

HUD-R09-EIS-82-04F

**FINAL**

**OEQC LIBRARY**

**ENVIRONMENTAL IMPACT STATEMENT**

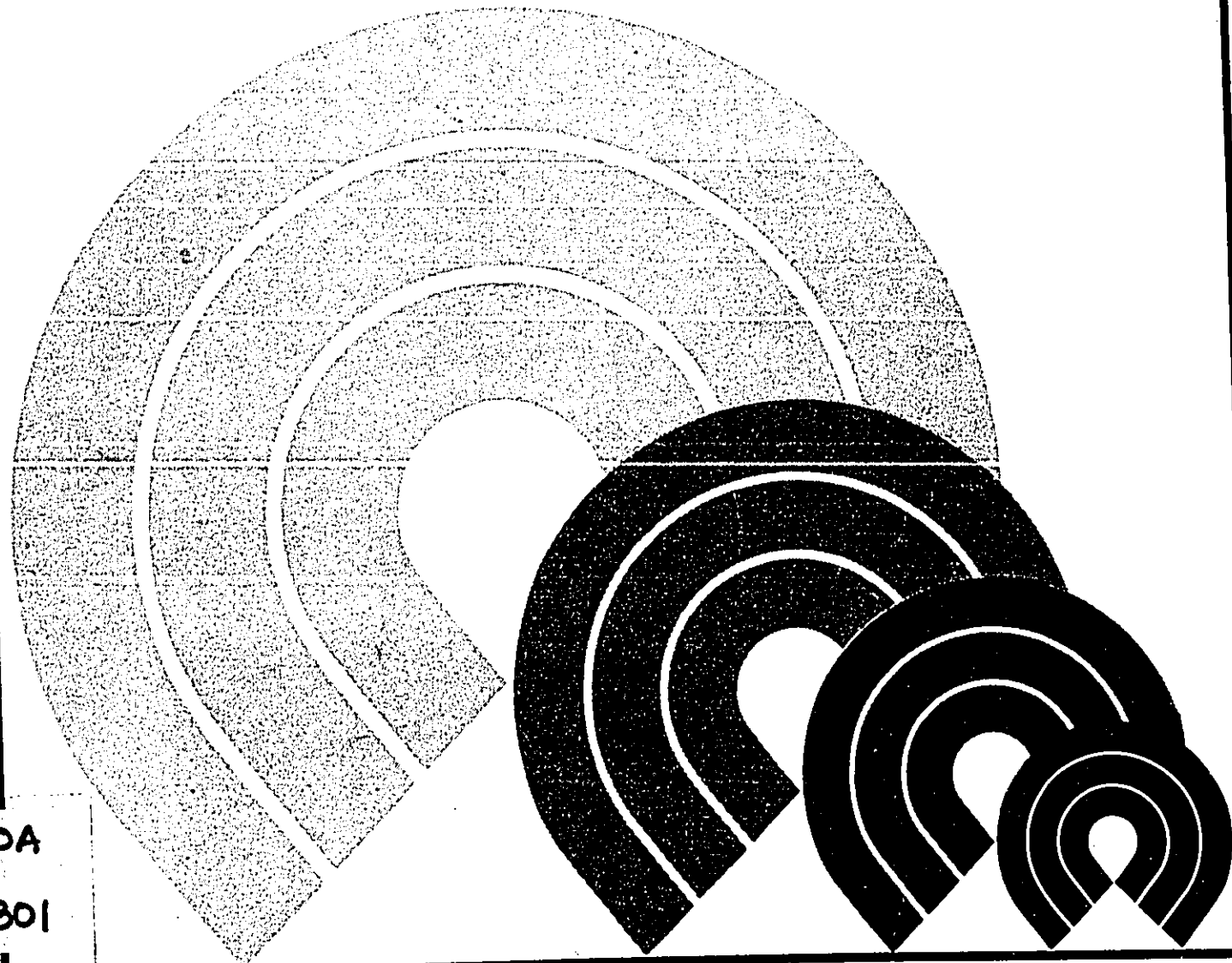
FOR A

**476-ACRE DEVELOPMENT**

AT

**MILILANI TOWN, HAWAII**

US Department of Housing and Urban Development  
Honolulu Area Office



0A

301

Office of Environmental Quality Control  
235 S. Beretania #702  
Honolulu HI 96813  
586-4185

**DATE DUE**

~~April 25, 2002~~  
April 14, 2003  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**NOTICE**

ALL reference material borrowed from this library will be on a 30-day loan period, limited to ONE RENEWAL ONLY.

If borrowed material is not returned when DUE, is DAMAGED, or LOST, there will be a REPRODUCTION CHARGE OF 25¢ PER PAGE.

OEQC LIBRARY - PHONE 548-6915  
550 HALEKAUWILA STREET ROOM 301



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 3318, P.O. BOX 50007  
HONOLULU, HAWAII 96850  
April 20, 1983

REGION IX

IN REPLY REFER TO:  
9.1SS (Johnson)  
546-5583

To:

**DISTRIBUTION LIST (Attached)**

**SUBJECT:** Final Environmental Impact Statement for the  
Mililani Town, Inc., 476-Acre Development  
HUD-R09-EIS-82-04F

Pursuant to Section 102(2)(c) of P.L. 91-910 and implementing Federal regulations, I am transmitting the Final Environmental Impact Statement for the Mililani Town 476 Acre Development Project to you for your information.

The Draft Environmental Impact Statement was distributed for review and comment on September 24, 1982. Comments received on the Draft Statement have been taken into account in the preparation of this Final Statement. Comments received, and HUD discussion of these comments, are included in the Final Statement.

Copies are available to the public for reading at the HUD Honolulu Area Office; State Environmental Quality Commission, Room 301, 550 Halekauwila Street; and at the State Library in Honolulu. Retention copies may be purchased from the National Technical Information Service, Department of Commerce, Springfield, Virginia 22151.

Sincerely,

A handwritten signature in cursive script, appearing to read "Robert K. Fukuda".

Robert K. Fukuda  
Area Manager, 9.1S

Enclosure

**FINAL EIS DISTRIBUTION LIST**  
(Pursuant to P.L. 92-500 and Chapter 343, HRS)

For A  
476-Acre Development at Mililani Town, Hawaii  
U.S. Department of Housing and Urban Development  
Honolulu Area Office

April 1983

- A. U.S. GOVERNMENT**
- Advisory Council on Historic Preservation
  - Office of Architectural and Environmental Preservation
  - Western Division Project Review
  - Department of Agriculture
  - Coordinator of Environmental Quality Activities
  - State Conservationist, Soil Conservation Service
  - Department of the Air Force
  - Fifteenth Air Base Wing
  - Department of the Army
  - U.S. Army Corps of Engineers
  - U.S. Army Support Command, Hawaii
  - Department of Commerce
  - Secretary of Environmental Affairs
  - Department of Housing and Urban Development
  - Community Planning and Development
  - Headquarters Library
  - Department of the Interior
  - Fish and Wildlife Service, Honolulu
  - Office of Environmental Project Review
  - Department of the Navy
  - Naval Base Pearl Harbor
  - Department of Transportation
  - Federal Highway Administration, Region 9
  - Federal Highway Administration, Honolulu
  - Fourteenth Coast Guard District
  - Environmental Protection Agency
  - Office of Federal Activities
  - Policy and Resources Management

United States House of Representatives  
The Honorable Daniel K. Akaka  
The Honorable Cecil Heftel  
United States Senate  
The Honorable Daniel K. Inouye  
The Honorable Spark M. Matsunaga  
Veterans Administration  
\* Loan Guarantee Service  
Regional Director

- B. STATE OF HAWAII**
- \* Department of Accounting and General Services
  - \* Department of Agriculture
  - \* Department of Defense
  - \* Department of Education
  - \* Department of Health
  - \* Department of Land and Natural Resources
  - \* Department of Planning and Economic Development
  - \* Department of Social Services and Housing
  - \* Department of Transportation
  - Environmental Quality Commission
  - \* Office of Environmental Quality Control
  - University of Hawaii
  - Environmental Center
  - \* Water Resources Research Center

- C. CITY AND COUNTY OF HONOLULU**
- \* Board of Water Supply
  - \* Building Department
  - \* Department of General Planning
  - \* Department of Housing and Community Development
  - \* Department of Land Utilization
  - \* Department of Parks and Recreation
  - \* Department of Public Works
  - \* Department of Transportation Services
  - \* Fire Department
  - \* Police Department

**D. REGIONAL LIBRARIES**

- Hamilton Library
- Legislative Reference Bureau
- Municipal Reference Center
- State Archives
- State Library, Main Branch

**E. OAHU LIBRARIES**

- Mililani Library
- Waikane Library

**F. NEWS MEDIA**

- Honolulu Advertiser
- Honolulu Star Bulletin
- The Sun Press

**G. QUASI-PUBLIC ORGANIZATIONS**

- American Lung Association
- \* Mililani Environmental Association
- Mililani Town Association
- Neighborhood Board No. 25
- \* Oahu Metropolitan Planning Organization

**H. UTILITIES**

- \* Hawaiian Electric Company

\* - Agencies responding to the Draft EIS



**FINAL**  
**ENVIRONMENTAL IMPACT STATEMENT**

**FOR A**  
**476 ACRE DEVELOPMENT**  
**AT**  
**MILILANI TOWN, OAHU, HAWAII**

**HUD-R09-EIS-82-04F**

**Lead Agency**  
**U.S. Department of Housing and Urban Development**  
**Honolulu Area Office**

The following person may be contacted for additional information:

Frank L. Johnson  
HUD, Honolulu Area Office  
P.O. Box 50007  
300 Ala Moana Boulevard  
Honolulu, Hawaii 96850  
(808) 546-5583

The proposed Federal action is to provide mortgage insurance for a 476 acre expansion of Mililani Town, on the Island of Oahu, City and County of Honolulu, Hawaii. Mililani Town, Inc. plans to develop 1,245 single family and 845 multi-family housing units, a 45 acre regional shopping center, and 130 acres of parks and open space. The potential impacts include loss of agricultural land, increased traffic, higher community noise levels, increased concentrations of carbon monoxide, withdrawal of water from the Pearl Harbor Aquifer and a demand for public services.

