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Office of Environmental Quality Control  
Office of the Governor  
350 Halekauwila Street  
Tani Office Building, Third Floor  
Honolulu, Hawaii 96813

FINAL ENVIRONMENTAL IMPACT STATEMENT

FOR

WAIANAË VALLEY ROAD HOMESTEAD SUBDIVISION

Submitted by:

Department of Hawaiian Home Lands

State of Hawaii

FEBRUARY, 1975

815

MAY 23 1975

MEMORANDUM

TO: The Honorable Billie Beamer, Director  
Hawaiian Home Lands

FROM: Governor George R. Ariyoshi

SUBJECT: Environmental Impact Statement for  
Waianae Valley Road Homestead Subdivision

Based upon the recommendation of the Office of Environmental Quality Control, I am pleased to accept the subject environmental impact statement pursuant to Chapter 343, H.R.S.



cc: GEQC  
EQC

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INTRODUCTION

The Waianae Valley Road Homestead Subdivision project consists of the development of approximately 500 houselots and appertaining structures (roadways, recreational space, etc.) on 155.1 acres of State-owned land in Waianae Valley, Waianae District, Island of Oahu. These houselots will be provided to qualified applicants of Hawaiian ancestry. The project is being developed by the State Department of Hawaiian Home Lands.

This final environmental impact statement addresses itself to the probable environmental effects which would occur as a result of the implementation of this project. Additionally, Part II incorporates the responses received on the draft statement and provides their disposition.

This document complies with guidelines in the "Final Draft Manual for the Preparation and Processing of Environmental Impact Statements," issued by the State Office of Environmental Quality Control (October 4, 1972). The Document has been prepared pursuant to Act 246 relating to the preparation of environmental impact statements.

PART I

## I. PROJECT NEED AND DESCRIPTION

### A. Project Need

This project will implement one of the provisions of the Hawaiian Homes Commission Act of 1920, as amended, which is to provide single family homesteads to native Hawaiians.<sup>1</sup> More specifically, as stated in the report, "A Land Inventory and Land Use Study for the Department of Hawaiian Home Lands," the primary purpose of the Hawaiian Homes Commission Act is:

"...to enable the "native Hawaiians" (defined in §201(a)(7) of the Homes Act as descendants 'of not less than one-half part of the blood of the races inhabiting the Hawaiian Islands previous to 1778') to recapture possession and control, but without the power or right of alienation, of some of the public lands of the Territory of Hawaii as homesteads, thereby encouraging their rehabilitation within a western and modern society."<sup>2</sup>

Currently, the Department of Hawaiian Home Lands has approximately 2,800 applicants for homestead lands on the Island of Oahu.\* Of this number, 223 applicants have indicated that they would accept the residential lots to be developed by this project.

### B. Project Description

The project site is situated in Waianae Valley about 1.5 miles east (maukā) of Farrington Highway. It is on the southeast side of Waianae Valley Road near Piliuka Place. The site is identified by tax map key number 8-5-04, portion of parcels 2, 12, 40, and 53. Figures 1 through 3 provide the reviewer with an orientation of the site's location.

As indicated earlier in the Introduction, the project proposes to develop approximately 500 houselots on 155.1 acres of State-owned land in Waianae Valley. Each houselot will be approximately 7,500 square feet, with access to each lot provided by internal residential streets which will conform to standards of the City and County of Honolulu.

Work items during construction will include:

1. Clearing and grubbing
2. Grading
3. Excavation
4. Paving of roads and construction of sidewalks
5. Installation of underground utilities
6. Development of three mini-parks and landscaping of mini-parks
7. Construction of an off-site water storage tank
8. Finish work to include finish grading and drainage system
9. Construction of a bridge over Kaupuni Stream.  
The bridge is designed for a 8300 cfs flow.  
It spans 60' over Kaupuni Stream and is 40' wide.  
(See Figures 4 and 5.)

\* This figure (2800) represents the total applicants for Hawaiian Home Lands throughout Oahu: Papakolea, Waimanalo, Waianae, and Nanakuli.

The approximate amounts of land to be allotted to specific land uses are provided in Table 1.

The project will be completed in two phases; the first phase will be at the west (makai) end of the site. Construction of approximately 150 houselots on 35 acres of land will be developed in one year. The second phase will consist of developing 350 houselots and will utilize the remaining land. ✓

The time schedule and completion period for Phase I and Phase II have not yet been finalized. ✓

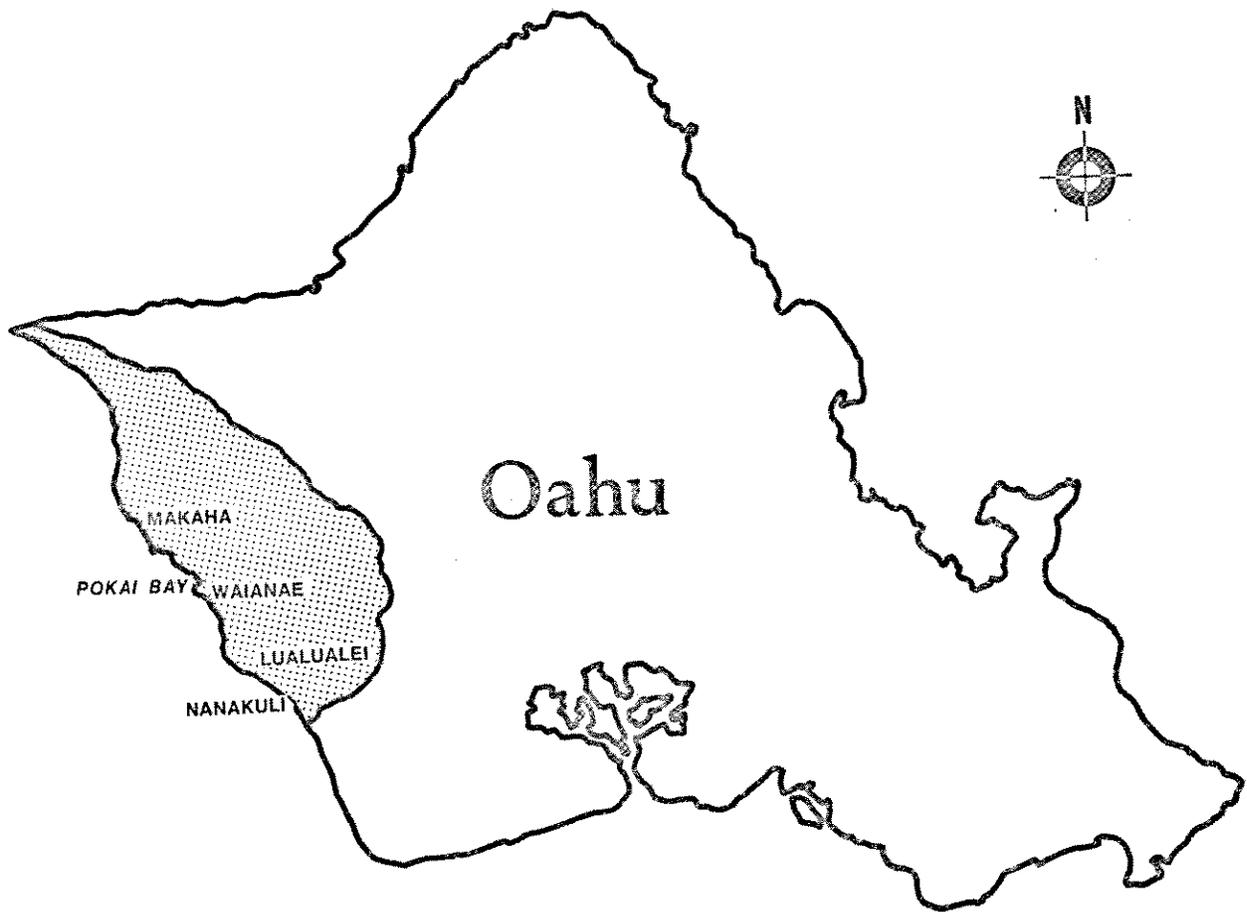
After the lots are completed, homesteaders acquiring these lots will be required to construct houses on them. The Department of Hawaiian Home Lands will provide homesteaders with the option of having a contractor build the houses on the lots at moderate prices. Homesteaders will also be given the opportunity to borrow up to \$20,000 for the construction of their houses.

The site development costs will be borne entirely by the Department of Hawaiian Home Lands; the homesteader will not be required to reimburse the Department for the cost of site development.

FIGURE 1.

Waianae District

Tax Key Zone 8: Makaha, Maili, Waianae, Nanakuli, and Pokai Bay



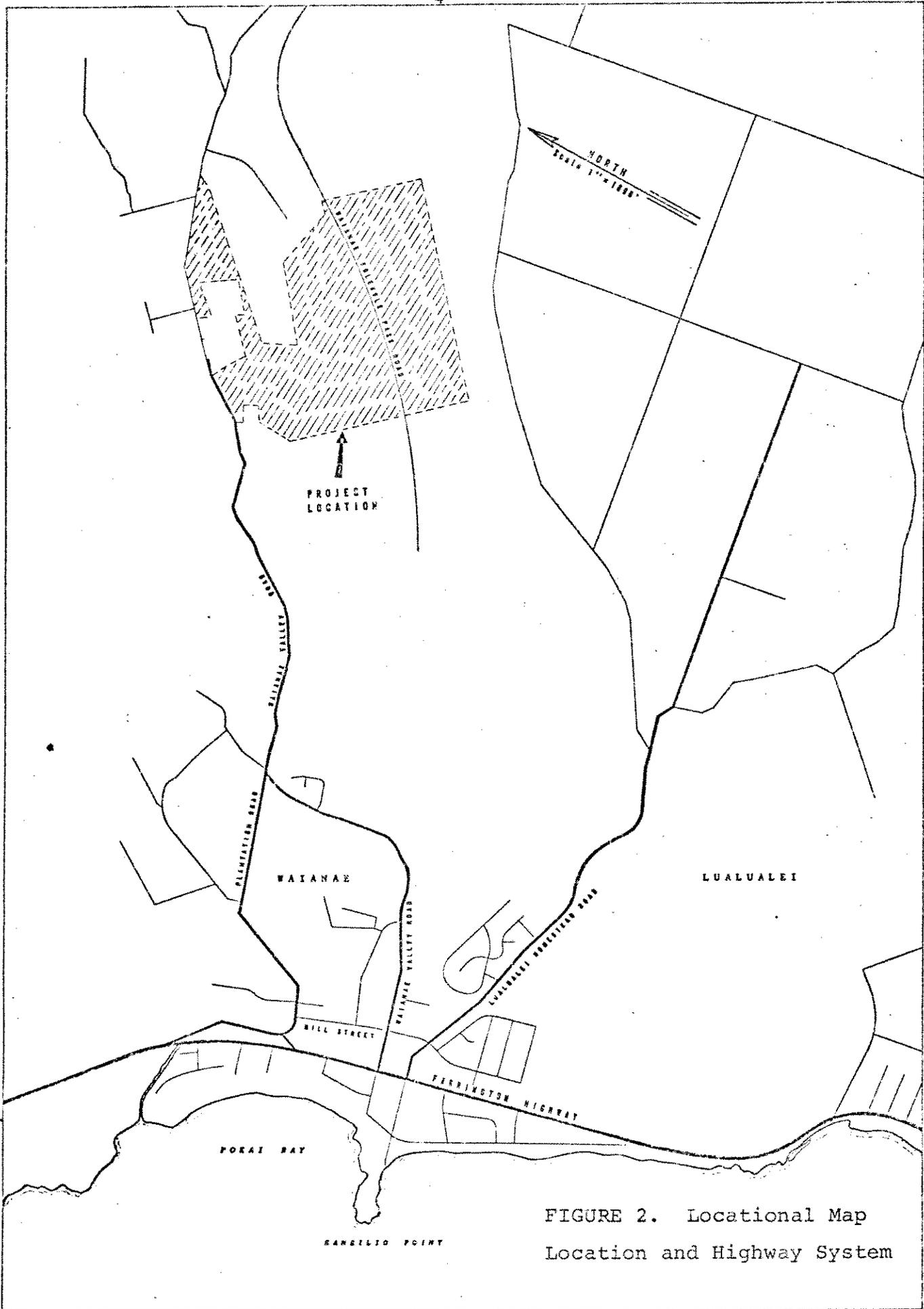


FIGURE 2. Locational Map  
Location and Highway System

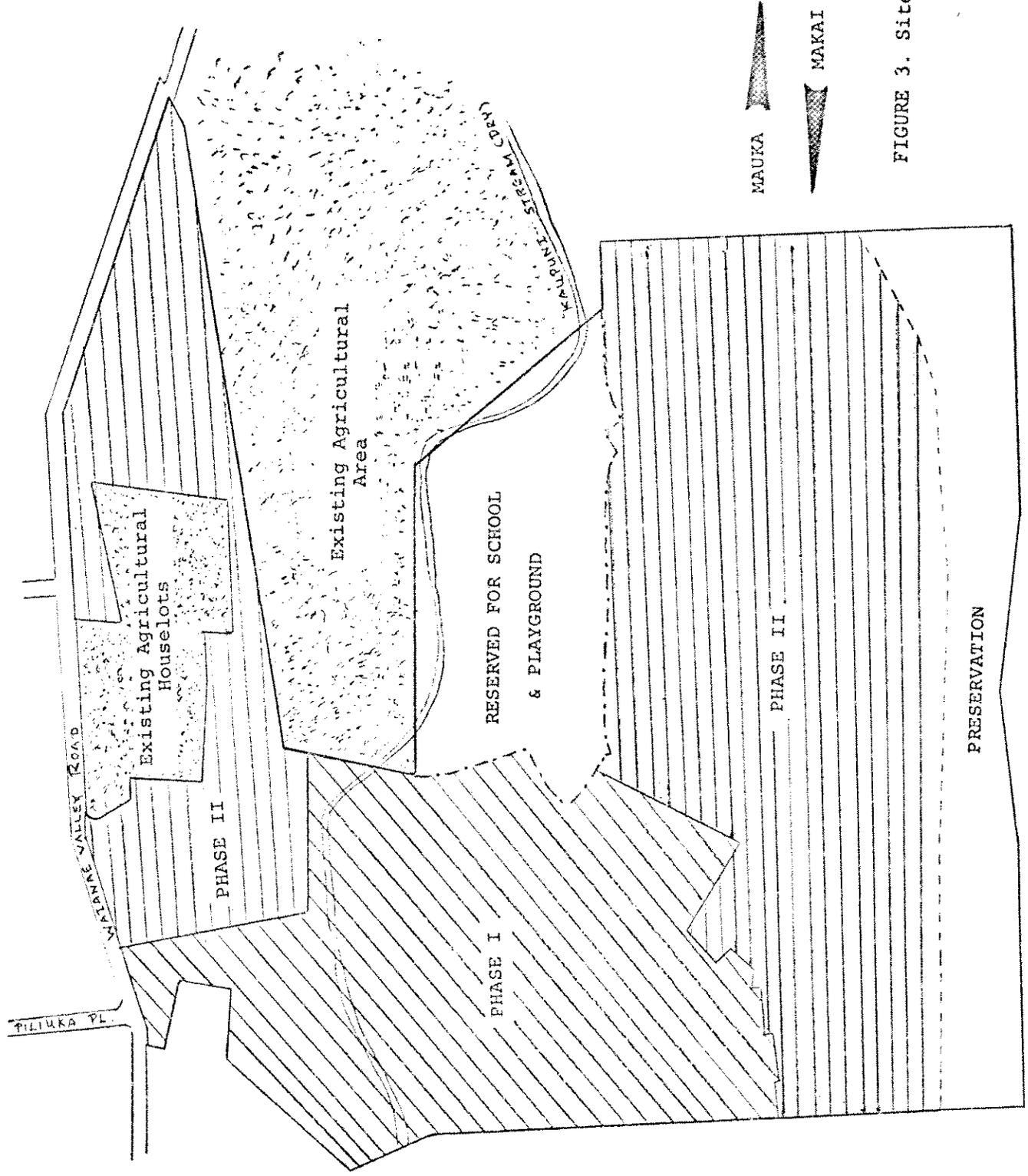


FIGURE 3. Site Map

TABLE 1.

LAND USE	ACRES
School Use, including stream and bank areas. (At the present time, no firm plans for construction of a school have been made.)	18.22
Roads	22.77
Houselots	95.29
Preservation	<u>18.85</u>
Approximate Total:	155.13

## II. EXISTING CONDITIONS OF THE PROPOSED SITE

### A. General Field Observations of the Site

Figure 3 gives the location of the site. Kaupuni Stream and tributary drainageways are generally located along the western boundary of the site. Most of the site on the east side of Kaupuni Stream slopes down about 3 to 10 percent towards the southwest. The slopes of the sides of the drainageways vary from about 20 to 50 percent. A drainageway was also noted near the southeastern corner of the site. ✓

The eastern portion of the site is covered with grass, weeds, some shrubs, and trees. Some rock walls were noted in this portion of the site. Cobbles and boulder were also noticed on the surface. A portion of the area was being used as cattle grazing ground. Paheehee Ridge is about 500 feet or more from the eastern boundary.

The western portion of the site is covered with koa haole and kiawe trees, grasses and weeds. Boulders were noted along the stream bed and stream banks.

The original vegetative covering of the site was removed several decades ago either by man's clearing or cattle grazing. The site is presently overgrown with various exotic grasses; koa haole and kiawe trees are predominant. There are no buildings or homes located on this site.

Although no mammals were observed, it is likely that the site could sustain or harbor small, commonly known mammals such as mongoose, rats, mice, and possibly feral cats. Avifauna known to exist in the area include: cardinals, barred doves, spotted doves, mockingbirds, golden plovers, pueos, ricebirds, and white eyes.<sup>4</sup>

### B. Geologic and Soil Classification<sup>5</sup>

Surface soils are generally described as follows:

1. Stearns, H. T. and U. S. Geological Survey, "Geologic and Topographic Map, Island of Oahu," USGS 1938:

Qa: Consolidated noncalcareous deposits.  
Older alluvium.

2. U. S. Soil Conservation Service, "Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii," August, 1972:

EwB: Ewa silty clay loam (ML, CL soils), 2 to 6 percent slopes.

PvC: Pulehu very stony clay loam (ML, CL, SM soils),  
0 to 12 percent slopes.

LPE: Lualualei extremely stony clay (CH soils), 3 to  
35 percent slopes.

From the field exploration and laboratory test results, soil conditions encountered in the borings may be generally expected to be as follows:

1. Eastern Portion: Stiff brown clay with cobbles and boulders to 2- to 3-foot depth underlain by brown and gray-brown sandy silts, clayey silts, decomposed rocks, cobbles, and boulders to a drilled depth of 15 feet.
2. Western Portion: Brown silty sands, sandy silts and clayey silts interspersed with boulders, cobbles and decomposed rocks to 41 feet, the maximum depth drilled.

Water was not noted in the borings at the time of the field explorations. Variations to the above soil conditions are to be expected in localized areas and between borings. This site and the surrounding area are not sources of potable water, according to the Board of Water Supply's "2020 Plan."

#### C. Microclimate

The area, located in the upper portion of Waianae Valley, receives approximately 35 to 40 inches of rainfall annually.<sup>6</sup> The mean annual temperature is 75.4°F., with a mean maximum temperature of 85.2°F. and a mean minimum temperature of 66.8°F.<sup>7</sup> The wind direction is predominantly from the northeast (trade-winds). Additionally, the winds passing across Oahu from the northeast converge at the Waianae coast. During certain seasons, winds from a northerly and southerly direction have been observed.

#### D. Socio-Economic Aspects

Zoning. The lands held by the Department of Hawaiian Home Lands are exempted from State and County land use and zoning designations.<sup>8</sup> At present, both the State land use designation and County zoning designation are for agricultural use.

Adjacent Land Uses. The surrounding areas are subdivided into agricultural lots. Agricultural activities include: vegetable growing for home consumption; orchid farming; and cattle, poultry and other livestock raising. (A-1 zoning.) A single family dwelling on most agricultural lot characteristically fronts the main road (Waianae Valley Road). A private dirt road leads to those dwellings that do not front the main road.

Community Profile. The following pages contain community profiles of Waianae City; this information was obtained from "Community Profiles for Hawaii," compiled by the State Department of Planning and Economic Development based on the 1970 U.S. Population Census results.<sup>9</sup> The profiles provide information on residence, employment, income, housing, and ethnicity. Additionally, the average profile of Oahu is provided for comparison purposes.

