary, the Environmental Assessment states that:

   "a. Air pollution by fugitive dust from the operations at Mokuleia should not constitute a problem when all facts are considered.

"b. Noise levels resulting from proposed sand mining operations at Mokuleia can be expected to comply with requirements of the CZC if the precautions listed in this report are implemented.

"c. Wave erosion of the area being proposed for mining should not be a factor to contend with because of the 150 foot setback which will preserve the present beach area."

Comments received from governmental agencies by the City Planning Department are as follows:

No Comments or Objections - The Board of Water Supply, City Building Department, Honolulu Redevelopment Agency, State Department of Transportation, Department of Education, Federal Housing Administration, Federal Aviation Authority had no objections or comments.

Traffic - The City Traffic Department asked that matter be referred to the Department of Transportation, which had no objections. The Police Department foresees no traffic control problems.

Dust - The Department of Public Works noted that the applicant anticipates moist soil conditions. The Air Sanitation Branch of the Department of Health voiced no objections provided that air pollution regulations are complied with.

Ground Water - The Department of Health expressed concern over possible contamination of the ground water table by the proposed fill material. The Department of Land and Natural Resources advised that existing wells within the excavation area must be capped in accordance with applicable statutes. The Board of Water Supply foresaw no threat to any of their installations.

Noise - All agencies agreed that the proposed berms would be effective. The Department of Public Works suggested that they be moved back sufficiently so as not to affect Farrington Highway.

Setback from Highway - The Department of Land and Natural Resources and the Soil Conservation Service recommended a minimum setback of 30 feet to provide for vegetative screening.

Shoreline Setback - The Corps of Engineers foresees no ill effects provided a setback of 150 feet from the line of vegetation is observed.

A letter dated March 16, 1973 has been received from Mr. Ramon Duran, Deputy Director of the City's Department of Recreation,

advising that their Long Range Plan shows a proposed Makaleha Beach Park on that portion of the subject property lying makai of Farrington Highway. He urged that this makai area be excluded from consideration in order to preserve the many mature trees, the removal of which could destroy the character of the site. There are no acquisition funds at present; however, if the area is preserved, a General Plan amendment and CIP funds will be requested.

COUNTY RECOMMENDATION

At its meeting on February 28, 1973, the City Planning Commission voted to recommend that this request be approved subject to the final approval of the State Land Use Commission and subject further to obtaining a Conditional Use Permit from the City.

General Plan: Agriculture mauka of Farrington Highway, Residential makai of Farrington Highway; Ordinance No. 2443, May 7, 1964.

Detailed Land Use Map: None adopted for this area.

Development Plan: None adopted for this area.

Existing Zoning: AG-1 Agricultural District.

At the public hearing held by the City Planning Commission, Mr. Jacob Y. W. Ng, President of Waialua High School PTA, testified that classroom work at Waialua High and Intermediate School would be disrupted by the increase in truck-trailer traffic on Farrington Highway. He noted that some of the classrooms are located only 12 feet away from Farrington Highway; that the auditorium is 50 feet away and the cafeteria 200 feet away from the highway. Traffic hazards during the morning and afternoon hours will be increased. Congestion on Kaukonahua Road will occur since the gravel hauling trucks will be able to maintain speeds of less than 15 m.p.h. on the hilly, winding road. To alleviate these problems, Mr. Ng suggested alternative measures such as air conditioning and soundproofing of classrooms by the petitioner, rerouting of trucks during school hours; night hauling and restriction on use of Kaukonahua Road.

Other considerable testimonies in opposition to the request were presented by Fred Rodriguez, Marcus Bright, Sanford Parker, Vincent Mazza and Ms. Thelma Kihano of the Mokuleia Beach Colony; Lorrin F. Thurston, Charles D. Reid, George L. Sheetz and Mrs. Theodore Wrobel, nearby property owners; Jack Morse, attorney for certain residents in the area; Mrs. Allen Levear, concerned citizen; and Miss Kathleen Maurer of the Department of Social Services. Some of the major concerns expressed by the above related to the inadequacy of the Environmental Impact Statement, the need for a study on the long term

effects of tourism development in the area; the stripping of trees and other vegetation from the area; and the adverse impact on the health, safety, and comfort of the residents, students and motorists in the area which would be caused by the generation of dust, noise, and traffic during mining and hauling operations.