The Draft Statement was made available to the Environmental Protection Agency and the public on September 24, 1982. Comments received during the 45 day review period are reproduced and addressed in the Final Statement which was made available to the Environmental Protection Agency and the public on April 29, 1983

## **SUMMARY**

### **Description of the Proposed Action and Alternatives**

Mililani Town, Inc. has requested FHA mortgage insurance for its proposed 476 acre housing project at Mililani Town. The project is an increment of a 3,500 acre planned community located on the Island of Oahu, City and County of Honolulu, Hawaii. The current proposal is for 1,245 single family and 845 multi-family housing units to be developed on 280 of the 476 acres. Project plans also include a 45 acre regional shopping center and 130 acres of parks and open space, with 66 additional acres allocated to community amenities and facilities. The rate of construction will be tied to home sales, which fluctuate with various market factors such as mortgage interest rates. FHA mortgage insurance is needed to enable more families to qualify for financing at Mililani Town.

Alternatives evaluated in this EIS include: the proposed action, no action, limited actions based on thresholds of traffic congestion and water allocations; alternatives outside of HUD's jurisdiction which include site design alternatives and rezoning the project area to agricultural or other land uses.

HUD will participate in residential developments that are fulfilling current housing needs of the community provided HUD requirements and local codes have been satisfied. When these conditions are met, applications on individual properties are insured through one of HUD's FHA home mortgage insurance program.

### **Environmental Impacts and Mitigation Measures**

- o The project will convert agricultural lands to urban uses, however this is in accord with current State and County policies for this area.
- o Sewage from the project will be treated and used to irrigate sugar cane.
- o Traffic will increase as a result of the project to an extent that demand at some intersections may approach their designed capacity.

- o Houses located adjacent to the major roadways serving the project may be exposed to noise levels in excess of L<sub>DN</sub> 65 dBA but not more than 70 dBA. Affected units to be insured by FHA will be required to provide 5 decibels additional sound attenuation for compliance with HUD noise standards.
- o Construction activities will generate dust which will be controlled by regular sprinkling. Traffic congestion, some of which would be unrelated to the project, may cause State air quality standards for carbon monoxide to be exceeded on occasion. Federal standards would not be violated in the project area.
- o The project will provide 224 housing units for low and moderate income families. Providing HUD mortgage insurance will enable these and other families to more easily qualify for financing.

#### Unresolved Issues

- o The Board of Water Supply has not granted a commitment of the water needed for full development of the proposed project. Water is available for approximately 3 years of development (1,221 units). After this time, however, it is anticipated that the development of new water sources or changes in water allocations will make more water available to the project.
- o The full development of both Mililani Town and the Gentry-Waipio planned community located to the south of Mililani Town has the potential for causing serious morning peak hour congestion on Kamehameha Highway. Traffic studies for Gentry-Waipio have concluded that there is a need for an interchange with the H-2 Freeway for this project. If this is not provided, then south bound traffic from Mililani Town would be forced to use the Meheula Parkway access, which does not have sufficient capacity for this additional demand.
- o The rate of development of the proposed project is unknown, since new home construction is tied to sales, which in turn fluctuates with market and economic factors. If development at Mililani Town is relatively slow, as has been the case, then some possible impacts (school enrollment, water demand, traffic, noise, and air quality) will be delayed and significantly moderated over time.

### **Organizations and Persons Consulted**

A Notice of Intent to prepare an EIS was published in the Federal Register on January 6, 1981. A similar Legal Notice was published in the Honolulu Star Bulletin and Honolulu Advertiser on January 7, 1981. Parties that were directly contacted by letter and asked to comment on the Notice of Intent are listed in Chapter V, and copies of their responses are included in Appendix F.

Availability of the Draft EIS was published in the Federal Register on October 1, 1982, and in the State Environmental Quality Commission Bulletin on September 23, 1982. The review period ended November 15, 1982, but comments were accepted beyond that date. The Draft EIS distribution list and copies of comments and responses are reproduced in Appendix G.



**T A B L E   O F   C O N T E N T S**

	Page
	====
<b>SUMMARY .....</b>	<b>i</b>
 <b>CHAPTER I. PURPOSE AND NEED FOR THE PROJECT</b>	
A. Authority .....	1
B. Project Background .....	1
C. Purpose and Need for HUD Action .....	4
 <b>CHAPTER II. ALTERNATIVES INCLUDING THE PROPOSED ACTION</b>	
A. HUD's Preferred Alternative .....	7
B. No Action .....	14
C. Limited Action .....	15
D. Alternatives outside of HUD's Jurisdiction .....	15
E. Basis for Selecting HUD's Preferred Alternative .....	16a
 <b>CHAPTER III. DESCRIPTION OF THE AFFECTED ENVIRONMENT</b>	
A. Physical Environment .....	17
B. Biological Environment .....	22
C. Social Environment .....	23
 <b>CHAPTER IV. ENVIRONMENTAL CONSEQUENCES OF THE PROPOSED ACTION</b>	
A. Direct Effects .....	27
B. Indirect Effects .....	41
C. Urban and Community Impacts .....	43
D. Commitments of Natural Resources and Energy .....	46
E. Unavoidable Adverse Impacts .....	46
F. Compliance with Land Use Plans, Policies, and Controls .....	47
 <b>CHAPTER V. COORDINATION, COMMENTS, AND RESPONSES</b>	
A. Preparers of the EIS .....	48
B. Notice of Intent .....	49
C. Comments and Responses on the Draft EIS .....	50
D. Unresolved Issues .....	50

INDEX ..... 52

ACRONYMS, AND ABBREVIATIONS ..... 54

REFERENCES ..... 55

**TABLES**

1. Project Land Allocations .....	10
2. UBC Seismic Risk Zones in Hawaii .....	18
3. Mililani Town Land Use .....	24
4. Existing Water Use in the PHGWCA .....	28
5. Mililani STP Capacity .....	31
6. Mililani School Enrollment .....	44

**FIGURES**

1. Location Map .....	2
2. State Land Use .....	5
3. Site Plan .....	8
4. Mililani Water System .....	12
5. Mililani Sewerage System .....	13
6. Hydrology .....	21
7. Traffic Noise Impact .....	39

**PLATES**

1. Aerial View of Project Site .....	3
--------------------------------------	---

**APPENDICES**

A. Unilateral Agreement .....	A-1
B. Traffic Study .....	B-1
C. Noise Study .....	C-1
D. Air Quality Study .....	D-1
E. HUD Mortgage Income Calculations .....	E-1
F. Responses to the Notice of Intent .....	F-1
G. Responses to the Draft EIS .....	G-1