COMMUNITY PROFILE - POPULATION CHARACTERISTICS  
1970 CENSUS

County Honolulu Island Oahu Place Waianae City  
Division Waianae

NUMBER OF PERSONS

<u>Year</u>	<u>Population</u>	<u>Change from previous census</u>	
		<u>Number</u>	<u>Percent</u>
1970	<u>3,302</u>	<u>116</u>	<u>3.7</u>
1960	<u>3,186</u>		
1950			

GENERAL CHARACTERISTICS

	<u>Number</u>	<u>Percent</u>
Under 5 years of age	<u>334</u>	<u>10.1</u>
Under 18 years of age	<u>1,436</u>	<u>43.5</u>
65 years and over	<u>179</u>	<u>5.4</u>
Median age	<u>21</u>	
Persons 14 years and over		
Married, male	<u>654</u>	<u>57.6</u>
Married, female	<u>677</u>	<u>64.5</u>
Total number of persons		
Male	<u>1,706</u>	<u>51.7</u>
Female	<u>1,596</u>	<u>48.3</u>
Number of households	<u>843</u>	
Persons per household	<u>3.89</u>	
Living in group quarters	<u>22</u>	<u>0.7</u>
Number of families	<u>700</u>	
Husband and wife	<u>604</u>	<u>86.3</u>
Other male head	<u>31</u>	<u>4.4</u>
Female head	<u>65</u>	<u>9.3</u>

ETHNIC GROUPS

Caucasian	<u>1,217</u>	<u>36.8</u>
Negro	<u>8</u>	<u>0.2</u>
American Indian	<u>5</u>	<u>0.1</u>
Japanese	<u>617</u>	<u>18.6</u>
Chinese	<u>35</u>	<u>1.0</u>
Filipino	<u>552</u>	<u>16.7</u>
Hawaiian	<u>431</u>	<u>13.0</u>
Korean	<u>19</u>	<u>0.5</u>
Other	<u>418</u>	<u>12.6</u>

COMMUNITY PROFILE - SOCIO-ECONOMIC CHARACTERISTICS  
1970 CENSUS

	Place <u>Waianae City</u>	
	<u>Number</u>	<u>Percent</u>
<b>ORIGIN (Total population = 3,302)</b>		
Foreign born	277	8.4
Native born of native parents	3,025	91.6
Born in state of residence	2,070	62.7
Born in different state	829	25.1
<b>RESIDENCE IN 1965 (Pop. 5 yrs. &amp; over = 2,969 )</b>		
Same house	1,633	55.0
Different house, same county	689	23.2
Different county, same state	5	0.2
Different state	505	17.0
<b>EDUCATION (Pop. 25 yrs. &amp; over = 1,459 )</b>		
8 yrs. or less completed	395	27.1
Completed high school	786	53.9
4 yrs. or more college	126	8.6
Median school yrs.	12.1	
<b>EMPLOYMENT (Pop. 16 yrs. &amp; over = 2,055 )</b>		
In civilian labor force, male	664	61.7
In civilian labor force, female	427	43.6
In armed forces	143	7.0
Employed	1,031	94.5
Unemployed	60	5.5
Prof. and technical workers	167	16.2
Managerial & admin. workers	59	5.7
Laborers and farm workers	106	10.3
<b>INCOME</b>		
Median income, families	\$ 9,700	
Median income, unrel. individuals	\$ 2,324	
Families below poverty level	110	44.2
Families below \$10,000	400	51.5
Families above \$25,000	16	2.1
<b>HOUSING</b>		
Total housing units	908	
All occupied units	843	
Owner-occupied units	393	46.6
Median value, owner occupied	\$28,800	
Median rent, renter occupied	\$ 115	
Lacking all or some plumbing	89	9.8
Lacking telephone	137	16.2
1.51 or more persons per room	139	16.5
One-unit structures	726	80.0

COMMUNITY PROFILE - POPULATION CHARACTERISTICS  
1970 CENSUS

County \_\_\_\_\_ Island \_\_\_\_\_ Place Honolulu County  
Division \_\_\_\_\_

NUMBER OF PERSONS

<u>Year</u>	<u>Population</u>	<u>Change from previous census</u>	
		<u>Number</u>	<u>Percent</u>
1970	<u>630,528</u>	<u>130,119</u>	<u>26.0</u>
1960	<u>500,409</u>	<u>147,389</u>	<u>41.8</u>
1950	<u>353,020</u>	<u>95,324</u>	<u>36.7</u>

GENERAL CHARACTERISTICS

	<u>Number</u>	<u>Percent</u>
Under 5 years of age	<u>58,701</u>	<u>9.3</u>
Under 18 years of age	<u>223,857</u>	<u>35.5</u>
65 years and over	<u>31,385</u>	<u>5.0</u>
Median age	<u>24.6</u>	
Persons 14 years and over		
Married, male	<u>138,006</u>	<u>58.3</u>
Married, female	<u>135,389</u>	<u>62.7</u>
Total number of persons		
Male	<u>327,041</u>	<u>51.9</u>
Female	<u>302,135</u>	<u>47.9</u>
Number of households	<u>164,763</u>	
Persons per household	<u>3.60</u>	
Living in group quarters	<u>36,047</u>	<u>5.7</u>
Number of families	<u>138,277</u>	
Husband and wife	<u>119,823</u>	<u>86.7</u>
Other male head	<u>4,915</u>	<u>3.6</u>
Female head	<u>13,539</u>	<u>9.8</u>

ETHNIC GROUPS

Caucasian	<u>259,519</u>	<u>41.2</u>
Negro	<u>7,338</u>	<u>1.2</u>
American Indian	<u>996</u>	<u>0.2</u>
Japanese	<u>169,078</u>	<u>26.8</u>
Chinese	<u>48,288</u>	<u>7.7</u>
Filipino	<u>65,553</u>	<u>10.4</u>
Hawaiian	<u>53,709</u>	<u>8.5</u>
Korean	<u>8,058</u>	<u>1.3</u>
Other	<u>16,587</u>	<u>2.6</u>

COMMUNITY PROFILE - SOCIO-ECONOMIC CHARACTERISTICS  
1970 CENSUS

	Place <u>Honolulu County</u>	
	<u>Number</u>	<u>Percent</u>
ORIGIN (Total population = 629,174)		
Foreign born	<u>57,149</u>	<u>9.1</u>
Native born of native parents	<u>431,483</u>	<u>68.6</u>
Born in state of residence	<u>352,775</u>	<u>56.1</u>
Born in different state	<u>168,678</u>	<u>26.8</u>
RESIDENCE IN 1965 (Pop. 5 yrs. & over = 570,580)		
Same house	<u>242,260</u>	<u>42.5</u>
Different house, same county	<u>136,357</u>	<u>23.9</u>
Different county, same state	<u>6,887</u>	<u>1.2</u>
Different state	<u>119,383</u>	<u>20.9</u>
EDUCATION (Pop. 25 yrs. & over = 308,529)		
8 yrs. or less completed	<u>64,024</u>	<u>20.8</u>
Completed high school	<u>115,777</u>	<u>37.5</u>
4 yrs. or more college	<u>47,956</u>	<u>15.5</u>
Median school yrs.	<u>12.4</u>	
EMPLOYMENT (Pop. 16 yrs. & over = 427,601)		
In civilian labor force, male	<u>137,443</u>	<u>61.5</u>
In civilian labor force, female	<u>99,895</u>	<u>49.0</u>
In armed forces	<u>49,368</u>	<u>11.5</u>
Employed	<u>230,252</u>	<u>97.0</u>
Unemployed	<u>7,086</u>	<u>3.0</u>
Prof. and technical workers	<u>39,366</u>	<u>17.1</u>
Managerial & admin. workers	<u>21,533</u>	<u>9.4</u>
Laborers and farm workers	<u>13,195</u>	<u>5.7</u>
INCOME		
Median income, families	<u>\$12,035</u>	
Median income, unrel. individuals	<u>\$ 3,013</u>	
Families below poverty level	<u>10,025</u>	<u>7.2</u>
Families below \$10,000	<u>53,766</u>	<u>38.9</u>
Families above \$25,000	<u>11,745</u>	<u>8.5</u>
HOUSING		
Total housing units	<u>174,151</u>	
All occupied units	<u>164,763</u>	
Owner-occupied units	<u>74,162</u>	<u>45.0</u>
Median value, owner occupied	<u>\$38,400</u>	
Median rent, renter occupied	<u>\$130</u>	
Lacking all or some plumbing	<u>5,773</u>	<u>3.3</u>
Lacking telephone	<u>12,565</u>	<u>7.6</u>
1.51 or more persons per room	<u>11,361</u>	<u>6.9</u>
One-unit structures	<u>102,402</u>	<u>58.8</u>

E. Governmental Facilities and Services

Water Supply. The area is served by the Board of Water Supply and is part of Service Area No. 7. According to Board of Water Supply consumption data, an average of 0.6 million gallons of water per day was distributed in fiscal year 1974 to the Waianae Valley area and 5.4 mgd was consumed in the entire Waianae District. A 12-inch water line along Waianae Valley Road presently services the existing residences in the area.

Sewage Disposal System. The existing means of sewage disposal for the adjacent residential area is by cesspools. A sewerage system is not available to the site, nor is it anticipated that one will be available in the near future according to the future plans of the City and County Department of Public Works.

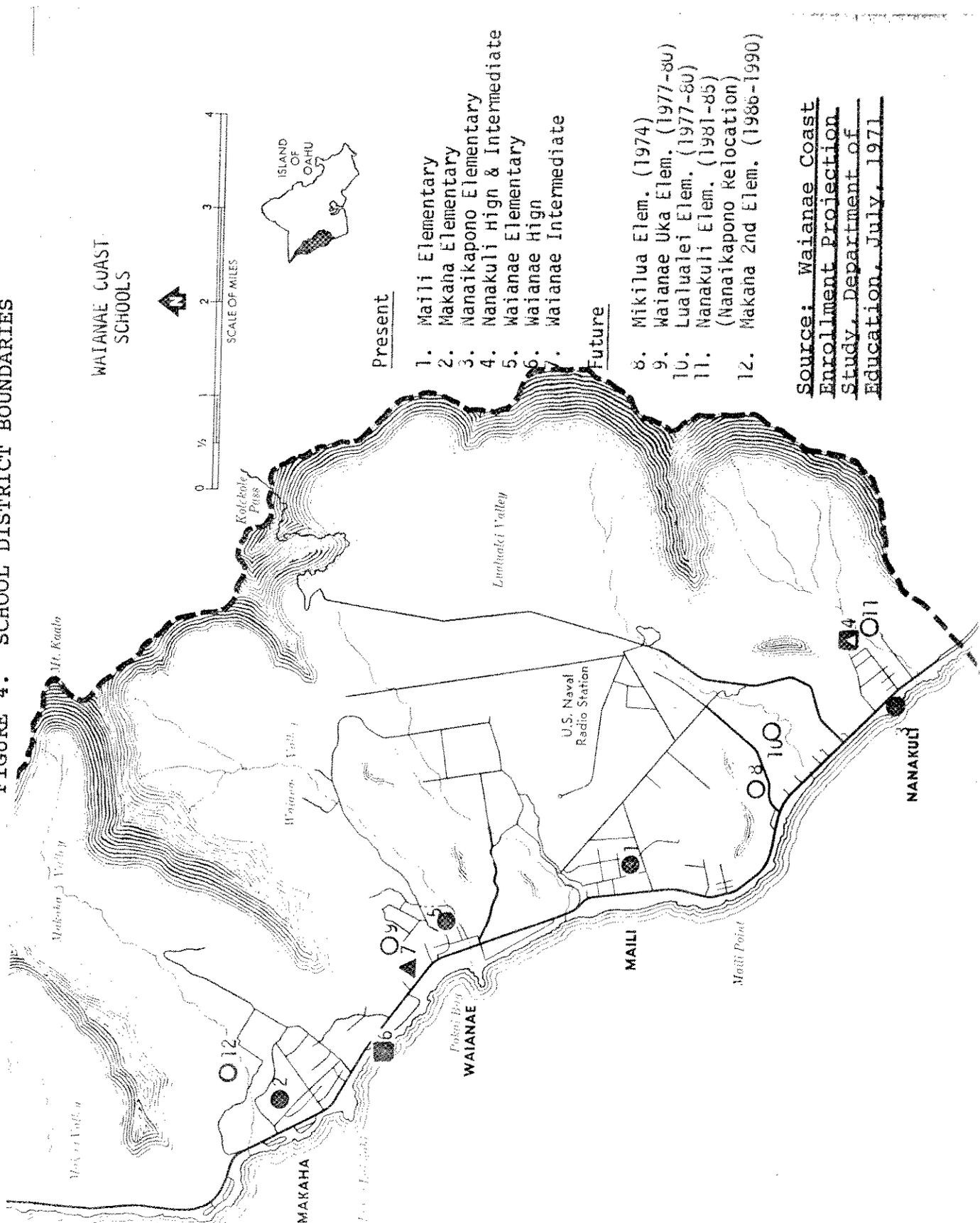
Refuse Disposal. The Refuse Division, Department of Public Works, City and County of Honolulu provides regular refuse collection and disposal services to existing residences in the surrounding area.

Community Action Facilities. The Waianae-Nanakuli area is part of the Model Cities Project (basically funded by the Federal government). Over several years, monies available from the Model Cities Project and the City and County of Honolulu have been used to upgrade the social and economic situation of the residents in the area. Various community oriented facilities have been established and several are within Waianae City or are accessible to the Waianae-Nanakuli area. These facilities include: drug clinics, medical and dental clinics, group homes, job training centers, rap centers, and a day-care facility.

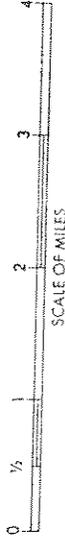
Schools. Several public schools service the existing residential area. (See Figure 4, School District Boundaries.) Waianae Elementary is located approximately 1.5 miles from the site. The State Department of Education's current enrollment for this school during 1974-75 is 1,143.<sup>10</sup> Waianae Intermediate School is located approximately 2.1 miles away from the site (in the Makaha direction from Farrington Highway); Waianae High School is approximately 2.7 miles away, also in the Makaha direction. The enrollment projections for 1974-1975 are 922<sup>11</sup> for Waianae Intermediate School. Waianae High School's present enrollment is 1,579.<sup>10</sup> Waianae Elementary School presently exceeds the Department of Education's desired enrollment figure. No new schools are proposed for the next five years. See letter, Exhibit B, dated February 5, 1975 from the Department of Education.

Recreational Facilities. There are 2 major recreational areas available within 2 miles of the site. Pililaaui Playground is 12.3 acres in size providing facilities for field activities (e.g., football, baseball), tennis and basketball (courts), and children playground apparatus. Pililaaui Playground is approximately 1.3 miles away from the project site. Pokai Bay Beach Park is several blocks makai of Pililaaui Playground across Farrington Highway. The park is popular in the Waianae area with swimming, snorkeling, fishing, boating, and picnicking activities. Boat launching ramps are also available at Pokai Bay. Other beach parks along the Waianae Coast can also be found within a 10-mile radius of the site.

FIGURE 4. SCHOOL DISTRICT BOUNDARIES



WAIANAЕ COAST  
SCHOOLS



Present

1. Maili Elementary
2. Makaha Elementary
3. Nanaikapono Elementary
4. Nanakuli High & Intermediate
5. Waianae Elementary
6. Waianae High
7. Waianae Intermediate

Future

8. Mikilua Elem. (1974)
9. Waianae Uka Elem. (1977-80)
10. Lualuaki Elem. (1977-80)
11. Nanakuli Elem. (1981-85)  
(Nanaikapono Relocation)
12. Makaha 2nd Elem. (1986-1990)

Source: Waianae Coast  
Enrollment Projection  
Study, Department of  
Education, July, 1971

Public Safety and Protection. Both police and fire protection services are available to the site: Waianae Police Station is located approximately two miles from the site along Farrington Highway; Waianae Fire Station is also located along Farrington Highway.

Transportation. The existing highway system serving the Waianae district consists of Farrington Highway, Plantation Road, Waianae Valley Road, and Lualualei Homestead Road. Vehicle usage generated by the existing, adjacent residential areas primarily utilizes Waianae Valley Road, a 44-foot right-of-way roadway, and Farrington Highway. In 1972, the average maximum (two way traffic) counts were 16,340 for Farrington Highway and 3,216 for Waianae Valley Road. The present roadway system adequately handles the traffic generated in this area.

Eased on the future highway system plan with proposed widenings and extensions, the highway network will have sufficient capacity to accommodate all of the anticipated traffic volumes. Farrington Highway, between Waianae and Makaha, is presently a 2-lane highway but will be widened by the State to a 4-lane highway. Waianae Valley Road is also to be widened (as an improvement district) to an 80-foot right-of-way roadway. No definite scheduling or dates have been set for these road widening proposals. ✓

Public bus transportation ("TheBus") is available along Farrington Highway. There are several school bus stops located along Waianae Valley Road. ?

#### F. Environmental Considerations

Air and Noise Pollution. The State Department of Health has no air or noise pollution data for this area. It was determined, from a review of adjacent land uses, that the rural character of this area produce minimal amount of air pollution. Additionally, the meteorological and topographical character of the area dilutes and/or carries away the small amounts of air pollutants generated. Some fugitive dust is created by vehicles traveling along privately owned dirt roads; these unpaved roads are not scheduled for improvement and will continue to remain in use for an indefinite period. In general, the air quality of this area is good.

The area is quiet. The noises heard are primarily those from passing vehicles along Waianae Valley Road.

Occasionally, there are odors generated from livestock raising activities in adjacent areas.

Water Pollution. The stream and drainageways are traditionally dry, subject to flow only during intermittent periods. There is a remote potential for water pollution in the area from the cesspools utilized by adjacent residences for sewage disposal.

In addition, liquid and solid wastes generated by animals can be considered potential sources of pollution during the wet seasons.

G. Private Utilities and Commercial Facilities

Telephone and electric lines service the immediate residential areas. Additionally, a television cable system is available to the area.

Drugstores, general merchandise stores, grocery markets, restaurants, service stations, bakeries, banks, and other specialized shops and services are available along Farrington Highway, about 1.6 miles from the project site.

### III. PROBABLE ENVIRONMENTAL IMPACT OF THE PROPOSED PROJECT

#### A. Flora and Fauna

Site and construction work will eliminate the present flora and fauna. This is not anticipated to be an adverse affect due to the exotic nature of the flora and fauna and because environments of similar nature exist in other parts of Waianae Valley. Avifauna may be temporarily affected by site work and construction; however, as in many other cases, the avifauna return and adapt to the residential setting of the area.

#### B. Topography and Microclimate

The geology, soils and microclimate would not be altered by the implementation of the proposed project.

#### C. Socio-Economic Aspects

Land Use. The land use of the site will change from agricultural use to residential use. Over the years very little intensive use of the lands have been made for agricultural purposes. Being Hawaiian Homes Commission lands, they were intended for eventual development into houseslots. The residential use of this land is not anticipated to alter the land uses of the surrounding areas. No dwellings or structures exist on the site.

Community Profile. The community profile of Waianae City as indicated on page 8b will be altered. The increase in population will be noticeable. Based upon Department of Hawaiian Home Lands' calculations, there is an occupancy rate of 6.0 persons per dwelling in homestead projects. A population increase of 3,000 persons (500 units x 6.0 persons/unit) of Hawaiian ancestry will alter the following socio-economic aspects:

1. The number and percentage of persons of Hawaiian ancestry;
2. The occupancy per dwelling units; and
3. The housing characteristics (e.g., age of dwelling, value, number of rooms, ownership).

Other socio-economic characteristics such as age group, income and employment may also change; however, at this time the direction of this change (increase or decrease) and its magnitude is not known.

#### D. Governmental Facilities and Services

Water Supply. The existing 12-inch water line along Waianae Valley road will provide water to the project. In the second phase, however, an off-site storage tank of 500,000 gallons is required by the Board of Water Supply to provide the amount of water needed during emergencies (e.g., fires) and peak hour uses. The

Board of Water Supply has approved the proposed plans for connecting to and use of the existing water line. Although water is available for this project, it should be noted that the area between Nanakuli and Makaha is a water deficit area and water must be conveyed from outside sources to supplement the area's sources of supply. Presently, approximately two million gallons per day of water is being transported from the Pearl Harbor area to supply the Waianae Coast.

Sewage Disposal System. The State Department of Health has approved the project's plans for utilizing cesspools to dispose of the sewage generated by this project. Knowledge of the geology and of the cesspools in the existing area indicates that the potential for leaching from these new cesspools is a remote one.

Refuse Disposal. The Refuse Division, Department of Public Works, City and County, will provide regular pickup and disposal services to the project.

Community Action Facilities. As residents of the Waianae area, the facilities provided by the State and City and County will be available to them.

Schools. At this time, detailed age breakdown on future residents and the number of school age individuals are not available. See letter, Exhibit B, from the Department of Education, February 5, 1975. Accommodation of these additional students in the public schools must be made; this accommodation (especially at the elementary school level) will necessitate some adjustments by the Department of Education. As plans are finalized, the Department of Education will be assessed as to the number of students generated by the project and the time schedule of the project, to insure that school facilities are available to adequately accommodate these new pupils.

A parcel of land within the project has been reserved for school use. However, according to the Department of Education, this site is not within their present six-year budget and the site will not be developed (for a school) prior to 1980.

Due to the distance from the schools, it is likely that bus transportation to and from schools must be provided. School bus service is available; it is also likely that this project will increase the number of buses necessary to transport students to and from school.

There will be an impact on the schools in the area. Since the families moving into the area are already established on other parts of Oahu (including Waianae), the basic problem lies in the reallocation of students from other parts of the Island to the Waianae school system. Adjustments to school facilities such as increases in teaching personnel, new physical structures, supplies, etc. is necessary; any improvements must eventually be funded by the State.

The impact of this project on the schools may be assessed in terms of the social impact: the creation of a higher enrollment situation in the schools; the enrollment of a greater percentage of individuals of Hawaiian ancestry; the possible conflicts with other groups; and the expenditure of State funds (amount unknown) to accommodate students generated by this project.