Testimony presented by Miss Maurer for the Department of Social Services and Housing stated that the project is "environmentally destructive and aesthetically objectionable". However, by letter dated February 2, 1973, Mr. Myron Thompson, Director of that agency, requested withdrawal of the statement made by Miss Maurer and further noted that the State's position on environmental concerns is made by the Office of Environmental Quality Control.

Apparently because of the many concerns encountered, the public hearing by the City Planning Commission on January 17, 1973 was kept open and continued on January 24. Action by that agency on February 7 was deferred to February 21 for further information, and again deferred to February 28 when action was taken.

Following are the conditions imposed by the City Planning Commission on this Special Permit as recommended by the City Planning Director:

1. Sand mining shall be permitted only in the areas designated as Increments 1 and 2 as shown on Exhibit "A" on file with the Planning Department and which shall be made a part of this Conditional Use Permit.

2. Thirty-foot setbacks will be observed from the right-of-way of Farrington Highway. Mining shall be prohibited within these setbacks. The setbacks shall be planted with vegetation sufficient to screen the mining activity from Farrington Highway. Landscape plans for the planting of the setbacks shall be submitted to the Director for his review and approval. No mining shall be permitted until such time as the vegetative screening has become established at such a height as to effectively block the view of the operation from passenger vehicles passing on the highway.

3. Fifty-foot setbacks shall be established along both sides of any stream within the areas to be mined. No mining shall be permitted within these setbacks.

4. A 150-foot setback shall be established from the vegetation line along the beach. No mining shall be permitted within this setback.

5. A single point of access shall be established by the applicant to each of the areas to be mined subject to the review and approval of the Director.

6. Prior to obtaining a grading permit:

   a. The applicant shall submit detailed grading plans showing existing topography and drainage, grading to be accomplished, the sequence of excavation and final topography and drainage in the areas to be mined for the review and approval of the Chief Engineer and the Planning Director. Such plans shall be subject to review and comment by the Soil Conservation Service.

   b. The applicant shall submit detailed plans showing existing and proposed topography and drainage of the borrow area and precise engineering plans of the silting basin and its associated dam and drains for the review and approval of the Chief Engineer and the Planning Director.

   c. The recorded owner of the land encompassed by these permits shall be required to file with the Bureau of Conveyances or the Assistant Registrar of the Land Court of the State of Hawaii, a declaration of the above-mentioned restrictive conditions; and

   d. A certified copy of the documents as issued by the Bureau of Conveyances or Assistant Registrar shall be presented to the Planning Department as evidence of recordation prior to issuance of a grading permit.

7. Before commencing operation, the plans for clearing the existing vegetation, disposing of the stripped vegetation and screening of the sand to eliminate foreign materials must be submitted to the Department of Agriculture for their approval.

8. Noise levels of the operation as measured at the boundaries of the areas to be mined as shown on Exhibit #1, shall not exceed the standards set in Section 21-232 of the CZC. In the event the standards imposed by the CZC are not met, the applicant shall take appropriate corrective measures as approved by the Director.

9. Positive dust control methods such as maintaining the moisture content of all excavated, processed, and fill materials at the point where fly dust is nonexistent beyond the boundaries of the mining areas as defined on Exhibit "A", and the covering of the loads of all trucks leaving or entering the

mining areas shall be used. Watering equipment shall be on-site at all times.

10. Hours of operation shall be from 8:00 a.m. to 5:00 p.m., Monday through Friday. No operations shall be permitted on Saturdays, Sundays, or State or Federal holidays.

11. Mining operations shall be done in progressive one-acre increments with one acre being mined, one acre being used as an operating base, and one acre being reclaimed at any single point in time.

12. The areas which are mined shall be reclaimed by backfilling to the original grade with materials which are acceptable to the Department of Health. All fills will be topped by at least six inches of fertile topsoil and planted with a suitable vegetative covering. In no instance shall a sanitary waste backfill method be used.

13. The existing Casurina trees in Area 2 which are marked in green on Exhibit 1 shall be conserved. No mining shall take place within 20 feet of the stand of trees.

14. In the event all conditions as set forth herein are not complied with, the Planning Director may take action to terminate the use or halt its operation until such time full compliance is obtained.

15. Any major modifications to the conditions stated herein shall be subject to approval of the City Council.

16. The City Council may at any time impose additional conditions, when it becomes apparent that a modification is necessary and appropriate.