## CHAPTER I. PURPOSE AND NEED FOR THE PROJECT

### A. AUTHORITY

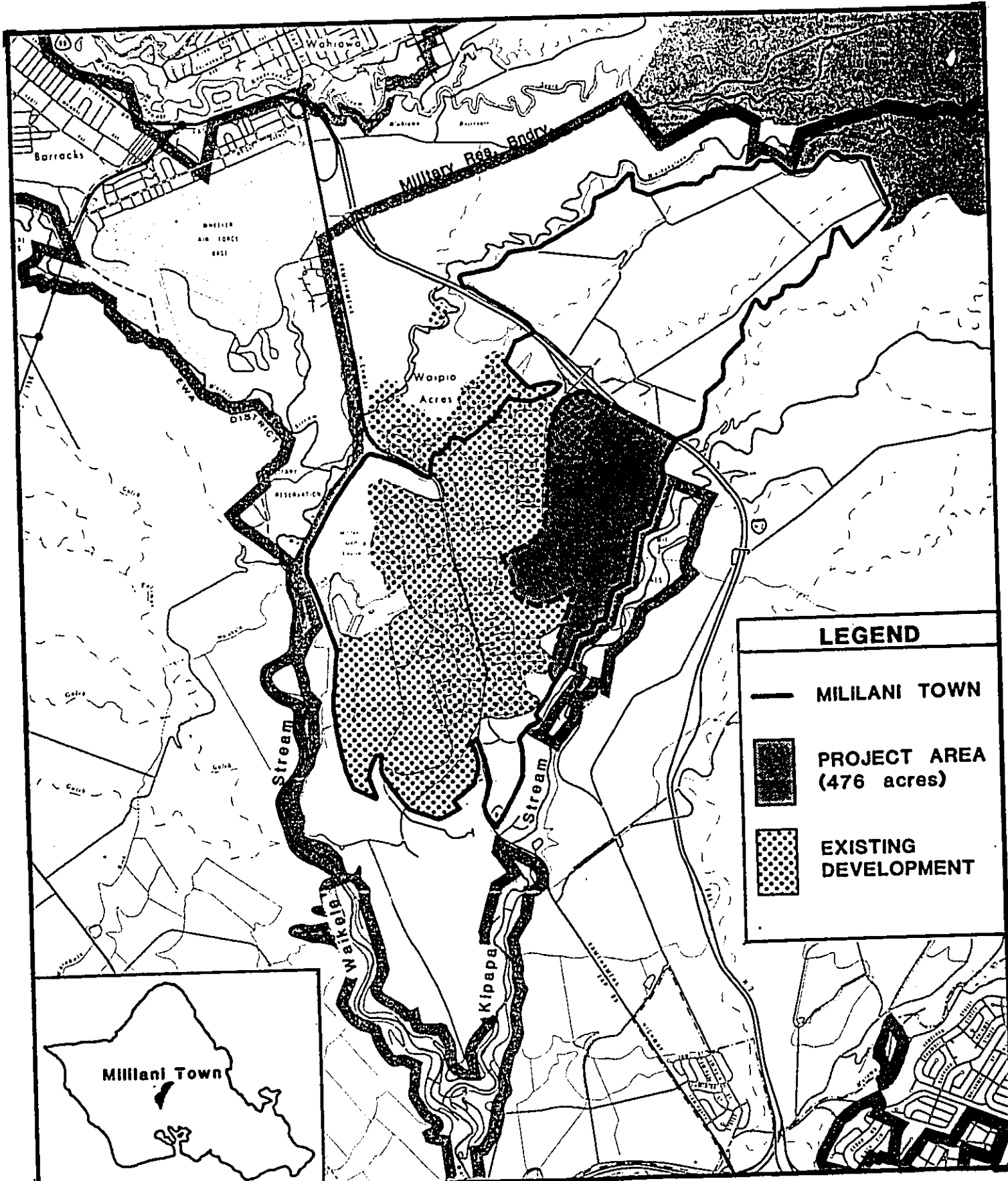
The National Environmental Policy Act (NEPA) of 1969 (P.L. 91-190) established policies, goals and procedures for directing and enhancing environmental quality. The Act directs Federal agencies and authorities to consider the environmental effects of proposed actions, and to avoid or minimize adverse effects of these actions. The Environmental Impact Statement (EIS) serves as the mechanism for implementing NEPA. HUD has promulgated its regulations to implement NEPA in accordance with the Council on Environmental Quality guidelines and other public laws. In November 1979, HUD established new criteria for determining threshold levels for HUD assisted housing projects which require the preparation of an EIS (24 CFR, Part 50).


This EIS was prepared in accordance with the provisions of applicable laws, HUD's program guidelines, and agency directives.

### B. PROJECT BACKGROUND

Mililani Town, Inc. is in the process of building and selling 2,090 housing units on a 476 acre tract of land in Central Oahu. (Figure 1 and Plate 1) To date, 235 units have been developed on 44 acres of this tract. Parks, a regional shopping center, an elementary school, and other amenities are planned for inclusion within the 476 acre site. The total project is an increment of a larger suburban development named Mililani Town.

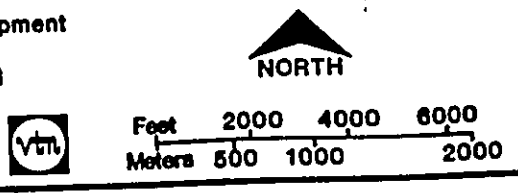
Mililani Town, Inc. plans to expand Mililani Town to encompass 3,500 acres. To date, the State Land Use Commission has classified 2,250 acres of the proposed Mililani Town area as Urban District and 1,250 acres as Agricultural District. Of the 2,250 acres in the Urban District, 1,589 acres (71%) are already developed, 476 acres (21%) have recently received appropriate County zoning and are now being



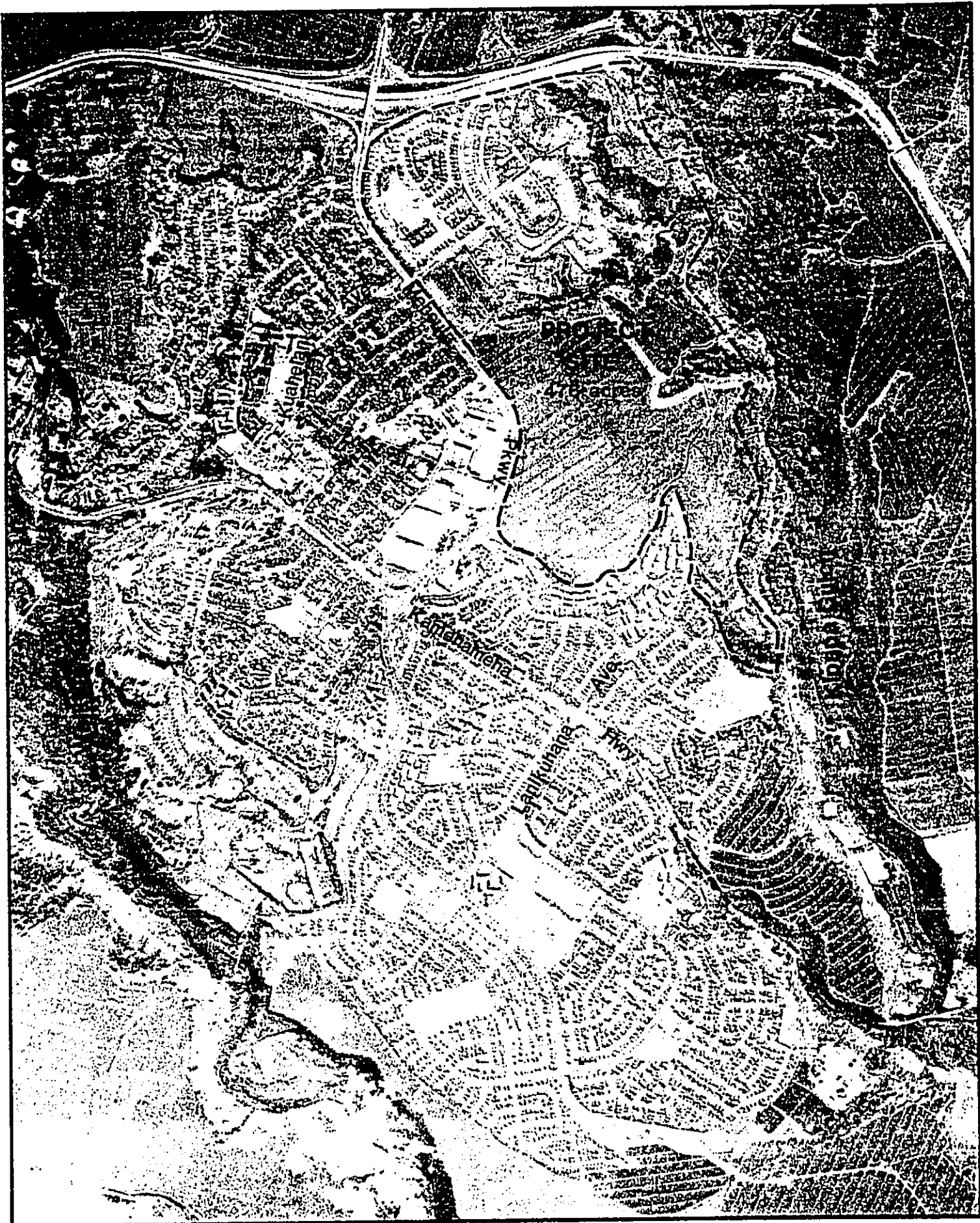
LEGEND	
	MILILANI TOWN
	PROJECT AREA (476 acres)
	EXISTING DEVELOPMENT



Dept. Housing and Urban Development  
**EIS for Mililani Town**  
 476 acre Increment  
**Oahu, Hawaii**



**Figure 1**  
**Location Map**



Dept. Housing and Urban Development  
**EIS for Millilani Town**  
476 acre increment



  
1" 1650' approx.