Recreational Facilities. The two recreational areas previously mentioned, Pililaaui Playground and Pokai Bay Beach Park, are not within a reasonable walking distance from the site. It is expected that access to these areas from the project site will be primarily by automobile. On-site mini-parks would be available to residents of the project. It is anticipated that the playground beach park and on-site mini-parks will be utilized by residents of this project; no significant stress on existing public recreational areas should be noted.

Public Safety and Protection. Both police and fire protection are available to the site and will be provided by the existing fire and police stations located in the district. No significant impact or stress on these emergency oriented agencies is foreseen.

Transportation. Based upon the "Traffic Impact Statement," prepared by Henry Tuck Au for the proposed project, the vehicles generated by the project will not adversely affect or congest the present transportation system. The existing 44-foot right-of-way Waianae Valley Road will adequately accommodate the estimated number of trips generated (8.0 trips per dwelling unit). The future expansion of this roadway to an 80-foot right-of-way when implemented will further improve the traffic capacity of this roadway.

Additionally, no significant congestion at the intersection of Waianae Valley Road and Farrington Highway is anticipated. There will be two routes available to vehicles to enter or exit from Farrington Highway to the project site. It is expected that vehicles will equally distribute themselves among the two intersections and this will adequately handle the increased traffic flow.

A summary of the traffic report is provided in Appendix I, along with the estimated trip generation data prepared.

#### E. Environmental Considerations

Air and Noise Pollution. It is not anticipated that the project will generate significant amounts of air and noise pollution. In both cases, vehicles would be the prime producer of air pollutants and noise. However, even with this increase of vehicles, it is felt that the residential setting will be similar to other suburban residential areas and will not produce significant vehicular emissions or generate excessive noise.

The residents of the project may occasionally smell odors generated by livestock raising activities in the adjacent agricultural-1 zoned areas. Although the extent of this annoyance cannot be predicted, it is felt that this aspect would not be a significant source of irritation to future residents.

Water Pollution. The proposed drainage system will consist of subterranean pipes which will discharge into Kaupuni Stream. Plans for the drainage system have been approved by the City and County Department of Public Works. The proposed project may adversely affect water quality in the following ways:

1. Leaching from new cesspools during the wet seasons.
2. Increase in storm water runoff (due to increased hard surfaces) will be diverted into Kaupuni Stream.

Private Utilities and Commercial Facilities. No adverse impact is foreseen in this area. Private utilities and commercial facilities are available and can accommodate the needs of the project's residents. Increase in sales volume is foreseen due to the increase in the number of families living within the area.

F. Construction Impacts

During the construction period, several noticeable environmental impacts will occur:

1. Increased traffic on Waianae Valley Road due to the transporting of equipment, supplies and materials to and from the project site.
2. Fugitive dust and noise would also be generated by construction and related activities.

It is also noted that all site work and construction activities will adhere to existing standards on noise, dust, solid waste disposal, and water pollution.

IV. POSSIBLE SIGNIFICANT ADVERSE IMPACT  
OF THE PROPOSED PROJECT

It is difficult to qualify the meaning of "significant adverse impacts." If the meaning is determined to be those environmental impacts which exceed the Federal, State and/or County standards, then none of the environmental impacts of this proposed project would qualify as significant adverse impacts. If the meaning is determined to be those environmental impacts which produce negative environmental results, then a review of Section III of this report provides the information.

V. ALTERNATIVES TO THE PROPOSED ACTION

A. No Action

If the project is not implemented, the existing conditions indicated in Section II would continue. The objectives of the project would not be accomplished and the Department of Hawaiian Home Lands would evaluate the land for other uses.

B. Agricultural Use of the Site

The site could continue in agricultural use instead of being developed for residential use. This would mean that the present low productivity of the land would continue and the site would remain in pasturage use. This would also allow the site to remain in open space and be considered for other development options at a later date.

C. Changes in the Scope of Project

Another alternative may be to reevaluate the number of units, houselots, sizes or to revise street designs, etc. This would not significantly eliminate those impacts discussed in Section III and therefore, could not be considered a true alternative.

*alternative jobs*

VI. RELATIONSHIP BETWEEN THE LOCAL SHORT-TERM USES  
OF MAN'S ENVIRONMENT AND THE MAINTENANCE  
OF LONG-TERM PRODUCTIVITY

Both the short-term and long-term uses and benefits of this project will be to provideouselots for individuals of Hawaiian ancestry, for purposes cited in the Hawaiian Homes Commission Act of 1920. Homes will be established on theseouselots for approximately 500 families of Hawaiian ancestry.

VII. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Commitment of resources include land, building materials and labor, and residential use of the parcel. Building materials and labor will be irretrievable for all practical purposes. It is felt that residential use of this land would be for long-term commitment of the site for urban use.

FOOTNOTES

1. Hawaiian Homes Commission Act, 1920 (Act of July 9, 1921, c.42, 42 Stat. 108).
2. Prepared by Arthur Y. Akinaka, Ltd., December 18, 1972. The land is presently owned by the State of Hawaii. The houselots developed will be provided to qualified applicants of Hawaiian ancestry.
3. Paragraphs one through three were primarily taken from "Waianae Residence Lots - Unit I, Hawaiian Home Lands, Preliminary Soil Report," Walter Lum Associates, Inc., July 5, 1974.
4. "Atlas of Hawaii," Department of Geography, University of Hawaii, 1973, page 72. (Avifauna according to the distribution and relation to vegetation types.)
5. Walter Lum Associates, Inc., July 5, 1974, pages
6. "Average Monthly Rainfall Maps," prepared by Meteorology Department, Pineapple Research Institute and Experiment Station, Hawaiian Sugar Planters Association in cooperation with the U. S. Weather Bureau.
7. Data obtained from the National Weather Service, U. S. Department of Commerce for the Waianae District.
8. See Exhibit A.
9. Prepared in 1972.
10. Letter from Mr. Koichi Tokushige, Assistant Superintendent, Department of Education, dated February 5, 1975. See Exhibit B.
11. Department of Education, State of Hawaii, Enrollment Projections of Public Schools in Hawaii 1974 to 1979, March 1, 1974.

ADDRESS REPLY TO  
"ATTORNEY GENERAL OF HAWAII"  
AND REFER TO  
INITIALS AND NUMBER

NSWC:my  
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DEPT. OF HAWAIIAN  
HOME LANDS

OCT 2 4 45 PM '72

Op. No. 72-21

STATE OF HAWAII  
DEPARTMENT OF THE ATTORNEY GENERAL  
HAWAII STATE CAPITOL  
4TH FLOOR  
HONOLULU, HAWAII 96813

October 2, 1972

Mr. William G. Among, Chairman  
Department of Hawaiian Home Lands  
State of Hawaii  
530 Halekauwila Street  
Honolulu, Hawaii

Dear Mr. Among:

This is in response to your question as to whether the counties may "zone" Hawaiian home lands.

We understand the question arose as a result of a rezoning action by the County of Hawaii of certain Hawaiian home lands situated at Keaukaha, Hilo, Hawaii, from residential to light industrial use. The rezoning action was requested by the Commission because of the threat of tsunami and aircraft accidents as well as noise and sewage pollution. We further understand that the Department of Hawaiian Home Lands has in the past requested the counties to change the land use designation of other Hawaiian home lands.

As a general rule, the counties must derive their power to zone from some expressed or implied delegation of such power from the State. Aside from the question of implied power, the Legislature has granted the counties zoning powers by enacting Act 234, Session Laws of Hawaii 1957, as codified in Section 46-4, Hawaii Revised Statutes. It is noted that county charters provide for the exercise of zoning powers also. Honolulu Charter, Chapter 5; Maui Charter, Chapter 6; Kauai Charter, Article XIV; Hawaii Charter, Chapter IV.

However, the zoning powers of the counties are subject to Act 187, Session Laws of Hawaii 1961, as codified in Chapter 205 of the Hawaii Revised Statutes. Act 187 provided for and created a state Land Use Commission which has been empowered to classify land in the State into four major land use districts:

Mr. William G. Among  
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urban, rural, agricultural and conservation. To the extent provided in Section 46-4, Hawaii Revised Statutes, the counties are still permitted to enact zoning regulations within the districts designated by the Commission, except within conservation districts. The Department of Land and Natural Resources has the power under Section 183-41, H.R.S., to enact regulations within conservation districts.

With reference to Hawaiian home lands, however, the statutes are silent.<sup>1/</sup> On the other hand, Section 204 of the Hawaiian Homes Commission Act of 1920 provides:

" . . . all available lands shall immediately assume the status of Hawaiian home lands and be under the control of the department to be used and disposed of in accordance with the provisions of this title . . . ." (Underscoring added)

Said section further provides:

"In the management of any retained available lands not required for leasing under section 207(a), the department may dispose of such lands by lease or license to the general public, including native Hawaiians, on the same terms, conditions, restrictions and uses applicable to the disposition of public lands as provided in chapter 171; provided, that the department may not sell such lands in fee simple except as authorized under section 205 of this Act."

Section 207 of the Act authorizes the Department of Hawaiian Home Lands to lease to native Hawaiians as defined herein the right to the use and occupancy of Hawaiian Home lands for "agricultural", "pastoral" and "residential" purposes and also to grant licenses to public utilities and others for various purposes.

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<sup>1/</sup> Indeed no state statute nor county ordinance or county charter provisions can affect such lands unless in conformity with the Hawaiian Homes Commission Act of 1920, which was adopted as a compact with the United States as a provision of the Constitution of the State of Hawaii (Article XI, Section 3).

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We further note that Section 206 of the Act provides:

"The powers and duties of the governor and the board of land and natural resources, in respect to lands of the State, shall not extend to lands having the status of Hawaiian home lands, except as specifically provided in this title."

In this latter connection, Section 212 of the Act provides:

"The department may return any Hawaiian home lands not leased as authorized by the provisions of section 207 of this title to the control of the board of land and natural resources. Any Hawaiian home lands so returned shall, until the department gives notice as hereinafter in this section provided, resume and maintain the status of public lands in accordance with the provisions of the [Hawaii Revised Statutes], except that any such lands may be disposed of under a general lease only. Each such lease, whether or not stipulated therein, shall be deemed subject to the right and duty of the board of land and natural resources to terminate the lease and return the lands to the department whenever the department, with the approval of the Secretary of the Interior, gives notice to the board that the department is of the opinion that the lands are required by it for leasing as authorized by the provisions of section 207 of this title or for a community pasture."

The legislative history of the Act provides further insight into the nature of the control given the Commission. The Congressional Record, 66th Congress, 2d Session, page 7495, reveals the following colloquy between two lawmakers:

Mr. Walsh. Will there be duties conflicting in any way, or has provision been made in this bill for any possible conflict between the duties to be performed by this commission and any other governmental agencies either of the Territory of Hawaii or the government of the United States?

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As I understand these are public lands in a sense. Now, is there provision in the bill which will prevent any possibility of a conflict?

Mr. Dowell. . . . There is a public land commissioner in Hawaii whose duty it is to have charge of the public lands. Under this bill certain specific lands are withdrawn from his jurisdiction and from the jurisdiction of every commission except the special one to have charge of these specific lands described in the bill, and those lands are exclusively by the terms of the bill under the control of this commission. (Emphasis supplied.)

Mr. Walsh. If the gentleman will permit, if I understand correctly, some of the lands are already under the jurisdiction of the existing land commissioner?

Mr. Dowell. All of them are.

Mr. Walsh. Now some of these restrictions in his jurisdiction, and power over them is vested in the new commission.

Mr. Dowell. That is correct.

A review of the pertinent provisions of the Hawaiian Homes Commission Act indicates that the congressional intent was to create a class of lands separate and distinct from other public lands, to be utilized for the rehabilitation of the Hawaiians and to vest control over the use of such lands in the Commission and not in any other governmental agency. (See Sections 204, 205, 206, 207, 208, 209 of the Hawaiian Homes Commission Act.)

We further note, however, that in the management of retained available lands not required for leasing under Section 207(a), the Department could dispose of such lands by lease or license as provided by Chapter 171, H.R.S., for the disposition of public lands, and Chapter 171 requires in certain cases that county zoning regulations be complied with. Accordingly, where the Hawaiian Homes Commission has determined that certain Hawaiian home lands are not needed or required for purposes of the Act, there appears to be no reason why county zoning regulations should not apply to such lands.

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We are advised that the Department has from time to time in the past applied to the counties for the rezoning of Hawaiian home lands. It has been suggested that such administrative practice is a clear indication of how the Act should be interpreted with reference to the power of counties to "zone" Hawaiian home lands. However, we do not believe that such administrative action is controlling in the interpretation of the Hawaiian Homes Commission Act. As stated in Frank Nichols, Limited v. Vannatta, 33 Haw. 602, 606 (1935):

" . . . neither official construction nor usage no matter how long indulged in, can be successfully invoked to defeat the purpose and effect of a statute which is free from ambiguity, nor will the courts be influenced by the construction placed upon a statute by the officials whose duty it is to execute it where such construction is manifestly incorrect."

We believe that the wording of the Hawaiian Homes Commission Act indicates that control of Hawaiian home lands is vested in the Department of Hawaiian Home Lands and that subjecting Hawaiian home lands needed for purposes of the Act to county land use regulations would be contrary to the purpose of the Hawaiian Homes Commission Act. Although the weight that may be given by the court to the long-standing practice in this case cannot be predicted with precision, on balance, it is our opinion that the past practice of the Department in seeking county rezoning action is not controlling in interpreting the Act, based upon Frank Nichols, Limited v. Vannatta, supra.

Since past administrative practice in seeking county rezoning actions may not be invoked to defeat the purpose and effect of the Hawaiian Homes Commission Act, we believe that Section 204 of the Act is controlling with reference to the use of Hawaiian home lands. Thereunder, it is the Department that has the right to say how Hawaiian home lands needed or required for purposes of the Act are to be used and disposed of within the scope of the Act, and any zoning ordinance purporting to change the land use designation or to impose restrictions on the use of such Hawaiian home lands would be outside the scope of any power granted to counties.

As earlier noted, however, a different conclusion applies where the Commission has determined that certain lands

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are not required for purposes of the Act. In this latter situation, such lands could be subjected to county zoning regulations.

In the instant case, we believe that the Commission's action of requesting and initiating the rezoning was tantamount to a finding that the Hawaiian home lands in question were no longer needed or required for purposes of the Act. Because of the Commission's finding, it is our opinion that the County of Hawaii was authorized to rezone the lands from residential to light industrial use and may also continue to exercise zoning powers over such lands; however, should the Commission subsequently determine that those lands are again needed or required for purposes of the Act, the authority of the County of Hawaii to zone those lands will terminate.

Very truly yours,

*Nelson S. W. Chang*  
NELSON S. W. CHANG  
Deputy Attorney General

APPROVED:

*George Pa.*  
GEORGE PAI  
Attorney General



STATE OF HAWAII

DEPARTMENT OF EDUCATION

P. O. BOX 2380  
HONOLULU, HAWAII 96804

OFFICE OF BUSINESS SERVICES

February 5, 1975

Environmental Communications, Inc.  
225 Queen Street  
Honolulu, Hawaii 96813

Gentlemen:

Subject: Environmental Impact Statement  
Waianae Valley Road Homestead Subdivision

This is in reply to your letter of January 30, 1975, requesting our review of the impact on public schools if the subject project is approved. Our comments are directed to concerns of possible overcrowding and planning for additional facilities.

Enrollment Projection

We anticipate the need to serve the following enrollment from the subject project:

<u>School</u>	<u>Grades</u>	<u>Approximate Enrollment From 500 Houselots</u>
Waianae Elementary	K-6	300-350
Waianae Intermediate	7-8	70-100
Waianae High	9-12	140-180

Waianae Elementary

Enrollment is down substantially from the 1300-1700 level of the early 1960s but still exceeds the desirable maximum of 800-1000 students. The current enrollment is 1143 students.

We project an enrollment of approximately 1250-1300 students by 1980, assuming that approximately 400-500 additional housing units (including a portion of the subject development) will be constructed in the school service area.

Environmental Communications, Inc.

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February 5, 1975

The school can accommodate 1300-1350 students with existing facilities; however, adjustments will be required to relocate non-teaching activities temporarily housed in some of the classrooms.

Waianae 2nd Elementary

There are no immediate plans to construct an additional elementary school to serve the area in and around Waianae Town. However, two possible sites for a future school are under active consideration for future development. One possibility is the proposed site in the subject 500-unit Hawaiian Homes development. The other is a 10-acre site tentatively designated within Waianae Kai Subdivision (adjacent to Lualualei Homestead Road). Development of a school site will involve continuous evaluation of the enrollment situation, detailed study of various alternative sites, and appropriation of funds required for planning and construction.

The Department of Education's current biennium budget submission did not include an appropriation request for a new school in Waianae. A low priority is necessary because of the backlog of CIP requirements to meet existing needs in the Leeward District. Priority is also affected by the uncertainty as to when proposed housing developments in the Waianae area will proceed.

In the event that enrollment growth cannot be accommodated with existing facilities or occurs prior to construction of additional permanent facilities, it may be necessary to use portable classrooms or temporary lease of house shells for classrooms.

Waianae Intermediate

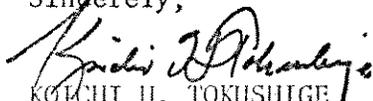
There is adequate permanent capacity to accommodate up to 300-350 additional grade 7-8 students. There should be no problem in accommodating the subject development.

Waianae High

The present enrollment of 1579 students is accommodated with 48 permanent and 20 portable classrooms. Enrollment is projected to reach 1700 students within three to four years. The school has been designed to accommodate in excess of 2000 students and the current DOE's biennium budget includes \$948,000 request for 10 classrooms, planned for construction by 1977.

The subject 500-unit development will add to the enrollment at Waianae High; however, the construction schedule and the occupancy of the units will determine whether the enrollment increase can be accommodated with the new 10-classroom building or whether additional portable classrooms will be needed.

Sincerely,

  
KOICHI H. TOKUSHIGE  
Assistant Superintendent  
Office of Business Services  
KIT:JEE:yk

cc: Leeward Oahu District  
Dept. of Hawaiian Home Lands  
Office of Environmental  
Quality Control

HENRY TUCK AU  
CONSULTING ENGINEER  
~~ATTORNEY AT LAW~~  
HONOLULU, HAWAII 96813 SUITE 507, 33 S. KING ST.  
TELEPHONE 538-7237

February 3, 1975

Mr. Fred Rodriguez, President  
Environmental Communications, Inc.  
P. O. Box 536  
Honolulu, Hawaii 96809

Dear Mr. Rodriguez:

Subject: Comments On Traffic And Transportation  
Draft Environmental Impact Statement  
Waianae Residence Lots Subdivision

Submitted herewith are the disposition of comments on traffic and transportation relating to the Waianae Residence Lots Subdivision.

1. Department of Transportation, State of Hawaii

COMMENT: The average maximum counts reported on page 11 may have been erroneously reported as one-way counts. The 16,340 VPD value reported seems more like a two directional point count.

DISPOSITION: The counts reported on page 11 were erroneously reported as one-way counts. The 16,340 VPD value is a two-way count on one leg of Farrington Highway. Being a two-way count, the actual traffic volume is not as critical as set forth in the Draft Environmental Impact Statement. Since the actual traffic volume is only 1/2 of the value stated in the report, the actual traffic volume, therefore, should support and favor the development of the Waianae Residence Lots Subdivision.

COMMENT: The statement on page 18 that vehicles generated by the project will not adversely affect or congest the present transportation system is debatable. In our judgment, estimated future volume of 7,000-9,000 VPD will congest Waianae Valley Road during peak periods.

DISPOSITION: Judgment must be accompanied by factual data to support the contention that Waianae Valley Road will be congested during peak periods.

In the preparation of the Traffic Impact Statement, traffic estimates and projections made by the Consultant were compared with the traffic volume information and data contained in the report "Highway Functional Classification and Needs Study, State of Hawaii 1970-1990", of the State Department of Transportation.

This State Department of Transportation study determined the future highway needs based on estimates of growth, the distribution of population, motor vehicle registration and use and the economic development of the State. The latest land use planning maps and information of each county were also obtained and evaluated. These major items or factors were investigated and analyzed and all highways, roads and streets in the State of Hawaii were reclassified in accordance with existing and anticipated use. The traffic volumes estimated for 1990 were then assigned to the highway network. Based on this study, the 1990 assignment on Waianae Valley Road was only 2,463. The latest estimate of 7,000-9,000 VPD is considerably higher than the 2,463 VPD. How was this latest estimate derived?

Even if the estimated future volume of 7,000-9,000 VPD is accepted as being correct, the peak hour volume will not be very high. This is best illustrated on page 38 of the "Highway Capacity Manual". Two rural highways in the same State were compared. Both highways had an annual average volume of 7,200 VPD; yet the peak hour volumes on Road A were much higher than those of Road B due to greater fluctuation of traffic. The maximum hourly volume on Road A was 2,462 whereas the maximum hourly volume on Road B was only 988. The peak hour volume of 988 vehicles is within the capacity of a 44 ft. roadway.

It must be emphasized the residents of Waianae Valley Road must travel more than 20 miles to work in Honolulu. The workers must be on the road between 5:00 to 6:00 A.M. These are hours when the traffic volumes on the major highways are not congested.