17. No more than 20 loads of sand per day shall be taken from the mining area. The applicant, after six months of operation and upon submission of supporting documentation as may be required by the Planning Director, may request an increase in the number of loads per day. The Planning Director may grant an increase, or reduce the number of loads per day and may require those improvements which may be necessary to minimize the impact of increased traffic loads.

18. The Department of Health Environmental Health Division shall conduct field inspections of the mining, reclamation and soil removal sites as necessary to assure compliance with the environmental measures contained herein.

19. The applicant shall submit regularly on a six-month basis a report indicating the status of the operation, noting his affirmative actions taken to comply with the conditions herein contained. This report shall also contain:

    a. A measurement of noise emitted at the perimeter of the site during a normal working day.

    b. Observations of fugitive dust.

    c. A report on replanting activities, including the areas replanted and the type of vegetation planted.

    d. A report of any citizen's complaints relating to the operation along with the actions taken to ameliorate those complaints.

In order to clarify questions relating to environmental and pollution problems, an Environmental Impact Statement was submitted to the Office of Environmental Quality Control by the petitioner as requested by the City Planning Department. It was indicated by the City Planning Department that the Office of Environmental Quality Control did not comment directly on the proposal but served only as a coordinating agency to solicit comments from other governmental agencies. In answer to a direct question by the City Planning Department on the adequacy of the EIS, the Office of Environmental Quality Control responded that the original submission and the ensuing dialogue between the applicant and the various agencies are sufficient to provide "an adequate description of the proposed operation and its probable environmental impacts". The Office of Environmental Quality Control suggested that:

"1. the Environmental Health Division, Department of Health be requested to monitor the operation for conformity with environmental standards;

"2. the Soil Conservation Service be requested to review the final grading plans; and

"3. the applicant be required to submit, every six months, a report on his operation including a measurement of noise and fugitive dust levels."

ANALYSIS

A review of the proposed sand mining operation as it now stands under the 19 conditions imposed by the City Planning Commission shows the following:

Mr. Chairman -

We have just recd this letter from Capt L. G. Timberlake, District Civil Engineer of the 14th Naval District reiterating their concern over possible damage to their water system.

The Navy requests that the LUC defer approval of the special permit until this matter is resolved between the petitioner + the Navy. It was expressed that the Navy will continue to cooperate w/ the petitioner to resolve the problem. It was further expressed that the Navy concurs w/ the action taken by the City Planning Director which resulted in the establishment of Condition #4 by the City Plaing Commission.

For clarification, the staff believes that Condition #4 on page 7 of the staff report affords adequate protection to the Navy in that the studies will have to be conducted + approved by the Navy prior to quarrying operations.

Mr. Chairman, I believe that a representative of the Navy is in the audience to answer any questions that the Commission may have on this matter.

MR BOERNER

1. The size of the area to be excavated has been reduced to approximately 38.5 acres, or less than 1/3 of the original proposal of 152 acres. Staff planimetric measurement of the map transmitted by the City Planning staff shows that the area mauka of Farrington Highway designated as Area 1 contains approximately 17.5 acres. Area 2, situated makai of Farrington Highway, contains approximately 21 acres. These figures do not include the 150 foot setback from the shoreline, the 30 foot setback from Farrington Highway, the 50 foot setback from the stream, nor the line of trees in Area 2 which are to be preserved. The total area of Increments 1 and 2, including the setbacks, shore and treeline comprises approximately 66 acres.

2. Under condition #10, the hours of operation have been restricted to more reasonable hours to coincide with normal residential working hours. Further, no operations are allowed on weekends or holidays, when beaches in the area are utilized by the general public.

3. Actual sand mining operations will be limited to a small 3 acre area at any given time.

4. Conditions have been established to enable various governmental agencies and individuals such as the Planning Director, Chief Engineer, Department of Agriculture, Soil Conservation Service, Department of Health, and the City Council to monitor and control the objectionable aspects of the sand mining, borrowing, filling and hauling operations.

It is the staff's conclusion that adequate and reasonable safeguards have been imposed to control the entire operation, particularly its nuisance aspects. Under condition #14, the Planning Director may act to terminate the operation if all the conditions stipulated are not complied with.

Based on the above considerations, the staff finds that the proposed use meets the guidelines for an "unusual and reasonable" use within the Agricultural District in that:

1. It is not contrary to the objectives sought to be accomplished by the Land Use Law;

2. The need for additional sources of sand to supply Oahu's construction needs have become pressing;