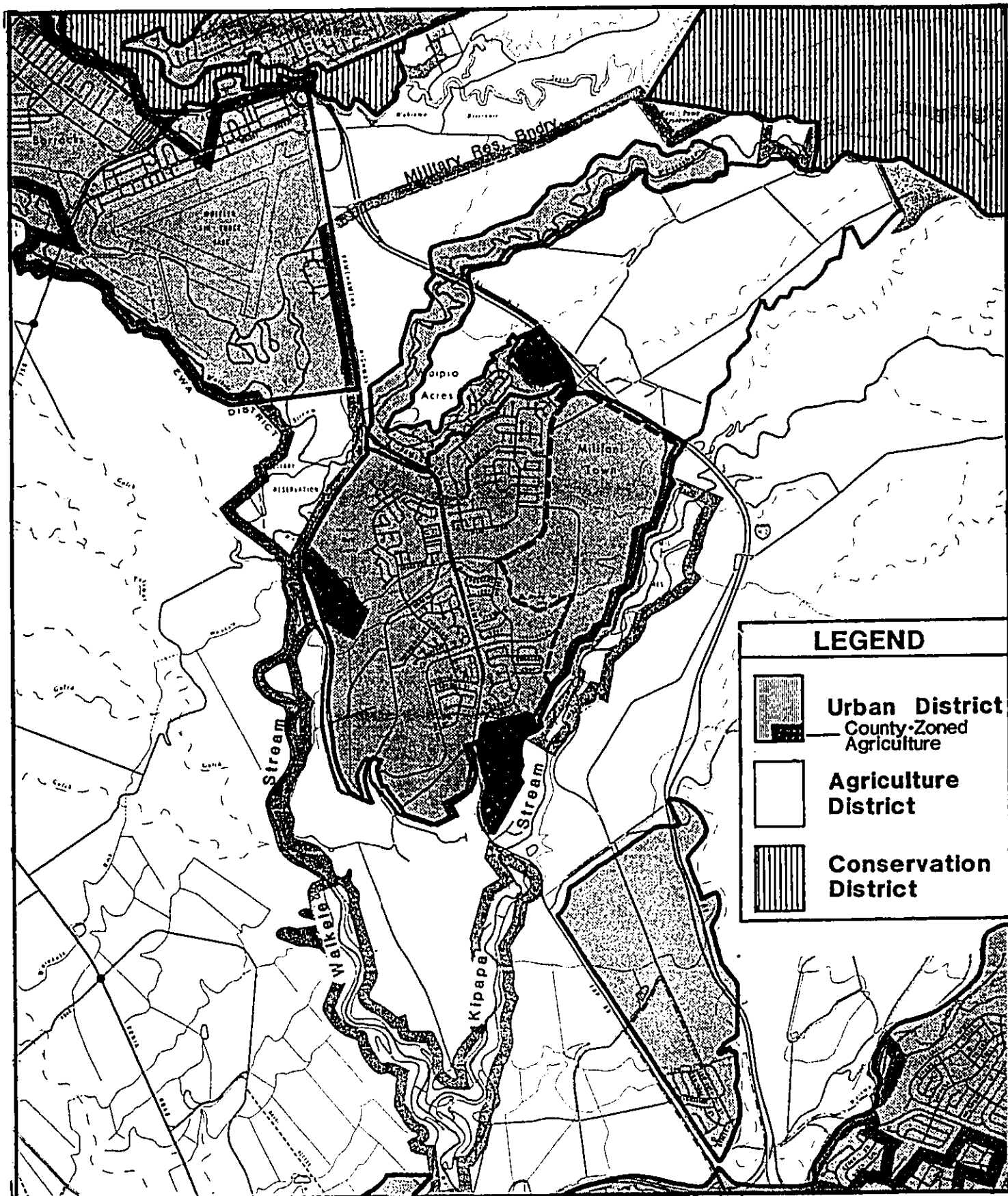
**Plate 1**  
**Aerial View of Project Site**  
(By R. M. Towill, Inc. May 5, 1981)

developed (the subject project), and 185 acres (8%) are still zoned by the County for agricultural use. (Figure 2) Most of the undeveloped lands proposed for this increment of Mililani Town are abandoned pineapple fields.





In order to change the original County zoning of the 476 acre project area from agriculture to residential, apartment and commercial, the City and County of Honolulu Department of Land Utilization (DLU) required an EIS. The "Environmental Impact Statement for the Proposed Mililani Town Expansion" was prepared for Mililani Town, Inc. by Belt, Collins & Associates. It was prepared and processed under rules and regulations contained in Chapter 343, Hawaii Revised Statutes (HRS), Environmental Quality Commission and Environmental Impact Statements as amended. The following milestones were met: EIS Preparation Notice published, 12/8/77; Draft EIS circulated, 5/23/78; Final EIS accepted by DLU, 8/1/78. HUD participation was not considered at that time, so the EIS was not processed in accordance with Federal or HUD EIS procedures or requirements. Since the 1978 EIS was written and accepted by local authorities for the subject project, it is a primary source of information for this EIS and is incorporated by reference. The 476 acre project area was then rezoned on October 18, 1979 [Appendix A].

#### **G. PURPOSE AND NEED FOR HUD ACTION**

Over the past several years, housing costs and mortgage rates in Hawaii have steadily risen to the point where many potential home owners are unable to secure financing. As a result, new housing sales have not met expectations. While Mililani Town, Inc. was able to sell 450 to 600 units per year during the 1970s, sales during the early 1980s are expected to average less than 200 units per year because of high interest rates. To improve this situation, Mililani Town, Inc. submitted a subdivision application to the Honolulu Area Office of the U.S. Department of Housing and Urban Development (HUD) in an effort to make its various mortgage insurance programs available to persons purchasing a home in the current 476 acre increment of Mililani Town.



**LEGEND**

-  Urban District
-  County-Zoned Agriculture
-  Conservation District
-  Agriculture District

Dept. Housing and Urban Development  
**EIS for Milliani Town**  
 478 acre Increment  
**Oahu, Hawaii**



Feet 2000 4000 8000  
 Meters 500 1000 2000

**Figure 2**  
**State Land Use**

The primary purpose of HUD-assisted housing programs is to provide decent housing and a suitable living environment. While many of HUD programs involve government subsidies or loans, this is not the case with market interest mortgage insurance. Instead, HUD encourages private lending institutions to make more liberal mortgage loans by minimizing the risk of loss in the event of default on FHA insured mortgages. FHA mortgage insurance is only available for housing built to HUD standards. It is widely used throughout Oahu, including some of the previously developed sections of Mililani Town. Resale of many homes in Mililani Town have been financed with mortgage insurance issued by HUD through its FHA insured programs. The Veterans Administration also assists purchasers through its loan guarantee program.



## CHAPTER II. ALTERNATIVES INCLUDING THE PROPOSED ACTION

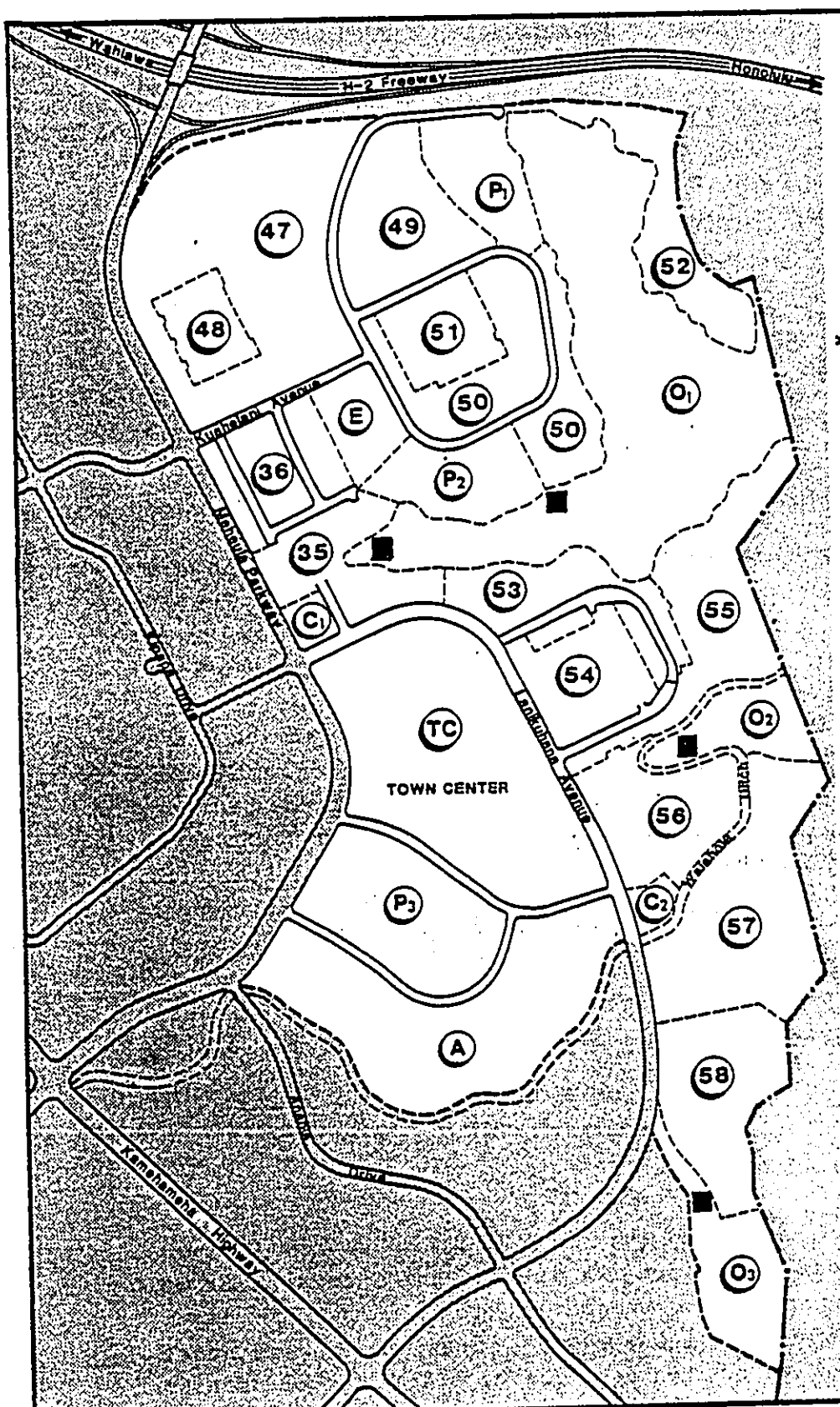
### A. HUD'S PREFERRED ALTERNATIVE

The proposed HUD action is to make mortgage insurance available for use throughout the current increment of Mililani Town. In effect, this will facilitate development by increasing the number of persons who can afford to purchase a new home in Mililani Town. An increase in development at Mililani Town could accelerate the construction of planned increments and potentially encourage urbanization of agricultural lands on Central Oahu. Use of other HUD-assisted housing programs is also possible, but at most will only involve subsidies for a limited number of families who wish to rent or purchase a home. For those units where FHA mortgage insurance is provided, HUD will review each proposal to assure compliance with HUD and federal environmental standards.

Mililani Town, Inc. plans to develop 1,245 single family and 845 multi-family housing units on 280 of the 476 acres in the current increment of Mililani Town. The rate of construction will be tied to home sales, which fluctuate with various market factors such as interest rates for home mortgages. Project development plans also include 45 acres of regional shopping center and 130 acres of parks and open space (Table 1). The project site plan is shown in Figure 3, and specific elements are described in the following paragraphs.