2. Office of Environmental Quality Control. State of Hawaii

COMMENT: The Department of Public Works, City and County of Honolulu, states that the, "Widening of the Waianae Valley Road as an improvement district project . . . is unlikely in the near foreseeable future". The DEIS should incorporate this correction as appropriate.

DISPOSITION: This statement was made on the erroneous assumption that Waianae Valley Road, in order to accommodate the traffic generated by the Waianae Residence Lots Subdivision, must be widened to 80 ft. as shown on the General Plan so that an improvement district for the widening becomes necessary.

The Consultant questions whether the improvement district and/or widening to a 80 ft. right of way is really necessary. What was the basis used by the Planning Department to justify the establishment of the 80 ft. roadway? In the opinion of the Consultant, a 56 ft. roadway would be very adequate.

As set forth in the "Traffic Impact Statement", the peak hour volume generated by the development is 336, whereas the capacity of a 44 ft. roadway, with no parking and at grade intersection is approximately 600 vehicles per hour in one direction and 900 vehicles for both directions. If the roadway is widened to 80 ft. the capacity will be increased to approximately 1,300 vehicles per hour in one direction and 1,950 for both directions.

The existing roadway with its 44 ft. right of way, therefore, will have sufficient capacity to accommodate all of the anticipated traffic volume.

COMMENT: How frequently does "the Bus" come along the Waianae Valley Road?

DISPOSITION: "The Bus" does not travel on Waianae Valley Road. Waianae Valley Road is served by the "Bus" traveling on Farrington Highway. Average headway is 60 minutes, but the peak hour headway is 30 minutes. Bus service to Waianae is expected to be improved as funds and equipment become available.

COMMENT: The statement: "The existing 44-foot right of way Waianae Valley Road will adequately accommodate the estimated number of trips generated (8.0 trips per dwelling unit)" is argumentative. The "Traffic Impact Statement" used the future 80' Waianae Valley Road not the 44'.

DISPOSITION: The analysis in the "Traffic Impact Statement" was based on both the present 44' Waianae Valley Road and the proposed 80' roadway. It would have been ridiculous and inconsistent on the part of the Consultant to use an 80' roadway to conclude that the existing 44 ft. (not 80') right of way will adequately accommodate the estimated of trips generated.

As set forth in the "Traffic Impact Statement" the peak hour volume generated by the Waianae Residence Lots Subdivision is 336, whereas the capacity of a 44 ft. roadway, with no parking and at grade intersection is approximately 600 vehicles per hour in one direction and 900 vehicles for both directions. If the roadway is widened to 80 ft., the capacity will be increased to approximately 1,300 vehicles per hour in one direction and 1,950 for both directions.

The existing roadway with its 44 ft. right of way, therefore, will have sufficient capacity to accommodate all of the anticipated traffic volume.

COMMENT: All other conclusions here were based on the future highway system which the City and County says is ". . . unlikely in the near foreseeable future".

DISPOSITION: It is definitely untrue that all other conclusions were based on the future highway system. As stated above, the analysis in the "Traffic Impact Statement" was based on both the present 44' Waianae Valley Road and the proposed 80' roadway.

The Consultant questions whether the improvement district and/or widening to a 80' right of way is really necessary. In fact, what was the basis used by the Planning Department for the establishment of the 80 ft. roadway? In the opinion of the Consultant, a 56 ft. roadway would be very adequate.

3. City and County of Honolulu. By Kazu Hayashida, Director & Chief Engineer.

COMMENT: Widening of the Waianae Valley Road as an improvement district project by the City is unlikely in the near foreseeable future. A sum of \$10,000, provided in Act 218, SLH 1974 (Item 70, Aid to Counties) is sufficient only for an engineering survey. No City funds are earmarked for this State project.

DISPOSITION: Until the basis used by the Planning Department to justify the establishment of the 80 ft roadway is known, there will continue to be the erroneous assumption that Waianae Valley Road, in order to accommodate the traffic generated by the Waianae Residence Lots Subdivision, must be widened to 80 ft. as shown on the General Plan, so that an improvement district for the widening becomes necessary.

The Consultant questions whether the improvement district and/or widening to a 80 ft. right of way is really necessary. In the opinion of the Consultant, a 56 ft. roadway would be very adequate.

As set forth in the "Traffic Impact Statement", the peak hour volume generated by the development is 336, whereas the capacity of a 44 ft roadway, with no parking and at grade intersection is approximately 600 vehicles per hour in one direction and 900 vehicles for both directions. If the roadway is widened to 80 ft., the capacity will be increased to approximately 1,300 vehicles per hour in one direction and 1,950 for both directions.

The existing roadway with its 44 ft. right of way, therefore, will have sufficient capacity to accommodate all of the anticipated traffic volume.

4. University of Hawaii, Environmental Center.

COMMENT: Regarding the traffic impact study, how can a real appraisal be made of the impact of change in the energy situation when the basic data only go to 1972?

DISPOSITION: The traffic impact study projected the future traffic volumes and conditions as if no energy crisis existed. Motor vehicle registration and traffic volumes were assumed to continue to increase. This was made to assure that a sufficient margin of safety was built into the study.

The impact of change in the energy situation was mentioned to stress and to call attention to the beneficial effects that may be derived from the energy crisis. With an energy crisis, the traffic volumes projected for the future in the "Traffic Impact Statement" will be reduced considerably. The energy crisis, therefore, should bring about considerable relief to our future traffic problems.

The same question of how a real appraisal can be made of the impact of change in any other situation may also be directed to city planners. How can a city planner prepare comprehensive plans for the year 1992 when the basic data available go only to 1972? If a city planner is able to forecast for 1992, so can a traffic planner.

5. Department of Transportation Services. City & County of Honolulu

COMMENT: The existing 44-foot right-of-way Waianae Valley Road has pavement widths of 16 feet to 21 feet, and a significant increase in traffic will have an adverse effect on the existing roadway.

It should be noted that there were fifteen accidents reported on this road in 1973, and twelve accidents during the first ten months of 1974.

DISPOSITION: No factual data was given to indicate what constitutes a significant increase in traffic. Compared to other developments with 2,500 or more dwelling units, the traffic generated by the Waianae Residence Lots Subdivision with only 500 house lots is insignificant.

The existing Waianae Valley Road is basically a 44 ft.

roadway with varying pavement widths. The capacity of such a road, with no parking and at grade intersection is approximately 600 vehicles per hour in one direction and 900 vehicles for both directions. Thus the existing roadway does have sufficient capacity to accommodate all of the anticipated traffic volume. The traffic problem should be completely eliminated when the roadway is widened to a 80 ft. right of way. The question posed at this time by the Consultant is whether the 80 ft. right of way is really necessary.

The fact that there are traffic accidents on Waianae Valley Road does not affect the capacity of the roadway. The accidents do indicate that hazards exist on the roadway. Many of these accidents could be eliminated by simply applying basic principles, techniques and procedures proved effective by experience. Many possibilities exist in the operational field for reducing the accident potential on roadways. Significant improvements in traffic have been realized through the proper and judicious use of the basic tools of the traffic engineering profession, such as warning signs, speed limit signs and markings. The potential exist in the use of traffic engineering measures in reducing accidents without physical improvement of the roadway itself.

The Department of Transportation Services should immediately undertake measures to correct the traffic accident problem without waiting for an improvement district or the road widening. If minor improvements or rounding of corners are necessary, maintenance funds could be used.

Sincerely yours,



Henry Tuck Au  
Consulting Engineer

HTA:Jmh

## SUMMARY

1. The gross area of the Waianae Residence Lots Subdivision consists of 155.1 acres which will be subdivided into a maximum of approximately 500 house lots.
2. The subdivision will be designed for residents of moderate income, in harmony with their social and economic needs.
3. The energy crisis and with it the rising transportation cost will restrict the use of the automobile and curtail the mobility of the general public. Changes in the mode of travel has already taken place and will affect the overall traffic pattern.
4. The major highway system to serve Waianae District has already been planned, providing the District with a workable and well integrated system.
5. The peak hour volume generated by the subdivision will total 336 trips, and is considerably less than the capacity of a local street. As a comparison, the capacity of a local street with only a 44 feet right of way, with no parking and at grade intersection is approximately 600 vehicles per hour in one direction and 900 for both directions of travel.
6. All of the major streets are proposed on the Detailed Land Use Map for either a 56 or 80 feet right of way. For a major street with a right of way width of 80 feet, with no parking and at grade interscction, the capacity is approximately 1,300 vehicles per hour in one direction and 1,950 for both directions.
7. Based on the future highway system with the proposed widenings and extensions, the highway network will have sufficient capacity to accommodate all of the anticipated traffic volumes, including the traffic generated by the proposed Waianae Residence Lots Subdivision.
8. The Waianae Residence Lots Subdivision will make possible the achievement of desirable social and economic improvements for the area. The development is for residential purposes and will not add substantially to the traffic problems to create an adverse impact. Suburban living is thereby made available to an increasing number of the population of Hawaiian ancestry in need of housing, with an improvement in quality and environment.

## TRIP GENERATION

The traffic generated by the Waianae Residence Lots is directly related to number of housing units in the subdivision and can be estimated with reasonable accuracy from data relating to traffic generating characteristics appropriate for the area or district. For residential land uses, the trip and household characteristics must be analyzed since these are the primary factors affecting traffic flow and volume.

Inasmuch as traffic generation for the same types of land uses is surprisingly similar, it would be proper and reasonably accurate to assume that the trip and household characteristics of the Kaneohe-Kailua District of Windward Oahu would be applicable to this area. These are the latest data available and were collected in 1971 for the purpose of evaluating the effect on traffic of proposed and planned streets and highway improvements in the District.

Tables 2 to 4 show the trip and household characteristics that would be typical of the area. Each household may be expected to own 1.8 automobiles and generate 8 trips per day. The number of trips made for the purpose of work is fairly constant throughout the week. Using these various factors, it is possible to analyze traffic conditions that may be expected to occur on the highway network and thus measure the present and future demand for service.

Table 2  
TRIP CHARACTERISTICS

Trips Per Person	Trips To Work Per Employed Person	Trips Per Dwelling Unit
2.1 Range 0.7 to 2.9	0.7 Range 0.5 to 0.7	8.0 Range 3.2 to 12.0

Table 3  
HOUSEHOLD CHARACTERISTICS

Auto Per Dwelling Unit	Persons Per Dwelling Unit	Employed Persons Per Dwelling Unit
1.8 Range 1.6 to 2.0	4.1 Range 1.7 to 4.5	1.6 Range 1.1 to 1.9

Table 4  
CAR OCCUPANCY FACTORS

<u>Work</u>	<u>Shop</u>	<u>Other</u>	<u>Non-Home Based</u>
1.19	1.39	1.74	1.54

On the basis of these factors, the 24 hour and peak hour traffic volumes were developed for each increment as shown in Table 5, with cumulative totals as each increment is completed. The first increment of 150 units will generate a 24 hour volume of 1,200 trips and a peak hour volume of 101 trips in one direction. The completion of the four increments for a total of approximately 500 dwelling units will increase the 24 hour volume to 4,000 trips and the peak hour volume to 336 trips. The population for the entire subdivision will total approximately 2,050 persons.

Peak Hour Volumes

Peak hour traffic volumes are an important consideration in the design of highways. In this connection, work trips are important not only in their volume but also in the fact the majority of them are made during the morning and afternoon peak hours. For peak hour volumes generated by residential land uses, the work trips give a very good indication of the peak hour traffic flow.

Analysis of the 24 hour traffic volumes collected at the various intersections and sections of highways on the Island of Oahu shows that the morning peak traffic is usually concentrated within a two hour period from 6:00 a.m., whereas the afternoon peak traffic is concentrated within a longer period of 3 hours from 3:00 p.m. to 6:00 p.m. Thus, the afternoon peak hour is usually not as heavy nor as congested as the morning peak hour. The morning peak traffic demand, therefore, will govern the design or capacity of the streets, unless the afternoon peak hour volume exceeds the morning peak hour volume.

The peak hour volume is assumed to be approximately 60% of the total peak volume occurring within the 2 hour period between 6:00 a.m. to 8:00 a.m., with the remaining 40% occurring at the second hour. The actual peak hour percentage is slightly over 52%. However, the higher value of 60% was used to overload the roadway to determine if the roadway can

accommodate the higher peak hour volume without exceeding the traffic capacity. As an explanation, the capacity of a highway is a measure of its ability to accommodate traffic and is represented by the maximum number of vehicles that can be carried under prevailing roadway and traffic conditions. The peak hour volumes so estimated are shown in Table 5.

The peak hour volume of 336 trips is considerably less than the capacity of a local street. As a comparison, the capacity of a local street with a 44 feet right of way, with no parking and at grade intersection is approximately 600 vehicles per hour in one direction and 900 for both directions of travel. All of the major streets are proposed on the Detailed Land Use Map for either a 56 or 80 feet right of way. For a major street with a right of way width of 80 feet, with no parking and at grade intersection, the capacity is approximately 1,300 vehicles per hour in one direction and 1,950 for both directions.

Based on the future highway system with the proposed widening and extensions of streets, including the widening of Waianae Valley Road to an 80 feet right of way, the highway network as designated on the Detailed Land Use Map will have sufficient capacity to accommodate all of the anticipated traffic volumes. Farrington Highway between Waianae and Makaha presently is a two lane highway but will be widened by the State to a 4 lane highway.

### CONCLUSION

Based on the above analysis, it may be concluded the Waianae Residence Lots subdivision will make possible the achievement of desirable social and economic improvements for the area. The development is for residential purposes and will not add substantially to the traffic problems to create an adverse impact. Suburban living is thereby made possible to an increasing number of the population of Hawaiian ancestry in need of housing, with an improvement in quality and environment.

Table 5  
TRIP GENERATION

Increment	Construction Schedule	1.8		1.6		Cumulative Total	Work Trips	Cumulative Total	24 Hour Volume	Cumulative Total	A.M. Peak Hour Volume	Cumulative Total
		No. of Units	Cumulative Total	No. of Employed Persons	Cumulative Total							
1	1975	150	150	270	240	270	168	168	1200	1200	101	101
2	1976	100	250	180	400	450	112	280	800	2000	67	168
3	1977	57	307	103	491	553	64	344	456	2456	38	206
4	1978	193	500	347	800	900	216	560	1544	4000	130	336
Total		500		900	800		560		4000		336	

## SUMMARY.

1. The gross area of the Waianae Residence Lots Subdivision consists of 155.1 acres which will be subdivided into a maximum of approximately 500 house lots.
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7. Based on the future highway system with the proposed widenings and extensions, the highway network will have sufficient capacity to accommodate all of the anticipated traffic volumes, including the traffic generated by the proposed Waianae Residence Lots Subdivision.
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Peak hour traffic volumes are an important consideration in the design of highways. In this connection, work trips are important not only in their volume but also in the fact the majority of them are made during the morning and afternoon peak hours. For peak hour volumes generated by residential land uses, the work trips give a very good indication of the peak hour traffic flow.

Analysis of the 24 hour traffic volumes collected at the various intersections and sections of highways on the Island of Oahu shows that the morning peak traffic is usually concentrated within a two hour period from 6:00 a.m., whereas the afternoon peak traffic is concentrated within a longer period of 3 hours from 3:00 p.m. to 6:00 p.m. Thus, the afternoon peak hour is usually not as heavy nor as congested as the morning peak hour. The morning peak traffic demand, therefore, will govern the design or capacity of the streets, unless the afternoon peak hour volume exceeds the morning peak hour volume.

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### CONCLUSION

Based on the above analysis, it may be concluded the Waianae Residence Lots subdivision will make possible the achievement of desirable social and economic improvements for the area. The development is for residential purposes and will not add substantially to the traffic problems to create an adverse impact. Suburban living is thereby made possible to an increasing number of the population of Hawaiian ancestry in need of housing, with an improvement in quality and environment.

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		No. of Units	Cumulative Total	No. of Auto	Cumulative Total							
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Total		500		900		800	560		4000		336	

PART II

COMMENTS RECEIVED ON THE DRAFT ENVIRONMENTAL  
IMPACT STATEMENT AND DISPOSITIONS

GEORGE R. ARIYOSHI  
GOVERNOR



DEPT. OF HAWAIIAN  
HOME LANDS

RICHARD E. MARLAND, PH.D.  
DIRECTOR  
TELEPHONE NO.  
548-6915

JAN 23 10 05 AM '75

STATE OF HAWAII  
OFFICE OF ENVIRONMENTAL QUALITY CONTROL  
OFFICE OF THE GOVERNOR  
550 HALEKAUWILA ST.  
ROOM 301  
HONOLULU, HAWAII 96313

January 22, 1975

MEMORANDUM

TO: The Honorable Billie M. Beamer, Director  
Department of Hawaiian Home Lands

ATTN: Mr. Gordon Wong, Planner

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

SUBJECT: Draft Environmental Impact Statement for Waianae  
Valley Road Homestead Subdivision, Waianae, Oahu

This Office has completed its review of the subject draft environmental impact statement. As of this date, we have received a total of twelve responses.

Provided below is a summary of comments by other agencies and our Office.

PROJECT NEED AND DESCRIPTION

Project Description

The T.M.K. in the dEIS is identified as 8-5-04:53. The accompanying "Traffic Impact Statement" identifies the T.M.K. as 8-5-04:40 and 53. We question whether the project site also includes parcel 40.

Answer?  
T.M.K. 8-5-04:  
40, 53

Work Item #9 - Construction of a bridge over Kaupuni Stream - Where will this bridge be? For what purpose will it be built? It's location should also be shown on the map. 2)

Page 3d, it would be useful if the adjacent land areas were shown on the map. 3)

The dEIS states that Phase I will begin in 60 days. Why was the EIS submitted so late? 4) Why

EXISTING CONDITIONS OF THE PROPOSED SITE

General Field Observations of the Site

The description of the drainageways should be more complete. In addition to providing information on the slopes of the drainageways, the FEIS should mention other important things like depth, width, capacity, if it is dry or active, if it is lined, etc. 5,

The names of the grass, weeds, shrubs, and trees should be listed. There should also be more description of the rockwalls--height and length. 6,

Geologic and Soil Classification

The University of Hawaii's Environmental Center offers more information for the LPE soil. Seemingly, this soil undergoes "considerable expansion and contraction on wetting and drying". This is a concern which should be looked into because the cement slab floor and pavement could crack and buckle. To alleviate this problem, they suggest that "the sub-grade (be) removed and back-filled with gravel, sand, or soil materials which do not undergo much shrinking and swelling". 7,

Microclimate

Is the term "mean maximum" synonymous with mean high? 8,  
Is the term "mean minimum" synonymous with mean low?

Community Profile

*Census tract*

What is the exact ~~CDC~~ number? Does "Waianae City" include the project area? This Office finds the "community profile" informative. However, it would be more useful if the EIS evaluated the impact of the project on this "community profile". The community population is noted as 3,302 in 1970. The project is anticipated to increase the population by 3,000-- this is nearly double the 1970 population. Also, the number and percentage of Hawaiians will be increased from 431 persons (13%) to 3431 persons (54%)--this will make approximately half of the population Hawaiians as compared to the past 13%. An evaluation of impacts that may be generated by these increases should be discussed in the EIS. 9.

Government Facilities and Services

Water Supply. The Board of Water Supply offers re-wording for the second sentence: "According to Board of Water Supply water consumption data, an average of 0.6 million gallons of water per day was distributed in fiscal year 1974 to the Waianae Valley area and 5.4 mgd was consumed in the entire Waianae District".

Page 3

Schools. It seems that there will be an over-enrollment problem in the schools. The EIS should analyze the situation and disclose possible solutions with discussion. The dEIS mentions "...possible re-defining of school service areas..." but no further explanation is given. Are there nearby schools that could take this enrollment increase? 10.

On p. 17, the dEIS notes that a parcel of land on the project site could be for school use. But this is not within DOE's six-year budget, thus the school will not be developed before 1980. The "Traffic Impact Statement's" "Construction Schedule" (page 9) shows completion of the project by 1978. Thus the project will be completed prior to the possible new school. Therefore, this possibility also will not alleviate the over-enrollment problem.

Also, it is not clear whether or not it will be at all possible to build this new school.

Transportation. The Department of Public Works, City and County of Honolulu, states that the, "Widening of the Waianae Valley Road as an improvement district project...is unlikely in the near foreseeable future". The fEIS should incorporate this correction as appropriate.

How frequently does "the Bus" come along the Waianae Valley Road? 11.

#### Environmental Considerations

Water Pollution. The U.S. Army Engineering Division points out that, "...the proposed project would be subject to a 6,000-cfs flow for a 100-year frequency flood". Further investigation should be conducted for this potential flooding problem and a discussion should be made in the fEIS. 12.

NOTE: The title of this section is misleading. This section covers not only existing conditions of the proposed site but also the adjacent areas.

#### PROBABLE ENVIRONMENTAL IMPACT OF THE PROPOSED PROJECT

##### Socio-Economic Aspects

Land Use. The change in land use here is of great concern to agencies and especially the Department of General Planning, City and County of Honolulu. They "urge...the Department of Hawaiian Home Lands (to) postpone any development plans until a General Plan growth policy has been adopted by the City Council". We suggest that the Department of General Planning be consulted on this matter. 13.