**1. Single Family Housing.** Mililani Town offers ten types of single family "detached" homes. The units are sold in fee on lots averaging about 6,000 square feet. All of these homes offer double wall construction, all electric kitchens and two-car carports. The ten home designs range from a two bedroom single story model to a five bedroom two story model, with several options available to meet individual needs. Floor areas range from 1,060 square feet to 2,100 square feet. Five design styles of larger one and two-story homes will be offered on the larger perimeter lots.

**2. Multi-Family and Cluster Housing.** Low density patio homes, townhouses, condominiums (12 units per acre), and apartments (20 to 25 units per acre) are included in the project. In 1977,



### Unit Descriptions

Unit	Acres	# Units	Proposed Use
35	12.5	224	Apartment/Cluster
36	11.8	82	Single Family
** 47	43.8	235	Single Family
* 48	6.4	50	Cluster
* 49	19.7	99	Single Family
50	25.1	122	Single Family
51	8.9	69	Cluster/Single Fam
52	13.8	60	Single Family
53	15.3	68	Single Family
54	12.4	88	Cluster/Single Fam
55	19.0	94	Single Family
56	13.8	68	Single Family
57	26.9	125	Single Family
58	17.0	71	Apartment
A	36.0	550 85	Apartment Single Family
E	6.0		Elem. School
C1	2.0		Church
C2	2.0		Church
TC	45.0		Commercial/Civic
P1	10.1		Community Park
P2	10.1		Neighborhood Park
P3	19.6		Library/Park
O1	86.5		Open Space
O2	8.1		Open Space
O3	14.0		Open Space
10 :			Roads
<b>Total</b>	<b>476<sup>±</sup></b>	<b>2090 Units</b>	
			1245 Single Family
			845 Multi Family

■ Storm Drain Outlets

Unit Status:

\* Under Construction

\*\* Completed

Dept. Housing and Urban Development

EIS for Milliani Town

476 acre increment

Oahu, Hawaii

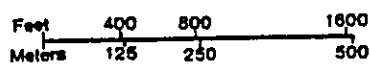


Figure 3

Site Plan

**TABLE 1 PROJECT LAND ALLOCATIONS**

Planned Uses	Acres
=====	=====
1,245 Single Family Housing Units	177
845 Multi-Family & Cluster Housing Units	105
Commercial Shopping Center	45
School Site	6
Church Sites	4
Parks	40
Open Space	89
Roads	10
=====	=====
<b>TOTAL</b>	<b>476</b>

Mililani began offering attached homes (duplexes) which are identical to single family units except that they share a common wall and have a smaller lot. Due to escalating land costs, a decrease in lot size of about 2,000 square feet results in a savings of several thousand dollars. Attached units have individual lots, fenced yards and carports. Cluster housing units contain attached two and four-plex multi-family units. Cluster units consist of a mix of single level, two and three bedroom patio homes, and two story, three and four bedroom townhouses. The lot size for cluster housing units are about one-half the size of single family detached house lots. The cluster option reduces the average price of a three bedroom unit by about \$20,000. Small clusters of multi-family units, interspersed among lower density areas, is accomplished through the City and County's cluster ordinance. Condominium apartments feature low rise, fee simple units.

**3. Community Facilities.**

**a. Shopping.** A 45 acre parcel, planned as a Town Center, will be located in the project area at the intersection of Meheula and Lanikuhana Avenues. It will include major department stores, small shops, a supermarket, and other retail and service businesses. The high density condominium units will be located near the Town Center.

**b. Schools.** A high school is located adjacent to the project area, and one six acre elementary school site has been reserved in the project area for future use by the State Department of Education. Its need will depend upon the number of students generated by land developed for residential use. Two 2-acre church sites have been reserved in the project area but have not yet been occupied.

**c. Recreational Facilities.** The project area includes three park sites, two at 10 acres each, and one 20-acre park situated between the Town Center and the high density units. Three undevelopable gullies have been designated as open space. The latter park (P3) will be the site of the Mililani Community Library.

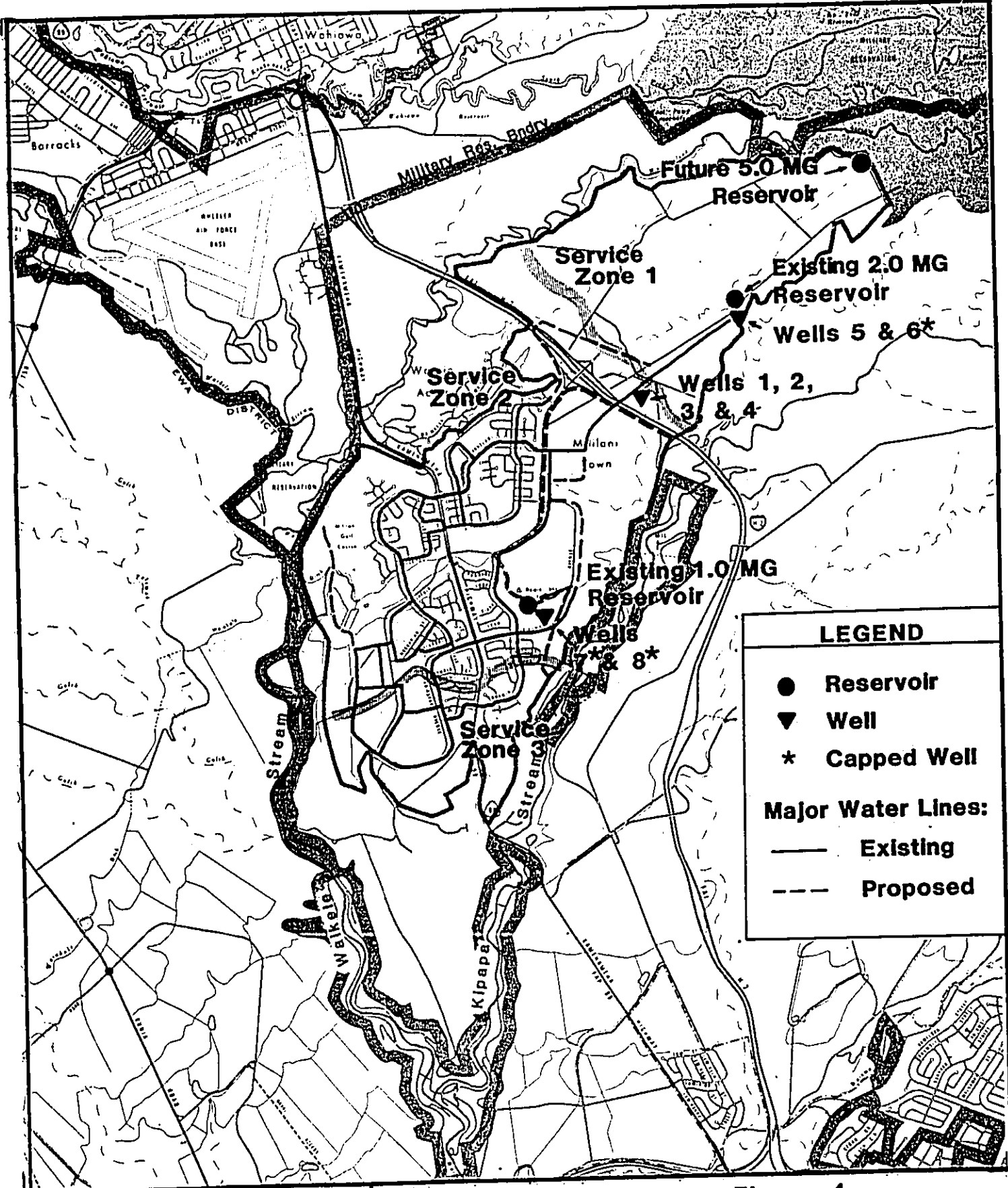
**4. Roads.** Vehicular access to the project area is via Meheula Parkway and Lanikuhana Avenue. Meheula Parkway is the primary north-south corridor through Mililani Town, linking the H-2 Freeway and Kamehameha Highway. It has a 108 foot right-of-way (ROW), a 20 foot landscaped median and provides 4 traffic lanes. Lanikuhana Avenue presently extends from Kamehameha Highway to the western boundary of the project area. It provides 4 lanes of traffic with a 20 foot median strip and a 88 foot ROW. Lanikuhana Avenue and other streets within the project area will be constructed according to City and County of Honolulu Standards (minimum 10 foot traffic lane). All traffic between Mililani Town and other parts of Oahu must utilize either Kamehameha Highway or the H-2 freeway. (See Figure 1)

**5. Power and Gas.** Electric power is distributed within the project area via an underground system connected to the Mililani Town power substation adjacent to the H-2 interchange. Power is supplied from the Hawaiian Electric Company's Waiiau Power plant via two transmission lines (46KV and 12KV). Electrical distribution equipment will be installed at the expense of Mililani Town, Inc. and dedicated to the Hawaiian Electric Company. Natural gas service is not available at Mililani Town although the Honolulu Gas Company will provide containers of liquified petroleum gas on order.

6. **Water Supply.** Mililani Town's Water Master Plan divides the 3,500 acres into three service zones, as illustrated in Figure 4. Existing development is located within zones 2 and 3. The proposed project is contained within zone 2. The Water Master Plan for developments within zones 2 and 3 has been approved by the City and County of Honolulu Board of Water Supply. As of late 1981, five wells extracted an average of 3.03 million gallons per day (mgd). The ground water elevation (static head) of wells one through five range from 28 to 20 feet above sea level. Three additional wells with a combined capacity of 6.0 mgd have been drilled and capped. Two reservoirs with a combined storage capacity of 3.0 mg are presently in use, and a third 5.0 mg reservoir is proposed to serve the north end of Mililani Town.

7. **Sewage.** The Mililani Sewage Treatment Plant (STP) serves Mililani Town and portions of Melemanu Woodlands and Waipio Acres (Figure 5). Although the STP is designed for an average daily flow of 3.6 mgd, an assessment of the plant capabilities rates the capacity at 2.8 mgd. [Ref. 43] Existing flows from the developments at Mililani Town was 2.0 mgd in 1980 and 2.1 mgd in January 1982. The secondary treated effluent is presently discharged into Kipapa Stream which joins Waikele Stream and flows into the West Loch of Pearl Harbor. Sludge is dewatered and hauled to the Waianae Landfill.

The Mililani STP effluent has met secondary treatment standards since July 1980 and will continue to be discharged into Kipapa Stream until 1983, when the current National Pollution Discharge Elimination System (NPDES) permit expires. Because West Loch's waters are classified as Class AA under Chapter 37-A of the State Public Health Regulations, discharge of the effluent must be discontinued by August 1983. Instead, the treated effluent will be used in furrow irrigation of sugarcane fields south of Mililani Town as shown on Figure 5. The effluent will be diverted via a gravity line now under construction. The effluent will by-pass the cane fields for an estimated 2 to 3 months per year during periods of non-irrigation (e.g. by heavy rains or labor strikes). The by-pass line, scheduled for completion by September 1983, will connect the Mililani STP to the Barbers Point marine outfall via the Waipahu Sewage Pump Station and the Honouliuli STP.



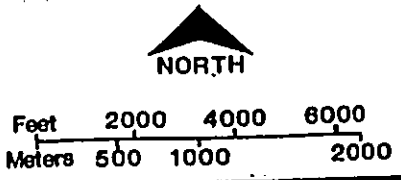
**LEGEND**

- Reservoir
- ▼ Well
- \* Capped Well

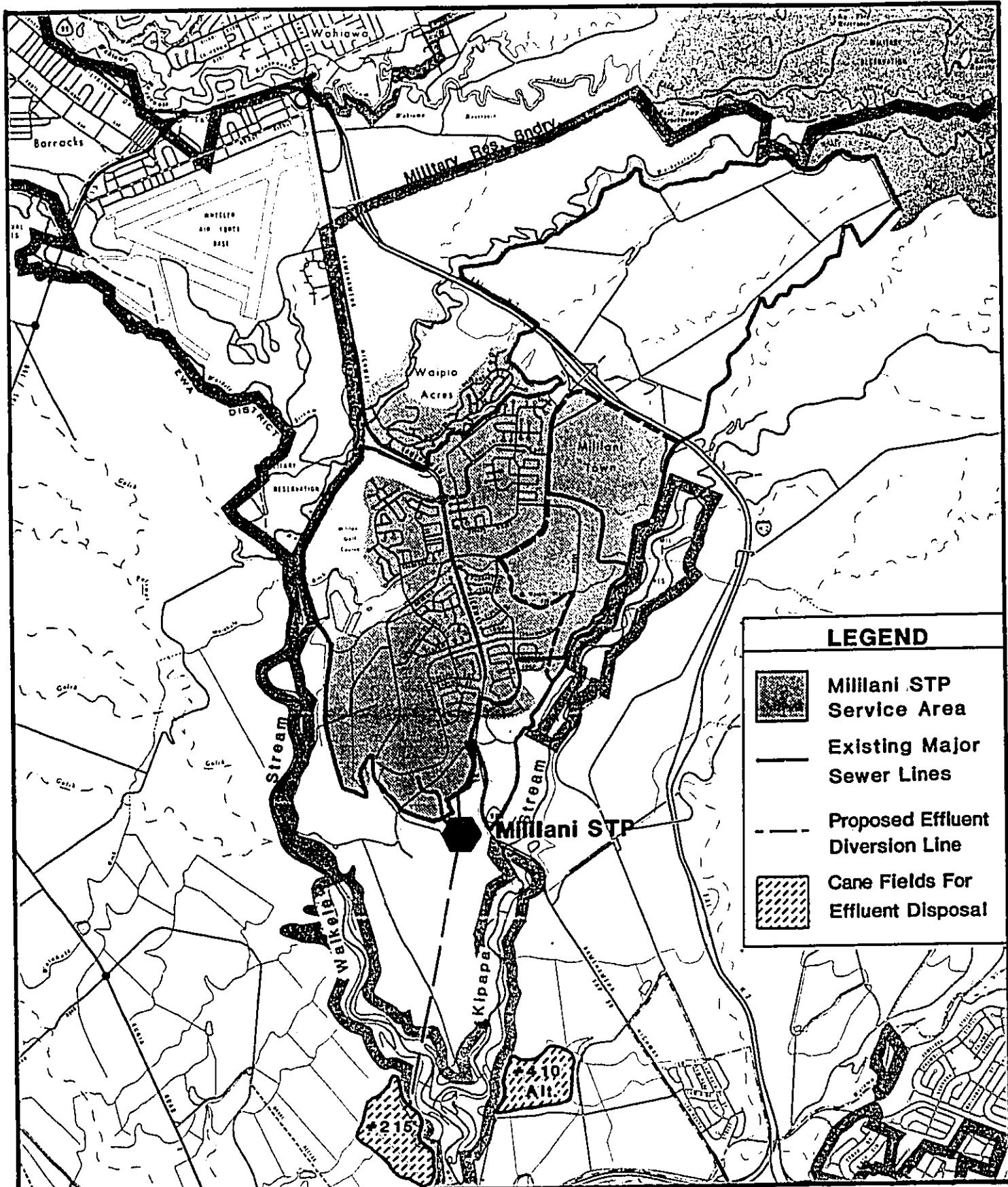
**Major Water Lines:**

- Existing
- - - Proposed

Dept. Housing and Urban Development  
**EIS for Millani Town**  
 476 acre Increment  
**Oahu, Hawaii**



**Figure 4**  
**Millani Water System**



**LEGEND**

-  Millani STP Service Area
-  Existing Major Sewer Lines
-  Proposed Effluent Diversion Line
-  Cane Fields For Effluent Disposal

Dept. Housing and Urban Development  
**EIS for Millani Town**  
 476 acre Increment  
**Oahu, Hawaii**



Feet 2000 4000 6000  
 Meters 500 1000 2000

**Figure 5**  
**Millani Sewerage System**

8. **Drainage.** Storm drainage facilities for the project are planned to continue the present system of catch basins directing storm runoff to four major outlets (see Figure 3). Runoff from these outlets flow into gulleys tributary to Kipapa Gulch. The drainage system will conform to the City and County of Honolulu Department of Public Works Drainage Standards, which are based on a 50-year storm.

9. **Solid Waste.** The City and County of Honolulu handles the collection and disposal of solid waste at Mililani. Private collectors dispose of refuse from condominium units and commercial establishments. The project's refuse will be disposed of at the Waipahu incinerator until at least 1987, at which time a resource recovery facility is expected to be operating. Initial plans for the H-POWER plant would have located the facility next to the Waipahu Sugar Mill in order to combine municipal waste and bagasse (sugar mill waste). This location has been rejected, and a new site is being sought. If the H-Power project is not implemented, Mililani refuse will continue to go to the Waipahu incinerator and the proposed Leeward sanitary landfill (the Department of Public Works has not yet acquired a new landfill site).

#### **B. NO ACTION**

The no action alternative would mean that HUD chose not to provide FHA mortgage insurance on individual properties in the project site. This action would not lessen the significant impacts on the environment since project development could and probably would proceed without HUD assistance. The 476 acre site is currently zoned for urban use.

This alternative was not chosen since HUD would be in a better position to exercise control over environmental impacts by imposing HUD requirements through the subdivision review process on succeeding increments.



### C. LIMITED ACTION

As a means of preventing traffic congestion, with its related impacts of noise and air pollution (see Pages 35-40), HUD has considered granting mortgage insurance for only a specified number of the total proposed units. The cut-off could be set at the point where traffic would reach level of service "F" (forced flow) or the point at which congestion would seriously limit access for emergency vehicles. This option has not been chosen for several reasons. The first is the difficulty of selecting an appropriate cut-off point in advance, since traffic congestion is a function of many factors besides the number of units constructed at Mililani Town. Secondly, the HUD Honolulu Area Office already has a policy of monitoring large projects as they are developed. Each increment will be assessed at the time it's application for mortgage insurance is processed. If traffic is a serious problem at that time then consideration will be given to denying mortgage insurance until the traffic congestion is alleviated. A similar alternative would be to grant mortgage insurance only for a specified number of units for which water service is assured (see Pages 27-30). Again, existing policies make setting up a "quota" unnecessary. Applications for mortgage insurance come after a project has all necessary local building permits. These permits will not be granted until the Board of Water Supply has made a commitment to serve the project. It is therefore not possible for HUD to grant mortgage insurance before water availability is guaranteed.

### D. ALTERNATIVES OUTSIDE OF HUD'S JURISDICTION

1. **Mililani Town, Inc. Site Design Alternatives.** Current housing market trends and economic factors such as family income and interest rates influence the types and numbers of residential units which are developed at Mililani Town. Since multi-family unit sales have been declining in recent years, higher density developments do not appear to be marketable at the present time. Furthermore, the existing land use allocations and intensity of development conform to the overall concept of low density residential development within Mililani Town specified by the City and County of Honolulu (Appendix A).