Page 4

Governmental Facilities and Services

Water Supply. We suggest that the statement: "No significant impact on the water supply is foreseen" be either eliminated or further qualified. According to the Board of Water Supply, "approximately two million gallons per day" is presently being transported to the Nanakuli through Makaha area. This is a water deficit area. With an increase of 3,000 persons, it seems there will be an impact on the water supply.

*agree -* { Sewage Disposal System. The first sentence should be corrected. The City and County's Department of Public Works does not approve the use of cesspools. They note that cesspools in areas adjacent to the project site require frequent pumping services or chemical treatment. Consequently, they recommend that the site be provided with a sewer system, extending from Waianae Town. The cost of this would be shared (50-50) by the State and the City and County. This Office suggests that this alternative be given serious consideration and the results be discussed in the FEIS.

Recreational Facilities. The Department of Parks and Recreation finds that there is inadequate information in this area. We suggest that the recreational needs be coordinated with that Department. We also suggest that any additional information be added to the FEIS.

Transportation. We question the conclusions drawn in this section.

1. The statement: "The existing 44-foot right-of-way Waianae Valley Road will adequately accommodate the estimated number of trips generated (8.0 trips per dwelling unit)" is argumentative. The "Traffic Impact Statement" used the future 80' Waianae Valley Road not the 44'.
2. All other conclusions here were based on the future highway system which the City and County says is "...unlikely in the near foreseeable future".

As a corrective measure, we suggest that the "Traffic Impact Statement" also include an analysis of the traffic situation based on the present 44' Waianae Valley Road. Conclusions could then be drawn for both road widths.

NOTE: Appendix I - summary of the traffic report - is missing.

Page 5

Environmental Considerations

Air and Noise Pollution. It should be noted that odors from livestock raising activities are undesirable and could affect the initial desirability of residents to live at the site.

Water Pollution. Due to increased hard surfaces, we gather there will be an increase in storm water runoff which will be diverted into Kaupuni Stream. We assume this would happen during the wet seasons, which is also when Kaupuni Stream may be subject to flooding. We again question the potential volume of Kaupuni Stream.

We also note that the dEIS does not state where Kaupuni Stream empties into. If it empties into Pokai Bay, with the increase water flow, what affect will this have on the coastal water quality?

ALTERNATIVES TO THE PROPOSED ACTION

We suggest the fEIS add another subsection - Alternative Sites. Are there other available sites on this island? The fEIS should analyze and discuss the advantages or disadvantages of each available site.

ADDITIONAL COMMENT

We question whether any type of archaeological survey was done. Such information would be important in the fEIS.

RECOMMENDATIONS

We recommend that: 1) written responses be sent to all commentors, with a carbon copy to this Office, indicating how specific concerns were considered, evaluated, and disposed; 2) all comments and your responses should be incorporated as an appendix to the fEIS; and 3) a copy of the fEIS should be sent to those individuals who provided substantive comments to the dEIS.

Thank you for the opportunity to review the subject draft environmental impact statement. We look forward to the final environmental impact statement.

Attachments I & II

ATTACHMENT I

LIST OF RESPONDING AGENCIES  
AND ORGANIZATIONS

<u>RESPONDENTS</u>	<u>DATE OF RECEIPT</u>
<u>State</u>	
Department of Planning and Economic Development	December 30, 1974
*Department of Health	January 2, 1975
<u>Federal</u>	
*Department of the Army	January 7, 1975
Corps of Engineers	January 10, 1975
*Department of the Air Force	January 16, 1975
<u>City and County</u>	
Department of Public Works	December 20, 1974
Board of Water Supply	December 27, 1974
Department of Land Utilization	January 9, 1975
Department of Parks and Recreation	January 13, 1975
Department of General Planning	January 13, 1975
<u>University of Hawaii</u>	
Water Resources Research Center	January 9, 1975
Environmental Center	January 10, 1975
<u>Late Comments</u>	
Department of Transportation Services	January 20, 1975
Department of Accounting and General Services	January 21, 1975

\*No comments on the dEIS

PROJECT OFFICES

WAIKAEA OFFICE  
P. O. BOX 125  
KAMUELA, HAWAII 96743  
KEALAKAHA OFFICE  
P. O. BOX 833  
HILO, HAWAII 96720



STATE OF HAWAII  
DEPARTMENT OF HAWAIIAN HOME LANDS  
P. O. BOX 1879  
HONOLULU, HAWAII 96805

PROJECT OFFICES

MAUI OFFICE  
P. O. BOX 22  
KAHULUI, MAUI 96732  
MOLOKAI OFFICE  
P. O. BOX 198  
HOOLEHUA, MOLOKAI 96729  
KAUAI OFFICE  
P. O. BOX 332  
LIHUE, KAUAI 96766

February 18, 1975

Dr. Richard E. Marland, Interim Director  
Office of Environmental Quality Control  
550 Halekauwila Street, Room 301  
Honolulu, Hawaii 96813

Dear Dr. Marland,

Thank you for your review of our department's draft environmental impact statement for the Waianae Valley Road Homestead Subdivision. We have carefully evaluated the comments and recommendations received and you will find attached a copy of the responses made to the various commenting agencies. Since these responses also encompass those relevant questions in your cover letter of January 22, 1975, we have not taken the opportunity to discuss your summary of comments on an item by item basis.

We feel that the review of the environmental impact statement has been a very fruitful process, in that it has provided us the opportunity to reflect upon future Hawaiian Home Lands projects.

Within the budget constraints of the Hawaiian Home Lands Department there is an opportunity to achieve our goal of providing homelots to the Hawaiian people. We recognize through the environmental impact statement process that certain socio-physical impacts will occur. This impact probably would occur for every project of this size in the Waianae area. The final

Dr. Richard E. Marland  
Page 2

February 18, 1975

environmental impact statement discusses the consequences of the project. We will comply with your recommendations in your cover letter (page 5, RECOMMENDATIONS).

We appreciate your comments and review of the environmental impact statement.

Owau no me ka haa haa  
(I am humbly yours)

  
Billie Beamer  
Chairman

GW:aa



DEPARTMENT OF PLANNING  
AND ECONOMIC DEVELOPMENT

GOVERNOR  
JULIUS ROSEN  
Hideto Kono  
SHELLEY M. VACK  
Director  
Frank B. Skrivanek  
EDWARD J. O'BRIEN, JR.  
Deputy Director

250 South King St. / Honolulu, Hawaii 96813 / P. O. Box 2359 / Honolulu, Hawaii 96804

December 26, 1974

Ref. No. 2644

MEMORANDUM

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

FROM: Hideto Kono, Director

SUBJECT: Draft EIS for the Waianae Valley Road Homestead Subdivision

We have reviewed the subject draft and find that it has adequately assessed the probable environmental impacts that can be expected by the proposed development.

However, we would like to add that while the lands held by the Department of Hawaiian Home Lands are exempt from State and County land use and zoning designations, appropriate documents to substantiate the exemption should be included in the contents of the final report.

We have no further comment to offer at this time but appreciate the opportunity to review the draft statement.

PROJECT OFFICES

-43-

PROJECT OFFICES

WAIMEA OFFICE  
P. O. BOX 125  
KAHULUI, HAWAII 96743  
KEAUKAHA OFFICE  
P. O. BOX 833  
HILO, HAWAII 96720



STATE OF HAWAII  
DEPARTMENT OF HAWAIIAN HOME LANDS  
P. O. BOX 1879  
HONOLULU, HAWAII 96805

MAUI OFFICE  
P. O. BOX 22  
KAHULUI, MAUI 96732  
MOLOKAI OFFICE  
P. O. BOX 198  
HOOLEHUA, MOLOKAI 96729  
KAUAI OFFICE  
P. O. BOX 332  
LIHUE, KAUAI 96766

February 18, 1975

The Honorable Hideto Kono, Director  
State Department of Planning and  
Economic Development  
250 South King Street  
Honolulu, Hawaii 96813

Dear Mr. Kono,

Thank you for your letter of December 26, 1974, regarding the proposed Waianae Valley Road Homestead subdivision. We will include in the final environmental impact statement the Attorney General's opinion (Op. No. 72-21) relating to Hawaiian Home Lands and their exclusion from compliance with County land use regulations.

As you can appreciate, it is our intent to expedite wherever possible, the objectives of this department. We will be reviewing the future potential for involving agencies such as the State Land Use Commission and the appropriate County planning agencies. We realize that it is in our best interests to cooperate wherever practical.

Thank you for your concern and interest, and we look forward to working with you and your staff.

Owau no me ka haa haa  
(I am humbly yours)

A handwritten signature in cursive script that reads "Billie Beamer".

Billie Beamer  
Chairman

GEORGE R. ARIYOSHI  
GOVERNOR OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF HEALTH  
P. O. BOX 3378  
HONOLULU, HAWAII 96801

GEORGE A. L. YU  
DIRECTOR OF HEALTH

In reply, please refer to:  
File: EPHSD-S

December 31, 1974

MEMORANDUM

To: The Honorable Richard E. Marland, Interim Director  
Office of Environmental Quality Control

From: Chief, Environmental Protection & Health Services Division

Subject: Draft Environmental Impact Statement (EIS) for Waianae Valley Road  
Homestead Subdivision, Department of Hawaiian Home Lands, State  
of Hawaii

Thank you for allowing us to review and comment on the subject  
EIS. Please be informed that we have no objections to this project.

We realize that the statements are general in nature due to  
preliminary plans being the sole source of discussion. We, therefore,  
reserve the right to impose future environmental restrictions on the  
project at the time final plans are submitted to this office for review.

  
SHINJI SONEDA

PROJECT OFFICES

-45-

PROJECT OFFICES

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KEAUKAHA OFFICE  
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KAUAI OFFICE  
P. O. BOX 332  
LIHUE, KAUAI 96766

February 18, 1975

State Department of Health  
P. O. Box 3378  
Honolulu, Hawaii 96801

Att: Mr. Shinji Soneda

Dear Mr. Soneda,

Thank you for your response to the Waianae Valley Road Homestead subdivision draft environmental impact statement (EIS). Your letter of December 31, 1974, will be filed and included as part of the final EIS submittal to the Office of Environmental Quality Control. The engineering plans for the proposed subdivision received signed approval from your department for the cesspool system on August 29, 1974.

We will of course be complying with all applicable requirements governing drainage, air quality management during construction, and other areas of environmental controls that your department regulates.

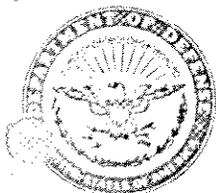
Thank you for your concern and interest and please be assured that our department will conform to all applicable requirements.

Owau no me ka haa haa  
(I am humbly yours)

A handwritten signature in cursive script that reads "Billie Beamer".

Billie Beamer  
Chairman

DEPARTMENT OF THE ARMY  
U. S. ARMY ENGINEER DIVISION, PACIFIC OCEAN  
BLDG. 230, FT. SHAFTER  
APO SAN FRANCISCO 96558



PODED-FV

9 January 1975

Dr. Richard E. Marland, Interim Director  
Office of Environmental Quality Control  
State of Hawaii  
550 Halekauwila Street  
Honolulu, Hawaii 96813

Dear Dr. Marland:

Review of the draft environmental impact statement for the Waianae Valley Road Homestead Subdivision has been completed, and the following comments have been made for your consideration.

a. The proposed project is bisected by the Kaupuni Stream. The EIS does not recognize the potential flooding problems of the stream. The Soil Conservation Service has recently completed the installation of a flood-protection structure (debris basin with a concrete channel running down to the coast) below the proposed project area. The Soil Conservation Service 100-year design flow is 6,400 cubic feet per second (cfs) at the debris basin, which drainage area is approximately 5 square miles. The difference in area between the proposed project and the debris basin is roughly 0.3 square mile. By rough approximation, the proposed project would be subject to a 6,000-cfs flow for a 100-year frequency flood. Investigation of the potential flooding problem should be conducted by the sponsors.

b. There is no discussion on historical or archaeological resources which may exist in the project area.

Sincerely yours,

KISUK CHEUNG  
Chief, Engineering Division

7AM 10 1975

PROJECT OFFICES

WAIMEA OFFICE  
P. O. BOX 125  
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LAUKAHA OFFICE  
P. O. BOX 833  
HILO, HAWAII 96720



STATE OF HAWAII  
DEPARTMENT OF HAWAIIAN HOME LANDS  
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HONOLULU, HAWAII 96805

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P. O. BOX 198  
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KAUAI OFFICE  
P. O. BOX 332  
LIHUE, KAUAI 96766

February 18, 1975

Mr. Kisuk Cheung, Chief  
Engineering Division,  
U. S. Army Engineer Division, Pacific Ocean  
Department of the Army  
Bldg. 230, Ft. Shafter  
APO San Francisco 96558

Dear Mr. Cheung,

Thank you for the comments made on the draft environment impact statement (EIS) for Waianae Valley Road Homestead subdivision. The engineering consultant, Mr. Yasuo Arakaki advises that the existing stream and designed bridge are capable of accommodating a stream flow of 8300 cfs. Flooding should not be a problem since the existing stream and designed bridge capacity is beyond the approximate 6000 cfs flow indicated by the Soil Conservation Service 100 year design flow.

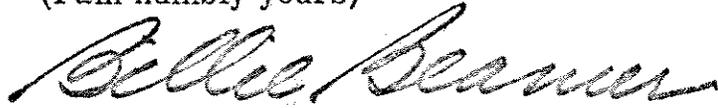
Regarding the lack of historial and archaeological references, we note that Dr. T. Stell Newman, formerly director of Archaeology with the State Parks, Outdoor Recreation and Historic Sites Division, State Department of Land and Natural Resources, made a field investigation on the archaeological and/or historial significance of a rock pile on the site. His conclusions were that the rock pile had no historial and/or archaeological significance and the furrowing terrain of the site indicated that it had once been utilized for sugar cane growing. The clearing and planting of sugar cane on this site negates the possibility that historical/archaeological sites, if at one time present, were preserved.

Mr. Kisuk Cheung  
Page 2

2/18/75

Thank you again for the comments and we look forward  
to our continued relationship with your agency.

Owau no me ka haa haa  
(I am humbly yours)

A handwritten signature in cursive script that reads "Billie Beamer". The signature is written in dark ink and is positioned above the printed name and title.

Billie Beamer  
Chairman

HEADQUARTERS  
APO SAN FRANCISCO 96353

24 JAN 1975



ATTN: DZEE (Mr Kimura, 4492155)

SUBJECT: Draft Environmental Impact Statement

TO: Office of Environmental Quality Control  
Office of the Governor  
550 Halekaiwila Street  
Tani Office Building, Third Floor  
Honolulu, Hawaii 96813

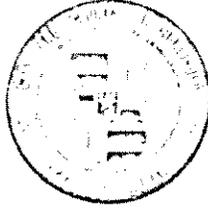
We have no comment to render relative to the draft environmental impact statement for the following projects:

1. Waianae Valley Road Homestead Subdivision
2. Excavation and Quarrying Use at Waihee, Oahu
3. Heeia Kea-Pine Tree Junction Rights-of-Way

ALLAN M. YAMADA  
Asst. Dep Comdr for Civil Engrg

CITY AND COUNTY OF HONOLULU

HONOLULU, HAWAII 96813



FRANK F. FASI  
MAYOR

KAZU HAYASHIDA  
DIRECTOR AND CHIEF ENGINEER

ENV 74-323

December 17, 1974

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

Gentlemen:

Subject: Draft Environmental Impact Statement  
for Waianae Valley Road Homestead  
Subdivision

We have reviewed the subject Draft EIS and have the following comments.

1. Transportation (pgs. 11, 19): Widening of the Waianae Valley Road as an improvement district project by the City is unlikely in the near foreseeable future. A sum of \$10,000, provided in Act 218, SLH 1974 (Item 70, Aid to Counties) is sufficient only for an engineering survey. No City funds are earmarked for this State project.
2. Water Pollution (pgs. 12, 20): If a cesspool is to function properly, there must be sufficient leaching of the wastewater through the subsurface soils, otherwise the cesspool would fail. If leaching does not occur, the cesspool will eventually overflow onto the ground and would create a health hazard as well as water pollution and aesthetic problems.
3. Sewage Disposal System (pg. 16): The Division of Sewers of the Department of Public Works does not approve the use of cesspool in lieu of sewers. This authority is vested with the State Department of Health.

According to the USDA, Soil Conservation Services, "Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii," August, 1972, soils in the area of the proposed subdivision exhibit slight to severe limitation for septic tank filter fields (applicable also to cesspool leaching). This limitation includes the Ewa silty clay loam (EWB), Pulehu clay loam (PUC) and the Lualualei stony clay (LPE)

Office of Environmental Quality Control  
December 17, 1974  
Page 2

soils. Cesspool pumping and chemical treatment records of the area along Momona Place, Piliuka Place and Waianae Valley Road indicate that cesspools are not functioning properly and required frequent pumping services or chemical treatment. One cesspool along Waianae Valley Road had to be pumped 33 times during the 1973-1974 Fiscal Year. Another cesspool on Momona Place had to be pumped 18 times.

In view of potential cesspool failures in the proposed housing site, it is recommended that consideration be given to provide a sewer system for the subdivision. The connecting sewer between the proposed subdivision and the existing sewer in Waianae Town can be installed as a sewer extension project. The cost of the sewer extension project will be shared equally (fifty percent) by the State and the City and County.

Very truly yours,

  
KAZU HAYASHIDA  
Director and Chief Engineer

cc: Div. of Engineering  
Div. of Sewers

PROJECT OFFICES

WAIHEA OFFICE

P. O. BOX 125

KAMUELA, HAWAII 96743

KOAUKAHA OFFICE

P. O. BOX 833

HAO, HAWAII 96720



STATE OF HAWAII

DEPARTMENT OF HAWAIIAN HOME LANDS

P. O. BOX 1879

HONOLULU, HAWAII 96805

PROJECT OFFICES

MAUI OFFICE

P. O. BOX 22

KAHULUI, MAUI 96732

MOLOKAI OFFICE

P. O. BOX 198

HOOLEHUA, MOLOKAI 96729

KAUAI OFFICE

P. O. BOX 332

LIHUE, KAUAI 96766

February 18, 1975

Mr. Kazu Hayashida, Director  
Department of Public Works,  
City and County of Honolulu  
City Hall  
Honolulu, Hi 96813

Dear Mr. Hayashida,

Thank you for your response to the draft environmental impact statement (EIS) for the proposed Waianae Valley Road Homestead subdivision. Your comments are well taken and have been reviewed by both the staff and retained consultants. We are taking this means of apprising your office of the corrections and revisions that will be made to the final EIS. These changes are to meet your specific comments made in your letter of December 17, 1974.

1. Transportation (p. 11, 19): Mr. Henry T. Au, traffic consultant retained for this project comments as follows:  
"Until the basis used by the Planning Department to justify the establishment of the 80' roadway is known, there will continue to be the erroneous assumption that the Waianae Valley Road, in order to accommodate the traffic generated by the Waianae Residence Lots Subdivision, must be widened to 80' as shown on the General Plan, so that an improvement district for the widening becomes necessary."

It is his opinion supported by traffic generation data, that the existing 44' roadway can accommodate the potential added traffic and if necessary, the widening can be expanded to 56' and very adequately meet all potential traffic loads anticipated. His response in total is provided to your office as an attachment.

Mr. Kazu Hayashida, Director  
Department of Public Works  
Page 2

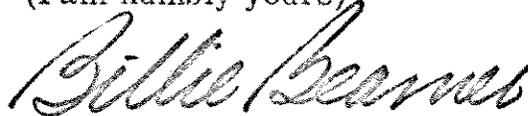
2/18/75

2. Water Pollution (p. 12, 20): Adequate functioning of the proposed cesspool system for the proposed subdivision has been analyzed by Mr. Yasuo Arakaki, the engineering consultant for this project. He has provided to your applicable branches the soils information contained in a soils report performed by Walter Lum and has received approval from your department on October 29, 1974.

3. Sewage Disposal System (p. 16): We appreciate your concern over the use of cesspools rather than sewer lines to your treatment plant, but costs for the necessary connections would place this project in jeopardy. We do not endorse cesspools as policy, but feel that in matters of economic necessity that are supported by full review of engineering consultants and the State Department of Health, we must proceed. The relevant points that you have discussed will be subjects of concern by our staff and will be monitored to prevent the cesspool malfunction problems that you outlined. We will also be examining the potential improvements for future consideration and will be analyzing for capital improvement budget requests, the sewerage of this project.

Thank you for your comments and we look forward to continued success in working with your department.

Owau no me ka haa haa  
(I am humbly yours)



Billie Beamer  
Chairman

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU

150 SOUTH BERETANIA

POST OFFICE BOX 3410

HONOLULU, HAWAII 96843

STANLEY S. TAKAGISHI, Vice Chairman  
GEORGE APDUHAN  
YOSHIE H. FUJIMAKA  
KAZU HAYASHIDA  
WALTER D. HOWARD  
E. ALVEY WRIGHT

EDWARD Y. HIRATA  
Manager and Chief Engineer

December 24, 1974

Dr. Richard E. Marland  
Interim Director  
Office of Environmental Quality Control  
550 Halekauwila Street  
Honolulu, Hawaii 96813

Dear Dr. Marland:

SUBJECT: Draft Environmental Impact Statement for  
Waianae Valley Road Homestead Subdivision

Thank you for sending us the draft environmental impact statement for our review and we have the following comments:

1. Page 8, line 20, should be reworded to read:  
"According to Board of Water Supply water consumption data, an average of 0.6 million gallons of water per day was distributed in fiscal year 1974 to the Waianae Valley area and 5.4 mgd was consumed in the entire Waianae District".
2. Page 16, line 2: The statement that the project will have no significant impact on the water supply should be taken advisedly. Although water is available for this project, it should be noted that the area between Nanakuli and Makaha is a water deficit area and water must be conveyed from outside sources to supplement the area's sources of supply. Presently, approximately two million gallons per day of water is being transported from the Pearl Harbor area to supply the Waianae Coast.

Should further information be required on this matter, please contact Mr. Michael Shigetani at 548-5221.

Very truly yours,

  
For Edward Y. Hirata  
Manager and Chief Engineer

PROJECT OFFICES

WAIMEA OFFICE  
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KAMUELA, HAWAII 96743  
  
KEAUKAHA OFFICE  
P. O. BOX 833  
HILO, HAWAII 96720



STATE OF HAWAII  
DEPARTMENT OF HAWAIIAN HOME LANDS  
P. O. BOX 1879  
HONOLULU, HAWAII 96805

PROJECT OFFICES

MAUI OFFICE  
P. O. BOX 22  
KAHULUI, MAUI 96732  
  
MOLOKAI OFFICE  
P. O. BOX 138  
HOOLEHUA, MOLOKAI 96729  
  
KAUAI OFFICE  
P. O. BOX 332  
LIHUE, KAUAI 96766

February 18, 1975

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

Dear Mr. Hirata,

Thank you for your comments on the Waianae Valley Road Homestead subdivision draft environmental impact statement (EIS). We have provided these comments to the retained consultants who have reviewed them and will make the appropriate corrections for the final EIS.

We have already received approval from your office on September 20, 1974 and will be planning to process the construction plans accordingly. We will of course be working with your department very closely to insure that adequate potable water supply is provided not only for this project, but for the Waianae Coast. We appreciate your concern over the potential deficit situation that could develop and will cooperate in all matters pertaining to this and future Hawaiian Home Lands projects.

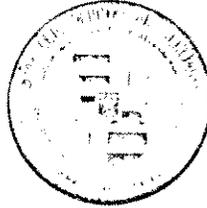
Thank you for your comments and we look forward to continued success in our working relationship.

Owau no me ka haa haa  
(I am humbly yours)

*Billie Beamer*  
Billie Beamer  
Chairman

CITY AND COUNTY OF HONOLULU

SUITE 2180 PACIFIC TRADE CENTER  
190 SOUTH KING STREET  
HONOLULU, HAWAII 96813



FRANK F. FASI  
MAYOR

PAUL DEVENS  
MANAGING DIRECTOR

GEORGE S. MORIGUCHI  
DIRECTOR

WILLIAM E. WANKET  
DEPUTY DIRECTOR

LU12/74-4352(LT)

January 6, 1975

MEMORANDUM

TO : DR. RICHARD MARLAND, INTERIM DIRECTOR  
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

FROM : GEORGE S. MORIGUCHI, DIRECTOR OF LAND UTILIZATION

SUBJECT : DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE  
WAIANAE VALLEY ROAD HOMESTEAD SUBDIVISION

Thank you for the opportunity to review the above. Overall, we find the statement informative; however, we do feel that certain aspects would benefit from further elaboration, as follows:

1. Reference: Section I.A, Page 2

Comments: Of the proposed 500 houselots to be developed, 223 applicants have indicated acceptance of the lots. With such a large number of homestead applicants needing housing, why is it that only 223 indicated interest in the houselots available?

2. Reference: Section I.B, Page 4

Comments: Homesteaders would be provided with two methods for development of their lots. Relative to Section I.A, could the costs of development be so high as to be infeasible for most homesteaders? Have any studies been done in this area?

3. Reference: Section III, C, Page 14

Comments: The statement is made that residential use of this 155.1-acre site "is not anticipated to alter the land uses of the surrounding areas" (which are predominantly

Dr. Richard Marland  
January 6, 1975  
Page 2

agricultural). Does this refer to potential growth-inducing impact, pressures for increased urbanization, etc.? We feel this subject should be discussed in more detail.

4. Reference: Section III.D, Pages 17 and 18

Comments: Regarding probable social impacts of the project on educational facilities ("...by the creation of a higher enrollment situation in the schools; enrollment of greater percentage of students of Hawaiian ancestry; possible conflicts with other groups; and the expenditure of State funds to accommodate students generated by this project..."), are all existing school facilities able to service the increased student population? (Ref., page 10) The statement made on probable ethnic group conflicts is disturbing. By what method was this determined to be an impact and how could it be alleviated, if at all?

5. Reference: Section V, Page 23

Comments: How feasible is residential development on Hawaiian Homes lands elsewhere on this island? Are there lands where similar development could occur? The site lies within an area designated for agricultural use on the City's Detailed Land Use Map and zoned AG-1 Restricted Agricultural District. Although the Department of Hawaiian Homes Lands is exempt from State and County land use and zoning designations, residential development of this site will irretrievably commit present agricultural land to urban uses.

  
GEORGE S. MORIGUCHI  
Director

GSM:rh

PROJECT OFFICES

WAIMEA OFFICE  
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STATE OF HAWAII  
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MAUI OFFICE  
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MOOLEHUA, MOLOKAI 96729  
KAUAI OFFICE  
P. O. BOX 332  
LIHUE, KAUAI 96766

February 18, 1975

Mr. George Moriguchi, Director  
Department of Land Utilization,  
City and County of Honolulu  
Suite 2180, 190 South King St.  
Honolulu, Hawaii 96813

Dear Mr. Moriguchi,

Thank you for your comments on the draft EIS for the Waianae Valley Road Homesteads subdivision. The questions raised cover primarily the administrative policies set forth for this department by the Federal law promulgated in 1920 by the Department of Interior. As you may know, the intent of the law is to make available in as expedient a manner as possible, residential homesites or dwellings for people of Hawaiian ancestry. To accomplish this, we are empowered to bypass certain land use policies. We realize this is within our power, but do not agree that it is politically a wise prerogative. However, we have no urban designated land on Oahu. While 4,000 people (3,000 of which on Oahu) are requesting homesites -- what is our alternative?

The consequences are often times the raising of questions such as those you have posed in your letter to the Office of Environmental Quality Control. The following responses are for your points raised on January 6, 1975.

1. Section I.A. p.2 : The total project of approximately 500 homesites will be phased in the following manner. Phase I - 150; Phase II - approximately 330 to 350. The initial response of 223 applicants would be covered in the Phase I increment and continued offerings in Phase II would accommodate the needs of the total project.

Mr. George Moriguchi, Director  
Department of Land Utilization  
Page 2

2/18/75

2. Section I. B., p. 4 : Analyzing the potential market that the Hawaiian Home Lands services, the answer to this question would be yes. For the most part, the annual income for the typical applicant is below the requirements for conventional mortgage loan funding, thus making necessary the assistance via the land or site in an improved condition at a nominal cost. Further discussion on subject can be provided to you if you are interested in pursuing this matter.
  
3. Section III. C. p. 14 : The potential growth-inducing factors you cover are for the most part relevant in situations that involve private developments that infringe on agricultural industries such as dairies, hog raising, etc. We feel that the makeup of the communities we develop under the precepts of Hawaiian Home Lands are not similar since they constitute similar people who seek the rural or more open lifestyle in the Waianae sector. Our surrounding neighbors are themselves involved in subsistence or backyard farming. The other agricultural industries also in the area are not considered problem areas.
  
4. Section III. D., p. 17 and 18: The phasing program for the development of this project will once again, provide assistance to the Department of Education in fulfilling their role as educators. The initial increment of 150 units will not significantly affect the carrying capacity of the Waianae schools that the children will attend. The ability of the DOE to meet the demands place on it by this project will be severely tested; however, there will be school facilities provided for the children of this project and while they may not be as complete as certain urban area facilities, there will be educational facilities provided. The ethnic makeup of the school population is a factor that demands attention throughout the State. Over emphasis in one particular racial group over others has created problems attributable to prejudice and economic disadvantage. It is felt however, that in the Waianae school district since the climate and atmosphere is still rural it does not suffer from the urban pressures that schools in metropolitan Honolulu suffer from.

Mr. George Moriguchi, Director  
Department of Land Utilization  
Page 3

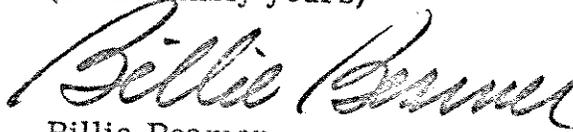
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5. Section V., p. 23: Residential development for the balance of Hawaiian Home Lands on Oahu as well as other islands is proceeding under a revamped procedure. Total pre planning must and will precede all projects prior to implementation.

We appreciate your comments and concern over the utilization of lands that are designated for uses other than urban. The overall agricultural impact that lands under our jurisdiction will have is considered minimal. Those lands that are considered prime agricultural lands will continue to remain in that use until agreements or tradeoffs can be accomplished.

Thank you again for your comments and we look forward to further improving our relationships with the County and your department.

Owau no meka haa haa,  
(I am humbly yours)



Billie Beamer  
Chairman

SUITE 2100 PACIFIC TRADE CENTER  
150 SOUTH KING STREET  
HONOLULU, HAWAII 96813

FRANK F. FASI  
MAYOR



ROBERT R. WAY  
CHIEF PLANNING OFFICER  
DONALD A. GLEGG  
DEPUTY CHIEF PLANNING OFFICER

DGP1/75-22 & 23 (53)

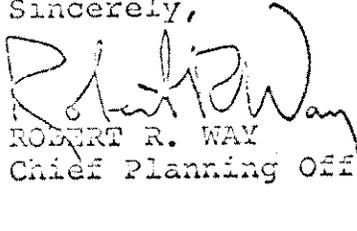
January 9, 1975

Dr. Richard B. Marland, Interim Director  
Office of Environmental Quality Control  
State of Hawaii  
550 Halekauwila Street, Room 301  
Honolulu, Hawaii 96813

Dear Dr. Marland:

Enclosed are the comments submitted by the Department of Parks and Recreation with regard to the draft environmental impact statements for the Waianae Valley Road subdivision and the Heeia high voltage transmission circuit projects. Your attention to these comments will be appreciated.

Sincerely,

  
ROBERT R. WAY  
Chief Planning Officer

RRW:fmt

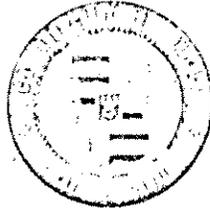
Enclosures

cc: Dept. of Parks and Recreation

1405 ... HONOLULU, HAWAII 96814

ANK F. FASI  
MAYOR

PAUL DEVENS  
MANAGING DIRECTOR



YOUNG SUK KO  
DIRECTOR

RAMON DURAN  
DEPUTY DIRECTOR

January 2, 1975

TO : ROBERT R. WAY, CHIEF PLANNING OFFICER  
FROM : YOUNG SUK KO, DIRECTOR  
SUBJECT: EIS FOR WAIANAEE VALLEY ROAD HOMESTEAD SUBDIVISION

The projected population increase for the subject project will be substantial enough to warrant a detailed review of the recreational needs for the area. However, the information on recreational facilities provided in the EIS is inadequate to make an evaluation. Therefore, we request that the applicant submit plans showing the proposed recreational areas and facilities for this project.

*Young Suk Ko*  
YOUNG SUK KO, Director

RECEIVED  
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DEPT. OF PLANNING  
GENERAL OFFICE  
C & CHICAGO BLVD

PROJECT OFFICES

WAIMEA OFFICE

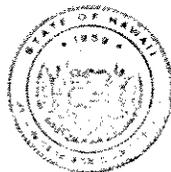
P. O. BOX 125

KAAHULUO, HAWAII 96743

KEAUKAHA OFFICE

P. O. BOX 633

HILO, HAWAII 96720



STATE OF HAWAII

DEPARTMENT OF HAWAIIAN HOME LANDS

P. O. BOX 1879

HONOLULU, HAWAII 96805

February 18, 1975

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MOLOKAI OFFICE

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HOOLEHUA, MOLOKAI 96729

KAUAI OFFICE

P. O. BOX 332

LIIHUE, KAUAI 96766

Mr. Young Suk Ko, Director  
Department of Parks and Recreation,  
City and County of Honolulu  
1455 South Beretania Street  
Honolulu, Hi 96813

Dear Mr. Ko,

Thank you for your comments regarding the recreational needs for the proposed Waianae Valley Road Homestead subdivision. The engineering consultant and our staff planner, Mr. Gordon Wong, indicate that there will be provided in the overall site development, three mini-parks in addition to the proposed school site which is in excess of ten acres. The plans for the improvements to the school site are as yet undefined but we will make every effort to insure that there are adequate recreational facilities available to the extent of the funding allocated for the project.

Thank you for your concern and we look forward to working with your office in future projects.

Owau no me ka haa haa

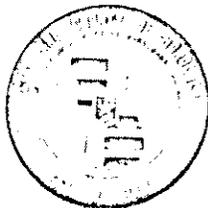
(I am humbly yours)

Billie Beamer

Chairman

DEPARTMENT OF GENERAL PLANNING  
CITY AND COUNTY OF HONOLULU  
SUITE 2100 PACIFIC TRADE CENTER  
190 SOUTH KING STREET  
HONOLULU, HAWAII 96813

FRANK F. FASI  
MAYOR



ROBERT R. WAY  
CHIEF PLANNING OFFICER  
DONALD A. CLEGG  
DEPUTY CHIEF PLANNING OFFICER

DGPL12/74-2961 (JB)

January 9, 1975

Dr. Richard E. Marland, Interim Director  
Office of Environmental Quality Control  
State of Hawaii  
550 Halekauwila Street, Room 301  
Honolulu, Hawaii 96813

Dear Dr. Marland:

Waianae Valley Road Homestead Subdivision  
Draft Environmental Impact Statement

This is in reference to the above-captioned subject matter.

Under the adopted Oahu General Plan, the real properties for the proposed Waianae Valley Road Homestead Subdivision are designated for Agricultural use. The residential subdivision development proposal, therefore, is inconsistent with the existing land use policy of the City and County of Honolulu.

As you are aware, this Department has been engaged over the past several years with the revision of the Oahu General Plan. Further, the efforts of the GPRP have already been reviewed by the Planning Commission and are now being reviewed by the City Council.

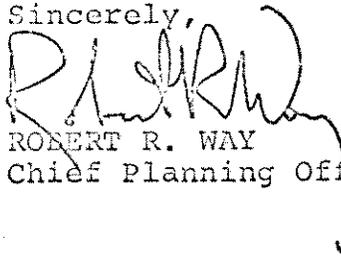
The proposed revision plan which describes alternative growth policies for the City and County of Honolulu is, in essence, a statement of objectives to be achieved for the general welfare of the public. The alternative, which we are recommending to the City Council for adoption as the revised General Plan, calls for directed growth with urban land uses channeled toward Ewa and into Central Oahu.

However, until the Council adopts one of the alternative General Plan growth policies, it would be undesirable to predetermine a housing development (significant as this proposal portends) on a project-by-project basis.

Dr. Richard E. Marland  
Page 2  
January 9, 1975

In summary, because the proposal is not only inconsistent with General Plan policies but would introduce a major change in the land use pattern within the area, we urge that the Department of Hawaiian Home Lands postpone any development plans until a General Plan growth policy has been adopted by the City Council. At that time, specifics regarding location and intensity of residential development may then be appropriately addressed.

Sincerely,



ROBERT R. WAY  
Chief Planning Officer

RRW:fmt

PROJECT OFFICES

WAIKAEA OFFICE  
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KAMAHA, HAWAII 96743  
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DEPARTMENT OF HAWAIIAN HOME LANDS  
P. O. BOX 1879  
HONOLULU, HAWAII 96805

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KAUAI OFFICE  
P. O. BOX 332  
LIHUE, KAUAI 96766

February 18, 1975

Mr. Robert Way, Director  
Department of General Planning,  
City and County of Honolulu  
Suite 2100 Pacific Trade Center  
190 South King Street  
Honolulu, Hawaii 96813

Dear Mr. Way,

Thank you for your comments on the draft environmental impact statement on the Waianae Valley Road Homestead subdivision. We reviewed your comments and have accepted them in the spirit that they were made.

We are aware of the extensive work that your department has been involved in with the revision of the General Plan. We are also aware that the proposed growth policies spoused by the City and County do not provide for projects such as the Waianae Valley Road Homestead subdivision. However, we feel the intent and purpose of our department is stymied, the remaining lands on Oahu offer no urban designation for 3,000 Hawaiians requesting residential sites. We will modify our plans to more actively comply.

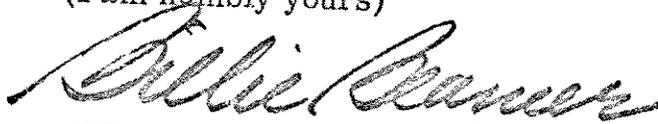
You will be pleased to know that we are developing amendment proposals to the Federal law which provides us with certain exemptions from land use planning procedures. We are adamant that projects should undergo State or County planning review and intend to correct as much as possible, this present prerogative to deviate.

Mr. Robert Way, Director  
Department of General Planning  
Page 2

2/18/75

I will discuss with you compliance with the upcoming General Plan revisions. In the interests of the applicants and at the request of the Hawaiian Homes Commission we must proceed perhaps with modification. Thank you for your comments and continuing concern; I hope that the relationship between our agencies can be strengthened in the future so that effective interaction will provide the people of Hawaii satisfactory results.

Owau no meka haa haa,  
(I am humbly yours)

A handwritten signature in cursive script that reads "Billie Beamer".

Billie Beamer  
Chairman

UNIVERSITY OF HAWAII

Water Resources Research Center  
Office of the Director

MEMORANDUM

January 8, 1975.

TO: Richard E. Marland  
Interim Director, OEQC

FROM: Reginald H. F. Young<sup>RHF</sup>  
Asst. Director, WRRRC

SUBJECT: Review of Waianae Valley Road Homestead Subdivision Draft EIS

The subject EIS has been reviewed in this office principally by Henry Gee and E. T. Murabayashi. Review comments/questions are as follows:

What volume of flow occurs in Kaupuni Stream during the wet seasons? Does this flow eventually discharge into Pokai Bay? If so, what environmental impact will this have on the coastal water quality due to increased runoff from the development of 3,750,000 square feet of lots in addition to city streets. What expected runoff loading of nitrogen, phosphorus, heavy metals, and pesticides can occur from an urban development of this size?

RHFY/jm

cc: H. Gee  
E. Murabayashi  
Environmental Center

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KEAUKAHA OFFICE  
P. O. BOX 833  
HĀO, HAWAII 96720

MAUI OFFICE  
P. O. BOX 22  
KĀHULUI, MAUI 96732  
MOLOKAI OFFICE  
P. O. BOX 198  
HOOLEHUA, MOLOKAI 96729  
KAUAI OFFICE  
P. O. BOX 332  
LĪHŪE, KAUAI 96766



STATE OF HAWAII  
DEPARTMENT OF HAWAIIAN HOME LANDS  
P. O. BOX 1879  
HONOLULU, HAWAII 96805

February 18, 1975

Dr. Reginald H. F. Young, Asst. Director  
Water Resources Research Center  
Office of the Director  
University of Hawaii (Manoa)  
Honolulu, Hawaii 96822

Dear Dr. Young:

Thank you for your comments on the draft environmental impact statement for the proposed Waianae Valley Road Homestead subdivision. Our consultants indicate that the runoff potential for the Kaupuni Stream is not considered significant since the area involved is traditionally a dry and somewhat arid area. The answers to your specific questions can not be answered at this point since qualitative studies have not been conducted for the project site relative to water quality.

The Department of Health advises that the stream is dry except for periods of unseasonally heavy rainfall. The potential of environmental degradation for the reasons that you raise are at best uncertain. We are confident, however, that in meeting the requirements of the City and County drainage section of the Department of Public Works, we can proceed with this project.

Thank you for your concern and we will for future projects, make every practical effort to resolve these questions of water pollution impact.

Owau no meka haa haa,  
(I am humbly yours)

Billie Beamer  
Chairman



# University of Hawaii at Manoa

Environmental Center  
Maile Bldg. 10 • 2540 Maile Way  
Honolulu, Hawaii 96822  
Telephone (808) 948-7361

Office of the Director

January 9, 1975

## MEMORANDUM

TO: Richard E. Marland, OEQC  
FROM: Doak C. Cox  
RE: Draft EIS for Waianae Valley Road Homestead Subdivision

To the preparation of our comments on this EIS the following have contributed:  
H. L. Baker, Dept. of Agr. & Resource Econ.  
Michael Chun, Public Health  
D. C. Cox, Environmental Center  
Edward Murabayashi, Water Resources Res. Ctr.  
Sheldon S. Varney, Dept. of Edn. Administration  
Douglas Yamamura, Dept. of Sociology

A basic question relates to all Hawaiian Homes developments, and not just the one proposed. Without disagreeing with the implication of the Hawaiian Homes Act that some special provision is needed to provide homesteads for the descendents of the early Polynesian settlers of these islands, a serious question may be raised as to the social desirability of the ethnic segregation that has resulted from the past and continuing development of Hawaiian Homes. The pattern is established in the federal Hawaiian Homes Commission Act, which is incorporated in the State Constitution. It will, therefore, be difficult to change. However, the social desirability of the pattern deserves careful appraisal, together with means by which it might be changed through land exchanges or otherwise.