If Mililani reduced or eliminated the planned community

facilities, up to 80 acres of land could be utilized for agricultural or other uses. However, the elimination of civic amenities would inhibit Mililani Town's ability to become a more viable community. Residents would have to commute to other parts of the island to utilize community facilities. In addition, pineapple production within this parcel currently is not an economically profitable land use. The small amount of agricultural land saved by this measure is insufficient rationale for Mililani to reduce the type or number of planned amenities for the community.

**2. State and County Options.** In 1976, the subject property was rezoned from agriculture to residential and commercial, and the General Plan was amended to accommodate the proposed project. An EIS was prepared in May 1978 in accordance with State environmental regulations. State and County authorities could reverse their earlier decisions and rezone the project area back to its original classification for agricultural or other uses, although this is not a likely possibility for several reasons. First, the decision to convert land from agriculture to urban uses at Mililani was based on the need for additional residential land outside of the presently developed urban core. This was judged to be a greater need than preserving the land in agricultural use. Secondly, converting the land back to agricultural zoning at this stage of development would have a number of potential adverse impacts that include: (1) conversion of urban land to agricultural land will result in a higher land cost that may require a governmental subsidy or a significant increase in cost of the agricultural product that may price it out of the market; (2) the agricultural land is isolated by urban development, and would require heavy trucks and equipment that would utilize residential streets; (3) noise and dust generated by agricultural operations would have an adverse impact on existing residential properties since the project area is located upwind of the existing developed area; and (4) the economic viability of Mililani Town, Inc. may be jeopardized.

#### **E. BASIS FOR SELECTING HUD'S PREFERRED ALTERNATIVE**

It is recognized that there are some potentially adverse environmental

impacts associated with the implementation of this alternative. These impacts include: increased traffic congestion; higher noise levels; conversion of agricultural land to urban use; dust generated by construction activity and the possible limitation of water available to complete the full development of the 476 acre site. Some of these impacts are normally associated with residential development but can be moderated to levels acceptable to HUD. HUD finds that the adverse impacts identified in this assessment process have been or can be overcome by initiating mitigating measures during processing of subsequent subdivision applications. They include:

1. **Conversion of Agricultural Land to Urban Use.** The conversion of agricultural land to urban use was a local decision without HUD input and prior to HUD's receipt of an application for HUD's participation.

2. **Increased Traffic Congestion.** Many factors influence the traffic generation factors that can cause this condition and can easily be monitored through site inspections and coordination with the State Department of Transportation, Highways Division, to determine current and projected traffic volumes. Also complaints by resident and spot surveys of travel patterns can assist in determining when adverse service levels are reached at some future date.

3. **Increased Noise Levels.** Only a limited number of residential units will be exposed to noise levels that exceed HUD's standard of 65 Ldn. In these cases HUD will require attenuation to meet its standard.

4. **Dust Created By Construction.** The City and County's Grading Ordinance requires that certain procedures be followed during grading and construction and is considered as only a short term impact.

5. **Availability of Water.** Each HUD insured property must be provided with water and the availability of water to be determined in processing of subdivision applications.

It is therefore concluded that there are sufficient mitigative measures and controls to provide FHA mortgage insurance through continuous monitoring of the development through the subdivision review process.

### CHAPTER III. DESCRIPTION OF THE AFFECTED ENVIRONMENT

#### A. PHYSICAL ENVIRONMENT

1. **Topography and Geology.** The Island of Oahu was built by two volcanic domes whose remnants consist of the Koolau Range and the Waianae Range. The lava flows from these volcanos formed the Schofield Plateau, a high central plain which connects the two ranges. The terrain is gently undulating, but stream erosion has cut a number of deep and narrow valleys. Mililani Town is located on this plateau at an elevation of 700 to 800 feet. It is bounded by three valleys - Waikakalaua Gulch to the north, Waikele Gulch to the east and Kipapa Gulch to the south. The area generally slopes toward Pearl Harbor at an average grade of three to five percent except for Nob Hill, which has slopes of about 10 percent.

Bedrock underlying Mililani consists of basaltic lava from the Koolau Volcano. The lava between the stream valleys has weathered to form relatively deep and fertile soils. Predominate soils in the area are the Manana, Helemano, and Wahiawa Series, which are moderately permeable and have only a slight erosion hazard. The soils have no significant foundation use limitations. [Ref. 3]

The Island of Oahu is not considered to have a high earthquake risk. In historic times, no major earthquakes have been centered on this island, although it is close enough to the seismically active Island of Hawaii to be affected by earthquakes originating there. Four earthquakes are known to have caused some damage in Honolulu: 1868, 1871, 1938, and 1947. [Ref. 54] The relative risk of earthquake damage has been standardized by the U.S. Coast and Geodetic Survey using four zones of increasing hazard (Table 2). These zones guide the design of structures under the Uniform Building Code. All of Oahu is currently classified in Zone 1, in which the earthquake damage risk is minor. However, Dr. Furumoto, et. al. has recommended that Oahu be reclassified to Zone 2, as risks have been underestimated for the island. [Ref. 54] All construction within the project site will likely conform to the Uniform Building Code and the HUD Minimum Property Standards (MPS) for risk Zone 1. All State funded structures are required to be

designed according to Zone 3 requirements, therefore all public buildings will conform to the more stringent code.

=====

**TABLE 2 - UBC SEISMIC RISK ZONES IN HAWAII [Ref. 51]**

=====

ZONE 0	No damage. (Kauai and Niihau)
ZONE 1	Minor damage; distant earthquakes may cause damage to structures with fundamental periods greater than 1.0 second; corresponds to intensities V & VI of the Modified Mercalli (MM) Intensity Scale of 1931. (Oahu, Molokai, and Lanai)
ZONE 2	Moderate damage; corresponds to intensity VII of the MM scale. (Maui and Kahoolawe)
ZONE 3	Major damage; corresponds to intensity VII and higher of the MM scale. (Hawaii)
ZONE 4	Those areas within Zone 3 determined by the proximity to certain major fault systems.

=====

**2. Climate and Air Quality.** A stationary high pressure area northeast of the Hawaiian archipelago produces steady northeasterly tradewinds that prevail most of the year. The typical weather pattern for the islands include mild year round temperatures, infrequent storms and great variability in rainfall over short distances and between leeward and windward locations. Generally, higher elevations and windward areas receive the most rain, while leeward, lowlying areas receive the least. Hawaii's rainy season occurs during winter, between November and April, when trade winds are interrupted and winter storms and cooler weather occur. The average annual rainfall in the project area is about 40 inches per year. Temperatures at Wheeler Air Force Base, near Mililani Town, average 63.7 degrees Fahrenheit for the

coolest month (January) and 74.8 degrees for the warmest month (August).

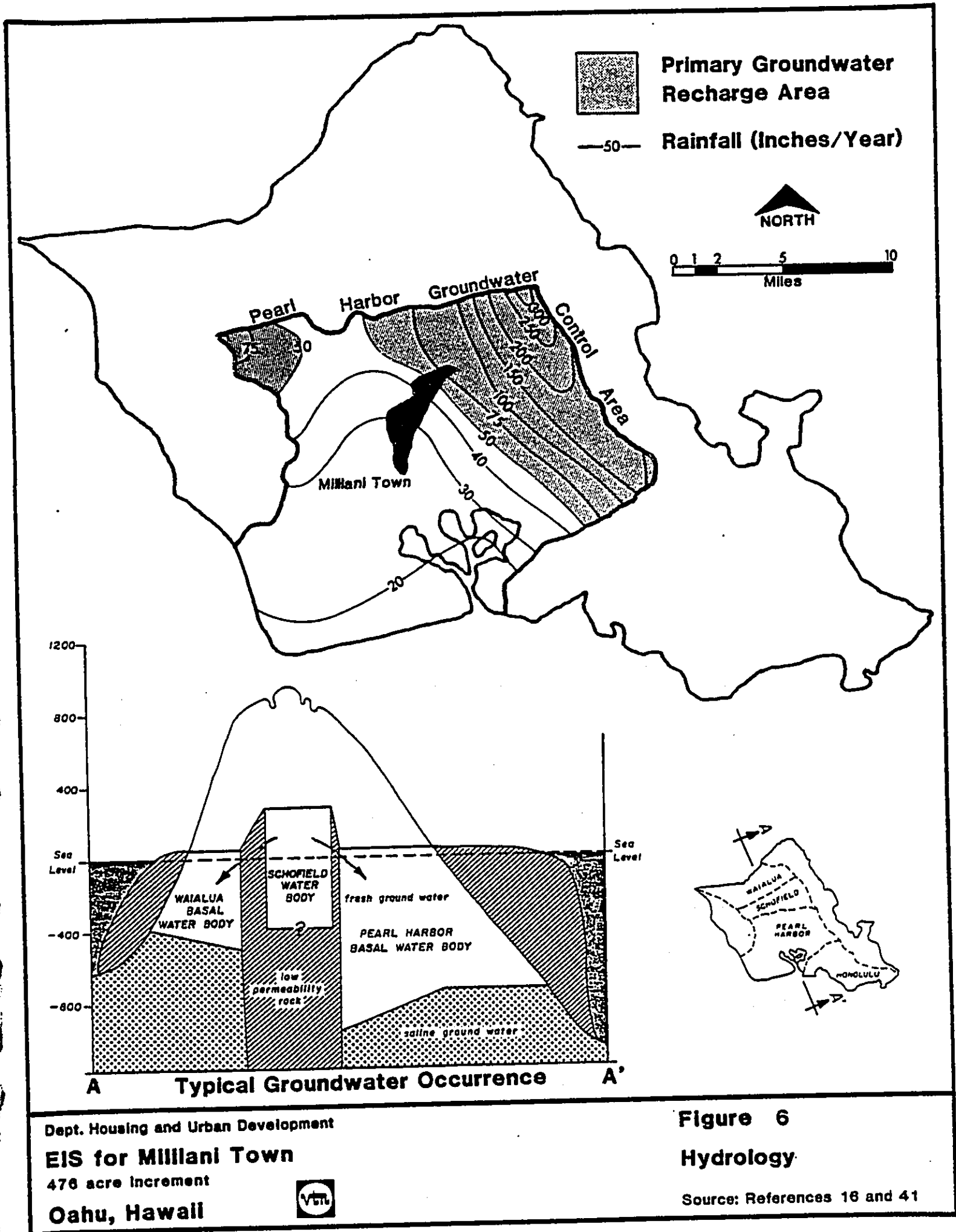
Hawaii's air quality is generally very good, primarily due to favorable topography, the dominance of the tradewinds and the absence of heavy industry. The State's major pollutant sources are motor vehicles, agricultural activities, and power plants. On a statewide basis, the only pollutants which have exceeded standards include carbon monoxide, total suspended particulates, and sulfur oxides. [Ref. 52] Air quality monitoring has not been conducted at Mililani, but it is reasonable to assume that no air quality standards are being violated except for total suspended particulates at times when nearby fields are being burned or ploughed. Appendix D examines the potential air pollution contribution from motor vehicles in the project area.