The following comments refer to cited parts of the EIS:

The Waianae Valley Road homestead subdivision EIS is generally "shallow," choosing to enumerate items and problems rather than to evaluate, or attempt to evaluate, their impact--witness the capious "community profile" statistics, the school problem analysis, etc. Since the preparers of the EIS know that 223 families (pg. 2) have indicated an interest in houselots, they must also know or

Richard E. Marland, OEQC

2

January 9, 1975

be able to find out some of the vital statistics about these families and, therefore, to appraise school needs and other socio-economic implications of the development.

The following specific comments refer to parts of the EIS indicated by the page numbers:

p. 3. Area allocation

The following statement in the Introduction deserves reconsideration: "The Waianae Valley Road Homestead Subdivision project proposed is for the development of approximately 500 houselots on 155.1 acres of State-owned land in Waianae Valley, Waianae District, Island of Oahu." This statement is somewhat misleading since only 95.29 acres (61%) will actually be put in houselots (p. 3d).

p. 6. Soil

The LPE soils (Lualualei extremely stony clay) undergo considerable expansion and contraction on wetting and drying. This can result in cracking and buckling of cement slab floor and pavement unless the subgrade is removed and back-filled with gravel, sand, or soil materials which do not undergo much shrinking and swelling.

pp. 9, 12, 16. Sewage treatment facilities

The EIS includes a statement on p. 12 which indicates that the cesspools can create a water pollution problem during the wet season if leaching occurs. Does this mean that leaching will occur only during the wet season? If so, why?

If the intent of the statement is to identify the stream as a body of water that may be polluted due to leaching, we would not be overly concerned because the volume of runoff would provide more than adequate dilution. Furthermore, the leachate would certainly be renovated significantly during passage through the soil. The silty and clayey soils in the area would serve as an excellent filter, and from soil investigations reported in the literature, considerable attenuation of organic and inorganic salts can be expected. Elaboration of these points in this section would strengthen the claim that cesspools should be acceptable.

We are somewhat surprised that the C & C of Honolulu has approved cesspools from the standpoint that one of the objectives of their program would appear to be to completely sewer the island, and this action would be in direct conflict with that objective. For a 500 lot subdivision, a collector sewage system with treatment plant would be highly desirable.

pp. 10, 16, 17. Schools

The appraisal of the impact the Homestead Subdivision would have on education in the Waianae area is sketchy at best. No attempt is made to estimate approximate enrollment increases even though estimates are made on the community profiles (p. 16) based on Department of Hawaiian Home Lands calculations. Such estimates would help identify the real impact on the schools of the area.

The impact of the project on the quality of education in the area would expectably be less in the elementary grades than in the intermediate and high school grades, because increases of several hundred in an elementary school can be quickly and adequately compensated for by the addition of portable general elementary style classrooms. Fewer specialized classrooms are needed for elementary (K-6) programs.

On the other hand, enrollment increases at secondary level require the addition of specialized facilities such as science labs, art rooms, vocational education labs, etc. These kinds of specialized facilities take longer to construct, hence require more lead time for planning and construction. Portable classrooms do not solve this problem and the quality of education, especially in college prep and vocational prep suffers. It is unfortunate that the Hawaiian population has to be deprived of quality college prep and vocational prep subjects, if this would indeed be the effect of an increased enrollment at secondary school level.

The EIS should address not only the problems associated with increased enrollment but possible solutions. How will redefinition of school service areas help to alleviate the elementary school enrollment problem at the presently overcrowded Waianae Elementary School? Are there, in fact, any nearby elementary schools that could absorb the new students? An indication of age and number of incoming students could be projected from the 223 applicants.

pp. 12, 20. Air and noise pollution

The effect of odors from livestock raising activities in the adjacent agricultural area is not adequately addressed. If dairy, swine, and poultry operations are in existence, the odors from these activities could materially affect the desirability of the site for residential purposes. An appraisal of these off-site land uses and their possible effects would be desirable.

p. 11. Transportation

Regarding the traffic impact study, how can a real appraisal be made of the impact of change in the energy situation when the basic data only go to 1972?

p. 14. Land use

The basis for the following statement is unclear: "Being Hawaiian Homes lands, they were intended for eventual development into houselots" (pg. 14, line 5 from bottom). The Hawaiian way of life has been basically "nonurban" in orientation.

Richard E. Marland, OEQC

January 10, 1975

p. 16. Community profile

This is glossed over very rapidly when in fact significant impacts will be felt in the community. When completed, the Project will almost double the existing 3,302 population (1970). Projected population for the subdivision is 3,000 persons. Assuming that present off-site facilities are roughly in balance with the demand, commercial activity can be expected to increase significantly. Similarly, use of recreational facilities will increase. Serious consideration should be given to the immediate development of the proposed school site for park use until such time that it is needed for a school. Also, the three neighborhood miniparks should be sufficiently large so that children need not play ball games in the streets.

See also general initial comment in this review.

p. 20. Water pollution

With respect to surface runoff, an estimate of the increase in volume can be made based on the acreage involved. The general statements such as "Increase in storm water runoff (due to increased hard surfaces) will be diverted into Kaupuni Stream," with no further elaboration. Will the increase in surface runoff be significant to the coastal waters, or will it even reach the coastal waters? What are the characteristics of the stream channel? Will the stream channel percolate the runoff before it reaches the coast? This is the type of discussion that can be most useful in substantiating a claim to the satisfaction of a reviewer.

p. 23. Agricultural alternative

Alternative B seems to be a viable alternative since less than half (223 out of 500) of the proposed subdivision houselots are desired by "homesteaders." This is especially true when 2,800 applicants are in apparent need.

Further comment

There is no indication in the EIS of any archaeological investigations of the site. Such an investigation is not only required but would be valuable from the standpoint of Hawaiian history and heritage for the residents.



Doak C. Cox, Director

cc: H. L. Baker  
E. Murabayashi  
S. Varney  
D. Yamamura  
M. Chun

PROJECT OFFICES

WAIIMEA OFFICE

P. O. BOX 125

KAMUELA, HAWAII 96743

KAUAI OFFICE

P. O. BOX 833

HILO, HAWAII 96720

-74-



STATE OF HAWAII

DEPARTMENT OF HAWAIIAN HOME LANDS

P. O. BOX 1879

HONOLULU, HAWAII 96805

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P. O. BOX 198

HOOLEHUA, MOLOKAI 96729

KAUAI OFFICE

P. O. BOX 332

LIHUE, KAUAI 96766

February 18, 1975

Dr. Doak Cox, Director  
Environmental Center  
University of Hawaii  
Maile Bldg. 10, 2540 Maile Way  
Honolulu, Hawaii 96822

Dear Dr. Cox,

Thank you for the comments made by the Environmental Center on the Waianae Valley Road Homestead subdivision, draft environmental impact statement (EIS). We appreciate the spirit in which these comments were made and your awareness of our department's objectives. We must express concern, however, over the fact that in spite of a certain degree of understanding our purpose in establishing these various residential projects, your staff requests information which for the most part is not available at the present time. We also are penalized by staff and funding deficiencies which restrict our ability to develop the data you seek. You may be assured however, that we will be reviewing all future projects with the intent of resolving areas of concern that you have outlined in your reviewing of our draft EIS.

The area allocation percentage comment is curious since our planning staff uses the rule of thumb method of approximately three homesites (7500 square feet) to the acre with the balance of the project site being used for interior roads, school site, recreational areas, etc. The breakdown is provided on page 3rd., Table 1.

We are enclosing a copy of the soil report conducted by Walter Lum and Associates for your review and information. The information contained in this report was accepted by the Department of Public Works, City and County of Honolulu for use in the design parameters to be used in the site work. Approval for construction was received on October 29, 1974.

Dr. Doak Cox, Director  
Environmental Center,  
University of Hawaii

2/18/75

Page 2

Sewage treatment and disposal is a matter which we also labored over and we concur with your comments on sewerage the project. Despite the desirability of sewerage the project, the costs that would accrue to the project and then would be passed on to the individual home purchaser could price the homes out of the reach of our extremely vulnerable market. Again, we will explore all possible methods of securing financial aid to provide this utility in future projects.

Regarding the schools and impact that our project's children will have due to the increased number of Hawaiian children, we are confident that the problems attributable to racial imbalance can be counteracted by Social and Educational opportunities. These Hawaiians are of mixed ancestry and can represent all Ethnic groups of Hawaii. We are concerned over the possible decline in the quality of Education and will be working with the DOE to resolve this matter. We believe as you do that our programs can have impact on certain geographical sectors of the State and we will take the necessary steps to upgrade an image.

The potential impact of air and noise pollution is not considered significant since for the most part, our applicants are seeking the more open and rural lifestyle that prevails in and around Waianae Valley Road.

The traffic consultant, Mr. Henry T. Au responds to your comment on transportation in the following manner: "The traffic impact study projected the future traffic volumes and conditions as if no energy crisis existed. Motor vehicle registration and traffic volumes were assumed to continue to increase. This was made to assure that a sufficient margin of safety was built into the study. The impact of change in the energy crisis, the traffic volumes projected for the future in the "Traffic Impact Statement" will be reduced considerably. The energy crisis therefore, should bring about considerable relief to our future traffic problems."

To fully appreciate the brief section on land use, it should be pointed out that historical use and practices employed in the development of HHL lands did not effectively provide these lands for immediate availability to the applicants. Also, the bulk of the lands are both non-productive and suffer from lack of water, roads and electrical power. The typical applicant is also restricted to the locale which he wishes to remain in, thus by his own choice, he has reduced the potential availability of options.

Dr. Doak Cox, Director  
Environmental Center,  
University of Hawaii

2/18/75

Page 3

It is our intention to ultimately make available as much of the land under our jurisdiction as possible within the limitations of our budget and ability to provide improvements. But 3,000 people await house lots and we have only agricultural land in our inventory.

We have established as department policy that in the instances where decisions must be made as to which will be done, homes first, amenities second, we are supported by our commission to provide homes to the applicants. We are aware and appreciate that amenities go hand in hand with homes, but can not reject projects that can not include these due to economic constraints.

The engineering consultant has advised us that surface runoff will not be significant in impact since Kaupuni Stream is traditionally a dry stream. He is aware that the top layer of soil is adobe clay and as such does not have high percolation. The impact on the coastal waters and other considerations have been reviewed and approved by both the Department of Public Works, City and County, and Building Department for construction permits.

The phasing of the project (Phase I 150 units; Phase II - 330/350 units) will adequately provide homes for the applicants who have expressed interest in the Waianae Valley sector. The "2800" applicants include those expressing interest in Papakolea, Waimanalo, Nanakuli, and other HHL sectors.

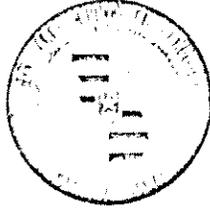
The Department of Land & Natural Resources, Historical Sites Division made a brief survey at the request of our department during 1974. Dr. T. Stell Newman conducted a field investigation at the request of our staff planner, Mr. Gordon Wong and found that there was no evidence of historical and/or archaeological sites on the project proper.

I hope that these responses to your comments are satisfactory and that your office can understand our position a little better. We look forward to continuing our relationship and thank you again for your concern.

Owau no meka haa haa  
(I am humbly yours)

  
Billie Beamer  
Chairman

DEPARTMENT OF TRANSPORTATION SERVICES  
CITY AND COUNTY OF HONOLULU  
CITY HALL ANNEX  
HONOLULU HAWAII 96813



FRANK F. FASI  
MAYOR

GEORGE C. VILLEGAS  
DIRECTOR

January 14, 1975

PL-6021-74

Office of Environmental Quality Control  
550 Halekauwila St., Rm. 301  
Honolulu, Hawaii 96813

Gentlemen:

Subject: Review of Draft EIS for Waianae Valley  
Road Homestead Subdivision

The existing 44-foot right-of-way Waianae Valley Road has pavement widths of 16 feet to 21 feet, and a significant increase in traffic will have an adverse effect on the existing roadway.

It should be noted that there were fifteen accidents reported on this road in 1973, and twelve accidents during the first ten months of 1974.

Very truly yours,

A handwritten signature in cursive script, reading "Clifford Y. Nohara".

CLIFFORD Y. NOHARA  
Chief, Traffic Engineering

PROJECT OFFICES

-78-

PROJECT OFFICES

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KAMUELA, HAWAII 96743  
KEAUKAHA OFFICE  
P. O. BOX 533  
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STATE OF HAWAII  
DEPARTMENT OF HAWAIIAN HOME LANDS  
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P. O. BOX 332  
LIHUE, KAUAI 96786

February 18, 1975

Mr. Clifford Y. Nohara, Chief  
Traffic Engineering,  
Department of Transportation Services  
City and County of Honolulu  
City Hall Annex  
Honolulu, Hawaii 96813

Dear Mr. Nohara,

Thank you for your comments on the traffic portion of the draft environmental impact statement (EIS) on the Waianae Valley Road Homestead subdivision. The comments were provided to Mr. Henry T. Au, the traffic consultant who has responded for us.

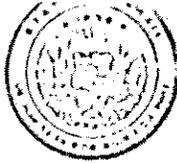
It is his position that the traffic carrying capabilities for the Waianae Valley Road can effectively handle the anticipated traffic that would be generated by our project. We are providing as an attachment his total response to you as well as to others who commented on the traffic problem.

Owau no me ka haa haa  
(I am humbly yours)

A handwritten signature in cursive script that reads "Billie Beamer".

Billie Beamer  
Chairman

GEORGE R. ARIYOSHI  
GOVERNOR



HIDEO MURAKAMI  
COMPTROLLER

STATE OF HAWAII  
DEPARTMENT OF ACCOUNTING  
AND GENERAL SERVICES  
P. O. BOX 119  
HONOLULU, HAWAII 96810

JAN 20 1975

Doctor Richard Marland  
Interim Director  
Office of Environmental  
Quality Control  
550 Halekauwila Street  
Honolulu, Hawaii

Dear Doctor Marland:

Subject: Draft EIS for Waianae Valley Road  
Homestead Subdivision

We have reviewed the subject draft EIS and have the following comments to offer regarding the proposed school site in the subject subdivision:

1. The enrollment projections shown on page 10 should be updated. The Department of Education's enrollment projections for the years 1974 to 1979 were published in March 1974.
2. The proposed school site is adjacent to and directly downwind of the existing agricultural area. More data should be provided on the impact of the odor and flies from the nearby livestock farms.
3. The frequency and intensity of flooding of Kaupuni Stream should be indicated. From the map on page 3c, the school site appears to be susceptible to flooding.
4. The school service area should be indicated.

Very truly yours,

HIDEO MURAKAMI  
State Comptroller

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MOLOKAI OFFICE  
 P. O. BOX 138  
 HOOLEHUA, MOLOKAI 96729

KAUAI OFFICE  
 P. O. BOX 332  
 LIHUE, KAUAI 96766

February 18, 1975

The Honorable Hideo Murakami, State Comptroller  
 Department of Accounting and General Services  
 P. O. Box 119  
 Honolulu, Hawaii 96810

Dear Mr. Murakami,

Thank you for your comments on the draft environmental impact statement (EIS) for the Waianae Valley Road Homestead subdivision. We are responding to the specific comments your office made as follows:

1. The enrollment projections will be updated as requested. The DOE has provided us with an updated letter which will be included in the final EIS as an attachment.
2. Regarding the school site and the potential problem of agricultural industry odors, we will advise the DOE of your concern in this matter and are confident that in conjunction with your department, the siting of the proposed school will take into consideration, this problem.
3. The flooding potential has also been acknowledged by our retained engineering consultant and he will at the appropriate time, consult with our staff planner Mr. Gordon Wong to insure that there is no flooding problem attached to the school site development.

The Honorable Hideo Murakami, State Comptroller  
Page 2

2/18/75

4. The school service area will also be included in the final EIS. This will be defined from the DOE who will retain ultimate responsibility for this designation.

Thank you for your continuing interest and concern.

Owau no me ka haa haa  
(I am humbly yours)



Billie Beamer  
Chairman

DEPT. OF HAWAIIAN HOME LANDS

GEORGE R. ARIYOSHI

GOVERNOR



27 2 30 PM '75

RICHARD E. MARLAND, Ph.D.

DIRECTOR

TELEPHONE NO.

548-6915

STATE OF HAWAII  
OFFICE OF ENVIRONMENTAL QUALITY CONTROL  
OFFICE OF THE GOVERNOR  
550 HALERAUWILA ST  
ROOM 301  
HONOLULU, HAWAII 96813

January 27, 1975

MEMORANDUM

TO: The Honorable Billie M. Beamer, Director  
Department of Hawaiian Home Lands

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

SUBJECT: Draft Environmental Impact Statement for Waianae  
Valley Road Homestead Subdivision

Attached are two late comments from the U.S. Soil Conservation Service and the State Department of Transportation. Please append them to our January 22, 1975 correspondence to you.

Thank you for your cooperation in this matter.

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

---

440 Alexander Young Bldg., Honolulu, HI 96813

January 22, 1975

Dr. Richard E. Marland  
Office of Environmental Quality Control  
550 Halekauwila St., Room 301  
Honolulu, HI 96813

Dear Dr. Marland:

Re: Draft Environmental Impact Statement for Waianae Valley  
Road Homestead Subdivision

We have reviewed the above-mentioned draft and offer the following comments for consideration by the developers:

The land involved is all presently zoned for agricultural use and is surrounded by land in agricultural use. All of the land, except the area along the steep ridge, is suited for grazing.

All of Phase II along Waianae Valley Road, the northwestern portion of Phase I, and the mauka-central portion of the larger Phase II are suitable for cultivated crops. Irrigation would be needed to grow crops.

There are some soils limitations that should be considered in the proposal. Pulehu soils, which occur along the drainageway, are subject to flooding. Lualualei soils, which also occur in the development, have high shrink-swell clays that could cause foundation problems. Lualualei clays also have severe limitations for septic systems, which may also cause problems for cesspools.

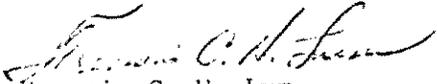
Because the thickness of the clay layers is variable in that area, an on-site investigation would be necessary to determine the extent and severity of these soil problems.

The proposed school and playground are located in an area that is subject to flooding from Kaupuni Stream. No mention is made regarding any corrective measures to be taken.

This proposed project is located above the completed Waianae Iki Public Law 566 Flood Control Channel. While this project is not expected to have any measurable effect on the constructed channel, it should be pointed out that the channel is designed considering a 100-year flow of 6,430 cubic feet per second. The proposed development, as a result, could have a severe flooding hazard.

Thank you for the opportunity to comment on this draft.

Sincerely,

  
Francis C. H. Lum  
State Conservationist

PROJECT OFFICES

PROJECT OFFICES



WAIMEA OFFICE  
P. O. BOX 125  
KAMUELA, HAWAII 96743

MAUI OFFICE  
P. O. BOX 22  
KAHULUI, MAUI 96732

KAUKAHA OFFICE  
P. O. BOX 833  
HILO, HAWAII 96720

MOLOKAI OFFICE  
P. O. BOX 138  
HOOLEHUA, MOLOKAI 96729

STATE OF HAWAII  
DEPARTMENT OF HAWAIIAN HOME LANDS  
P. O. BOX 1879  
HONOLULU, HAWAII 96805

KAUAI OFFICE  
P. O. BOX 332  
LIHUE, KAUAI 96765

February 18, 1975

Mr. Francis Lum, State Conservationist  
Soil Conservation Service,  
U. S. Department of Agriculture  
440 Alexander Young Bldg.  
Honolulu, Hawaii 96813

Dear Mr. Lum,

Thank you for your comments on the draft environmental impact statement for the Waianae Valley Road Homestead subdivision. We have reviewed your comments and find that they cover the proposed project site in excellent detail. The engineering consultant, Mr. Yasuo Arakaki has advised us that he has taken into consideration all of the points you have discussed with the Department of Public Works and has assured them that all construction phases will deal with these soils problems. We are attaching a copy of the Walter Lum and Associates soil report conducted for this project and feel that this has effectively met all applicable engineering demands.

The flooding problem that you point out has also been accounted for by the engineer; Mr. Arakaki has designed the bridge over the existing stream to meet a design flow rate of 8300 cfs, well in excess of the 100 year flow rate of 6430 cfs. All design factors have been reviewed and approved by the Department of Public Works and we are confident that there should be no significant problems.

Thank you for your concern and we look forward to continuing our relationship between your office and this department.

Owau no meka haa haa  
(I am humbly yours)

Billie Beamer  
Chairman

GEORGE R. ARIYOSHI  
GOVERNOR



E. ALVEY WRIGHT  
DIRECTOR

DOUGLAS S. SAKAMOTO  
DEPUTY DIRECTOR

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION  
669 PUNCHBOWL STREET  
HONOLULU, HAWAII 96813

IN REPLY REFER TO:  
AIP 8.2912

January 20, 1975

Dr. Richard E. Marland  
Interim Director  
Office of Environmental  
Quality Control  
550 Halekauwila St., Room 301  
Honolulu, Hawaii 96813

Dear Dr. Marland:

Subject: Draft Environmental Impact Statement  
Waianae Valley Road Homestead Subdivision

In reference to the subject environmental statement, we offer the following comments:

1. The average maximum counts reported on page 11 may have been erroneously reported as one-way counts. The 16,340 VPD value reported seems more like a two directional point count.
2. The statement on page 18 that vehicles generated by the project will not adversely affect or congest the present transportation system is debatable. In our judgment, estimated future volume of 7,000-9,000 VPD will congest Waianae Valley Road during peak periods.

Sincerely,

A handwritten signature in cursive script that reads "E. Alvey Wright".

E. ALVEY WRIGHT  
Director

PROJECT OFFICES

WAIMEA OFFICE  
 P O BOX 125  
 KAHULUI, HAWAII 96743

KEAOKAHA OFFICE  
 P O BOX 833  
 HILO, HAWAII 96720



STATE OF HAWAII  
 DEPARTMENT OF HAWAIIAN HOME LANDS  
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PROJECT OFFICES

MAUI OFFICE  
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 HOOLEHUA, MOLOKAI 96729

KAUAI OFFICE  
 P O BOX 332  
 LIHUE, KAUAI 96766

February 18, 1975

Ret. Rear Adm. E. Alvey Wright, Director  
 State Department of Transportation  
 869 Punchbowl Street  
 Honolulu, Hawaii 96813

Dear Adm. Wright,

Thank you for your comments on the traffic problems in the draft environmental impact statement (EIS) for the Waianae Valley Road Homestead subdivision. Our traffic consultant, Mr. Henry T. Au has responded as follows:

"The counts reported on page 11 were erroneously reported as one-way counts. The 16,340 VPD value is a two way count on one leg of Farrington Highway. Being a two way count, the actual traffic volume is not as critical as set forth in the Draft Environmental Impact Statement. Since the actual traffic volume only 1/2 of the value stated in the report, the actual traffic volume, therefore, should support and favor the development of the Waianae Residential Lots Subdivision."

The balance of the comments essentially state that the carrying capacity of the existing road can accommodate the anticipated traffic that would be generated from our project. He also states that the majority of the residents would be on the road at an earlier than usual hour to travel into Honolulu for work, thus minimizing the traffic peak on Waianae Valley Road.

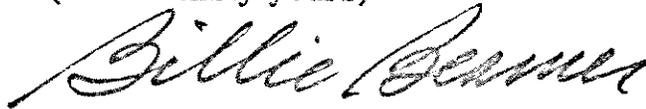
Ret. Rear Adm. E. Alvey Wright, Director  
State Department of Transportation  
Page 2

2/18/75

We are including a copy of his responses as an attachment to the final EIS so that all concerned agencies can be apprised of the traffic problems and the means to accommodate the additional load.

Thank you for your comments and we look forward to a continuing relationship with your department.

Owau no me ka haa haa  
(I am humbly yours)

A handwritten signature in cursive script that reads "Billie Beamer".

Billie Beamer  
Chairman

March 31, 1975

MEMORANDUM

TO: The Honorable Billie Beamer, Director  
Hawaiian Home Lands

FROM: Richard F. Marland, Director  
Office of Environmental Quality Control

SUBJECT: Final Environmental Impact Statement for Kaimanoe  
Valley Homestead Subdivision

We have received copies of the above final EIS. We would very much like to recommend acceptance of this document to the Governor, but at this time we are unable to do so. In reviewing this document, we find unsatisfactory responses to two major areas of concern and recommend that an explanation and/or a correction be added to the document. These concerns are elaborated below.

1. Sewage Disposal System - Through the Department of Public Works' letter of December 17, 1974 on the above subject it is known that cesspools in the adjacent areas to the subject project site are not functioning properly and require frequent pumping services or chemical treatment. Through your response, we understand that you do not endorse cesspools but because of economic necessity supported by engineering consultants and the Department of Health, you must proceed. You further state that the prevention of cesspool malfunction problems will be monitored. Our concern is that the EIS did not adequately discuss how you will monitor the prevention of these cesspool malfunctions. How will this be done?

If cesspools in fact do not work, and sewers have to be provided later on the economic effect would be worse than if sewers were provided originally.

The initial cost of installing cesspools may be cheaper than installing sewer lines but if the cesspools require high maintenance costs for frequent pumping and chemical treatment, the reverse may become true. We trust that you have considered this possibility with careful analysis and evaluation.

2. Traffic - Concerns were brought up by the Department of Transportation, Department of Transportation Services, Department of Public Works and our Office in this area. Questions were raised of the information as presented in the EIS and the responses given were quite inadequate. We have listed these points belows.

a. Department of Transportation Services stated that: "The existing 44-foot right-of-way Waianae Valley Road has pavement widths of 16 feet to 21 feet..." Mr. H. T. Au's response is: "The existing Waianae Valley Road is basically a 44 ft. roadway with varying widths." In our judgment, the issue--the actual pavement width--was not addressed.

b. The Department of Transportation Services further states that: "It should be noted that there were fifteen accidents reported on the road in 1973, and twelve accidents during the first ten months of 1974." Mr. H. T. Au's response implies that the accidents were caused by the lack of use of "...basic tools of the traffic engineering profession, such as warning signs, speed limit signs and markings." He further states that: "The potential exist in the use of traffic engineering measures in reducing accidents without physical improvement of the roadway itself." We agree that traffic engineering measures will help reduce accidents. However, we also believe that with physical improvement of the road, the possibility for traffic accidents will be further lessened. With increased pedestrians, bikers, and automobiles the existing conditions of the road will be aggravated. As we understand it, there are no sidewalks or gutters and the pavement width barely accomodates two oncoming automobiles. Was the safety of the present residents as well as the new residents been considered? Will Hawaiian Home Lands itself initiate improvement of the Waianae Valley Road?

c. On page 3, of Mr. H. T. Au's letter dated February 3, 1975, he states that: "...the peak hour volume generated by the development is 336..." No mention is made of the present existing peak hour volume. To depict a more accurate picture, the total peak hour volume should be given--that is, the existing peak hour volume plus the peak volume that will be generated by the development

d. To continue the quote from 2c. "...whereas the capacity of a 44 ft. roadway, with no parking and at grade intersection is approximately 600 vehicles per hour in one direction and 900 vehicles for both directions." We understand from the context of the quote that the capacity figures are for a 44 ft. roadway. The conclusion in the following paragraph states: "The existing roadway with its 44 ft. right-of-way, therefore, will have sufficient capacity to accommodate all of the anticipated traffic volume." Do the capacity figures also apply to a 44 ft. right-of-way roadway? We believe that there is a distinction between the terms "roadway" and "right-of-way". Please clarify.

e. The Department of Public Works pointed out that "...an improvement district project by the City is unlikely in the near foreseeable future." Mr. H. T. Au's response is: "Until the basis used by the Planning Department to justify the establishment of the 80 ft. roadway is known, there will continue to be the erroneous assumption that Waianae Valley Road, in order to accommodate the traffic generated by the Waianae Residence Lots Subdivision, must be widened to 80 ft. as shown on the General Plan, so that an improvement district for the widening becomes necessary." Mr. Au's response seems to imply that because the General Plan has Waianae Valley Road designated for a 80 ft. right-of-way, the roadway 'must be widened'. This, to us, is an unrealistic assumption. Unless someone takes the initiative to negotiate the widening of this road, it may not be widened at all.

f. We acknowledge receipt of Mr. H. T. Au's letter (18 copies) to Mr. Fred Rodriguez dated March 18, 1975. SUBJECT: Traffic Impact Study, Waianae Residence Lots, Hawaiian Home Land, Waianae, Oahu Hawaii. We ourselves had the same concern as the Department of Transportation and do find Mr. H. T. Au's clarification satisfactory. We have appended a copy of his letter to each Final FIS.

As stated earlier, we would appreciate an explanation and/or correction to the FIS for the above concerns. We will be looking forward to receiving your response. After your response is received and reviewed by our Office, we will be able to decide upon the recommendation of acceptance to the Governor.

ENVIRONMENTAL  
COMMUNICATIONS  
INC.

APR 8 10 42 AM '75

RODRIGUEZ,  
PRESIDENT

April 8, 1975

The Honorable Billie Beamer, Director  
Department of Hawaiian Home Lands  
550 Halekauwila Street  
Honolulu, Hawaii 96813

Dear Chairwoman Beamer,

We are pleased to provide for your use the following responses to the questions raised by the Office of Environmental Quality Control (OEQC) on the proposed Waianae Valley Road Homestead Subdivision.

The responses have been prepared in consultation with the retained engineering consultants, Mr. Henry T. Au and Mr. Yasuo Arakaki. Mr. George Kurio has also been advised of the questions raised and is aware of the situation.

1. Sewage Disposal System: The concerns raised over the construction and use of cesspools versus a formal sewage treatment plant have been analyzed by the retained engineering consultant. In addition, the proposed cesspool system's design and construction plans have been reviewed and approved by the authorized governmental agency, the State Department of Health.

The December 17, 1974 letter from the Department of Public Works regarding the proper functioning of cesspools is well taken and your Department is aware of the benefits of a formal sewage treatment plant (STP) versus cesspools. Our environmental review of the various systems concur with OEQC's concerns but we must accede to the basic premise of your Department's goals and objectives which is to provide homesites for the Hawaiian people. We have also discussed with the retained consultants the potential costs which could result from either (a) installation for "dry lines" from each home site to Waianae Valley Road and (b) the cost of an interceptor sewer line which would run from Farrington Highway up to the project site. His comments are as follows.

The minimum costs for "dry lines" would be an additional \$250,000. This expense would be incurred with no definite time limit on when the City and County would run the interceptor sewer line from Farrington Highway to the project site. At the present time, the interceptor sewer line is not scheduled for at least twenty (20) years according to the CIP of the City and County Department of Public Works. According to Mr. Arakaki, the cost of the interceptor sewer from Farrington Highway would be greater than the entire site development costs, which I understand are substantial.

HENRY TUCK AU -  
CONSULTING ENGINEER  
~~SUITE 201, 920 BYRD STREET~~ SUITE 507, 33 S. KING ST.  
HONOLULU, HAWAII 96813  
TELEPHONE 538-7237

April 4, 1975

Mr. Fred Rodriguez, President  
Environmental Communications, Inc.  
P. O. Box 536  
Honolulu, Hawaii 96809

Dear Mr. Rodriguez:

SUBJECT: Mr. Marland's Comments on Final Impact  
Statement For Waianae Valley Homestead Subdivision

By letter dated March 31, 1975, Mr. Richard E. Marland of the Office of Environmental Quality Control expressed what he regarded as unsatisfactory responses to two major areas of concern and recommended that an explanation and/or a correction be added to the final Environmental Impact Statement for the Waianae Valley Homestead Subdivision. One concern related to the Sewage Disposal System and the other to Traffic. To avoid any misunderstanding, the following explanations relative to traffic are submitted for his review and approval.

COMMENT: a. Department of Transportation Services stated that: "The existing 44 foot right-of-way Waianae Valley Road has pavement widths of 16 feet to 21 feet..." Mr. H. T. Au's response is: "The existing Waianae Valley Road is basically a 44 ft. roadway with varying widths." In our judgment, the issue--the actual pavement width--was not addressed.

EXPLANATION: The statement "The existing Waianae Valley Road is basically a 44 ft. roadway with varying widths" is not exact or correct. The actual wording is: "The existing Waianae Valley Road is basically a 44 ft. roadway with varying pavement

Madame Chairman, we have both initially and at your request, explored the various avenues available to this project which would not avail the use of cesspools, but if we are to keep your basic premise for existance in mind, prohibitive costs would make it necessary to drop nearly 50% of your proposed subdivision. My recommendation at this point is to bring this matter to the attention of Governor Ariyoshi since expenditures of this magnitude would require legislative assistance or Federal aid.

2. Traffic: I am taking the liberty of attaching the detailed explanations submitted by Mr. Au which address themselves specifically to the questions raised by OEQC. I am confident that they will sufficiently respond to the points raised.

Finally, I am pleased that this Environmental Impact Statement is receiving specific attention at the hands of OEQC. It indicates to me that there is valid concern over the various departments' projects and their potential impact on the environment as a whole. I must confess that I am concerned over the role that OEQC is playing in regards to accepting EIS documents that have been approved by those agencies in government vested with regulatory authority. I speak of the fact that your Waianae Valley Road project has signed construction drawings with approvals from the Department of Health; Department of Public Works; Board of Water Supply; and the Building Department. If there were specific questions raised by these regulatory agencies, they certainly must have been resolved or else the plans would not have been signed.

We understand OEQC's concerns on environmental impact, but find it difficult to accept their role as anything more than an advisory office to the Governor. I hope that we have provided for your use adequate comments and explanations to the questions raised.

Very truly yours,

  
F. J. Rodriguez

cc: Mr. Henry T. Au  
Mr. George Kurio  
Mr. Yasuo Arakaki

Enclosures

widths. The explanation is that for all practical purposes, the pavement width is 20 feet, even though very short sections of the roadway may have pavement widths of 16 feet to 21 feet. The major portion of the road has pavement widths of 20 feet or more.

Waianae Valley Road was originally constructed as an agricultural subdivision road with a water bound macadam surface of 4 inches finished thickness or coral of 6 inches finished thickness. In order that the road may become a public street, either the City or Capital Investment Company installed the hard surface pavement at no cost to the abutting properties. This may account for the varying pavement widths of 16 feet to 21 feet.

COMMENT:

b. The Department of Transportation Services further states that: "It should be noted that there were fifteen accidents reported on the road in 1973, and twelve accidents during the first ten months of 1974." Mr. H. T. Au's response implies that the accidents were caused by the lack of use of "...basic tools of the traffic engineering profession, such as warning signs, speed limit signs and markings." He further states that: "The potential exist in the use of traffic engineering measures in reducing accidents without physical improvement of the roadway itself." We agree that traffic engineering measures will help reduce accidents. However, we also believe that with physical improvement of the road, the possibility for traffic accidents will be further lessened. With increased pedestrians, bikers, and automobiles the existing conditions of the road will be aggravated. As we understand it, there are no sidewalks or gutters and the pavement width barely accomodates two oncoming automobiles. Has the safety of the present residents as well as the new residents been considered? Will Hawaii Home Lands itself initiate improvement of the Waianae Valley Road?

**EXPLANATION:** Several comprehensive studies and research projects have been made by the American Association of State Highway Officials in cooperation with the Bureau of Public Roads in an attempt to determine the relationship of traffic accidents to roadway design and traffic control. These studies were based on exhaustive review and analysis of traffic engineering studies conducted both in the United States and abroad. There is, therefore, a comprehensive collection of existing knowledge on traffic accidents available to guide and support engineering decisions.

Utilizing these facts and data as guides, and after an analysis of the traffic accidents and other factors relating to the road (gradient, alignment, sight distance, pavement width, etc.), it is my conclusion that the potential exists in the use of traffic engineering measures in reducing accidents without physical improvement of the roadway itself. It must be emphasized that physical improvements of the road do not always yield greater safety. Research studies have not yet determined the most economical width to construct from the standpoint of safety.

Undue emphasis has been given to engineering factors, such as lane width and other characteristics as the causes of traffic accidents. For example, a curve in an otherwise straight alignment may be the scene of many accidents, whereas a curve of the same radius in a curving alignment would have very few accidents. Many engineering decisions on traffic (dealing with human behavior) may seem illogical and inappropriate, but are very effective in reducing accidents. There are situations also where the key to safety lies in police enforcement activity.

The highway transportation system consists of three basic components: 1) the driver, 2) the vehicle, and 3) the roadway. A traffic accident,

therefore, is the result of a failure in the performance of one or more of these components. Thus, the highway itself is but one of the important determinents of where traffic accidents happen.

In my judgment, the application of a center line on Waianae Valley Road, not only would be most effective in reducing the number of accidents, but in controlling the speed on the road. The center line has the effect of reducing the width of the pavement and motorist will instinctively slow down when they encounter two way traffic and must use only one-half of the pavement width. The center line is also needed since there is no room for passing zones. The entire length of Waianae Valley Road is a no passing zone.

The increase in traffic generated by the Waianae Valley Homestead Subdivision will add to the safety factor by restricting the maneuverability of the motorist and reducing the speed of traffic. The restriction in maneuverability will still provide an acceptable level of service since the total traffic volume will not equal the capacity.

The safety of the present residents as well as the new residents was considered and there is no basis to believe that Waianae Valley Road will be unsafe with the additional traffic volume. Sidewalks, curbs and gutters are required for rural roads not for the safety factor, but because of the high cost of maintaining these roadways. The streets in the Aiea District (Aiea Heights Drive, etc.) have only 20 feet pavements, no sidewalks or gutters, and carry heavier traffic volumes than Waianae Valley Road, yet these streets present no safety problems.

In accordance with Chapter 24, Improvement By Assessments, of the Revised Ordinances of Honolulu, an improvement district may be initiated in three ways:

1. By the City through the Council's adoption of a Resolution of Intention.
2. By petition of the owners and lessees of at least 60 per cent of the frontage or of the area to be assessed; and
3. By petition of the owners and lessees of 100 per cent of the frontage or of the area to be assessed.

The length of Waianae Valley Road from Farrington Highway to the end of the Waianae Valley Homestead Subdivision boundary is approximately 12,200 feet, or a total frontage of 24,400 feet for both sides of the road. The frontage of this project is only 2,400 feet. With only 10 per cent of the total frontage, it is for all practical purposes, impossible for Hawaiian Homes Lands to initiate improvement of Waianae Valley Road.

**COMMENT:**

c. On page 3, of Mr. H. T. Au's letter dated February 3, 1975, he states that: "...the peak hour volume generated by the development is 336..." No mention is made of the present existing peak hour volume. To depict a more accurate picture, the total peak hour volume should be given--that is, the existing peak hour volume plus the peak volume that will be generated by the development.

**EXPLANATION:**

The present or existing peak hour volume is considerably less than the peak hour volume generated by the development and was omitted or not mentioned to emphasize the fact the analysis used higher than normal traffic generation figures.

The peak hour volume of 336 generated by the development will be higher than the actual volume to be generated since the 336 trips are not entirely auto driver trips. To assure that a sufficient margin of safety was built into the analysis, the trip volumes, including the 24 hour volume and peak

hour volume were assumed to represent only auto driver trips. Taking into consideration the mode of travel, only 75 per cent of the 336 trips would actually constitute auto driver trips.

From the traffic volume data collected by the Department of Transportation Services, the present or existing peak hour volume on Waianae Valley Road is 152 trips in one direction and 233 trips for both directions of travel. The total peak hour flow in one direction is, therefore, 488 trips (336 + 152), still less than the capacity figure of 600 trips in one direction.

COMMENT:

d. To continue the quote from 2c. "...whereas the capacity of a 44 ft. roadway, with no parking and at grade intersection is approximately 600 vehicles per hour in one direction and 900 vehicles for both directions." We understand from the context of the quote that the capacity figures are for a 44 ft. roadway. The conclusion in the following paragraph states: "The existing roadway with its 44 ft. right-of-way, therefore, will have sufficient capacity to accommodate all of the anticipated traffic volume." Do the capacity figures also apply to a 44 ft. right-of-way roadway? We believe that there is a distinction between the terms "roadway" and "right-of-way". Please clarify.

EXPLANATION:

There is no distinction between the terms "roadway" and "right-of-way". There are two definitions for the term "roadway": 1) a road, and 2) traveled part of a road. Using the preferred definition as a road, a 44 ft. roadway is the same as a road with a 44 ft. right-of-way.

COMMENT:

e. The Department of Public Works pointed out that "... an improvement district project by the City is unlikely in the near foreseeable future." Mr. H. T. Au's response is: "Until the basis used by the Planning Department to justify the establishment

of the 80 ft. roadway is known, there will continue to be the erroneous assumption that Waianae Valley Road, in order to accommodate the traffic generated by the Waianae Residence Lots Subdivision, must be widened to 80 ft. as shown on the General Plan, so that an improvement district for the widening becomes necessary." Mr. Au's response seems to imply that because the General Plan has Waianae Valley Road designated for a 80 ft. right-of-way, the roadway "must be widened". This, to us, is an unrealistic assumption. Unless someone takes the initiative to negotiate the widening of this road, it may not be widened at all.

EXPLANTION:

The statement by Mr. Au that Waianae Valley Road must be widened to 80 ft. as shown in the General Plan is not an unrealistic assumption. It is a requirement established by law and is set forth in the Revised Ordinances of Honolulu and the Revised Charter of the City & County of Honolulu, 1973.

The requirements are set forth in the following sections:

A. Revised Ordinances of Honolulu

- 1) Section 24-1.1 Method
- 2) Section 24-3.1 Initial Procedure
- 3) Section 24-3.2 Petition of Owners
- 4) Section 24-3.5 Compliance With General Plan

B. Revised Charter of the City & County of Honolulu, 1973.

- 1) Section 5-412 (3) Adoption of the General Plan and Development Plans
- 2) Section 6-1202 (a) Powers, Duties and Functions

Mr. Fred Rodriguez

-8-

April 4, 1975

In summary, no public improvement or project, including the construction of sidewalks independently of any other improvements, may be initiated unless it conforms to the General Plan or development plans of the City. Any improvement to Waianae Valley Road, therefore, must conform to the 80-ft. right-of-way as shown on the General Plan.

Sincerely yours,



Henry Tuck Au  
Consulting Engineer

HTA:jmh