3. **Water Resources.** Mililani Town is located adjacent to Kipapa Stream which is tributary to Waikele Stream. Two gaging stations provide data for stream flow, Gage 2128 located on the upper reaches of Kipapa Stream above Mililani Town and Gage 2130 located on Waikele Stream just above Pearl Harbor's West Loch. Gage 2128 monitors a 4.3 square mile drainage area. The average daily flow is 10.8 cfs over a 22-year period; a maximum flow for 1980 was 2,620 cfs, while a maximum discharge of 5,680 cfs was recorded on May 14, 1963. [Ref. 23] Although there are no records of flooding along Kipapa or Waikele Streams, the project site is classified as an undetermined but possible flood hazard area according to September 1980 Flood Insurance Rate Maps. The U.S. Army Corps of Engineers Flood Control Management Office have not conducted studies within the project's vicinity to determine flood hazards along Kipapa or Waikele Streams [Ref. 55]. However, the closest stream, Kipapa, is located at an elevation of 440 feet, about 360 feet below Mililani Town. Therefore, surface runoff from the site is unlikely to pose a threat to Mililani Town itself.

The water quality of these streams is generally poor due to nutrient and sediment loading from the agricultural areas through which they flow and from sewage effluent from the Schofield and Mililani STPs (see Chapter IV, Section A3).

Ground water on Oahu consists of basal aquifers and high level dike water. The basal aquifer is essentially a fresh water lens floating on top of salt water, which saturates the highly permeable lavas of the island. The basal aquifer of Pearl Harbor includes 69 square miles and is the major source of potable water for leeward Oahu. The Ewa aquifer (including 119 acres) partly overlies the Pearl Harbor aquifer. The water level varies throughout the aquifer to about twenty feet above sea level at Mililani Town and rises further inland. The fresh water lens of the Pearl Harbor aquifer is fed by the dike-confined Schofield high level water body. The Schofield dike water contributes to the recharge of ground water in Pearl Harbor by sub-surface flow (See Figure 6). Rainfall is the major source of recharge to the aquifer. Although recharge occurs over many areas of the island, the greater amount of rainfall (recharge) occurs in the higher elevations.

Due to the relationship between the basal aquifer and sea water, chloride content is one of the principal water quality parameters of concern. The Mililani wells produce high quality potable water, with chloride levels ranging from 20 to 30 parts per million (ppm) compared to a recommended limit of 250 ppm for drinking water. [Ref. 48] Since the area has been intensively cultivated for many years, other drinking water quality parameters of interest included nitrates and agricultural chemicals. Nitrates in the Mililani wells have been measured at 0.6 ppm in April 1980 [Ref. 49], which is well below the safe limit established by the State Department of Health (DOH). The State Department of Agriculture tests for agricultural chemicals (DBCP and EDB) in wells throughout the State, and did not find appreciable levels in Mililani's wells up through 1981 [Ref. 49]. However, dibromochloropropane (DBCP) was found in Mililani's Well No. 5 in September 1982 at a concentration of 0.09 ppb. As a precaution, the well was closed. Subsequent monitoring has shown no increase in DBCP levels [Ref. 63], but the well is being kept out of production until further information on the health effects of DBCP is available [Ref. 64]. Preliminary results of soil tests at the Mililani landfill (2 miles east of Mililani) indicate no significant potential for groundwater contamination from an alleged discarded barrel of DBCP. [Ref. 50].





## B. BIOLOGICAL ENVIRONMENT

1. **Vegetation.** Most of the gently sloping agricultural land surrounding the project area is in pineapple cultivation. Agricultural, cattle grazing and military land uses have eliminated almost all endemic plant species on the Schofield Plateau. The vegetation growing on the slopes of the gulches consist of guava and Eucalyptus with an understory of tall grasses and weeds. No endangered flora are located within the project area. Although there are some important plant species located in higher elevations of Kipapa Gulch, none are located within the project vicinity. [Ref. 3] Heavy surface runoff from the plateau has caused erosion in some areas of Kipapa Gulch to such an extent that vegetation cannot re-establish itself. The project's storm drainage system is expected to reduce some of this erosion and aid in restoring vegetation on nearby slopes.

2. **Wildlife.** On the plateau and within the gulches there are common finches, thrushes, rodents, and mongooses, all of which have been introduced by man. The Pueo, a native Hawaiian owl listed by the State as an endangered species, has been sighted within the project region. The Hawaiian Hoary Bat listed by both the State and Federal government as an endangered species, could also inhabit the area. Its critical habitat, however, is not likely to include the project site. There are no federally listed endangered or candidate species inhabiting the project area. [Ref. 60] The riparian habitat created by Kipapa Stream is not highly productive due to the intermittent stream flows. Kipapa Stream is not considered to be a significant wetland habitat for birds. [Ref. 36]

3. **Stream Macrofauna.** The two streams that border Mililani Town, Waikele, and Kipapa, have perennial flow, though Kipapa Stream has interrupted flow in its lower reaches before joining Waikele Stream. [Ref. 26] Waikele Stream is the larger of the two, and supports a relatively diverse fauna. Of the eleven species of fish and crustacea recorded in the lower portion of Waikele Stream, two are native and seven have been introduced. The Hawaiian prawn or Opae oehaa (Macro brachium grandemanus) is

relatively abundant upstream from the stream mouth at Pearl Harbor's West Loch, while the goby, O'opu nakea (Awaous stamineus) is reported to inhabit Waikele Stream in relatively low abundance. [Ref. 26] Both are found only in Hawaii, but are relatively common and are locally important food items. The predominance of introduced species in the Waikele Stream system is typical of Leeward Oahu, where urban development has resulted in channelizing the lower reaches of most streams.

### C. SOCIAL ENVIRONMENT

1. **Historic/Archaeological Resources.** There are no known sites listed on the National Register of Historic Places within the project area. [Ref. 61] However, Kipapa Gulch does have some historic significance dating back to pre-contact days, when it was the site of a battle between Hilo and his army from Hawaii, and Oahu's General Mailikukahi. The area received its name from this battle - Kipapa - meaning a "plain of corpses". [Ref. 3] Two heiaus, long destroyed, were located in Kipapa Gulch, northeast of the military access roads. Artifacts from this area are not considered significant, taken within their context, to warrant the designation of a historic or archeological site. [Ref. 3]

2. **Land Use.** Mililani Town currently occupies a land area of approximately 2,500 acres. The comprehensive Master Plan for Mililani Town proposes an ultimate development of 3,500 acres. More than half of the central area has been developed, while almost all of the west segment is complete. Mililani Town has not developed to the intensity originally intended, hence the total population will be considerably lower than the 63,000 cited in the Master Plan. The existing land uses for the entire town at the end of 1981 are listed in Table 3.

The land use surrounding Mililani Town consists of a green belt of agricultural lands. Approximately two miles south of Mililani

Town is the 510 acre Gentry-Waipio project with 3,700 planned housing units, of which approximately 700 units have been constructed. The Gentry Waipio community is scheduled to develop about 500 units per year until it is completed around 1990. [Ref. 11]

3. **Demographics.** Mililani Town is situated in Census Tract 89.02 within the Honolulu Housing Market Area (HMA). The HMA is part of the Honolulu Standard Metropolitan Statistical Area (SMSA). Over the last decade, Census Tract 89.02 was among the fastest growing Census Tracts on Oahu with a population of 24,860 as of 1980. The resident population of Mililani Town was 22,276 as of December 1981. [Ref. 42] The projected population expected to move into the new units within the project area is estimated to be 7,515 persons, based on 4 persons per single family unit and 3 per multi-family unit. [Ref. 42]

=====

TABLE 3

MILILANI TOWN LAND USE - [Ref. 37 and 42]

Use	Land Area (Acres)	Units	Units/Acre	Estimated Population
=====	=====	=====	=====	=====
Single Family	1,367	3,953	2.9	15,812
Multi-Family	235	2,427	10.3	6,464
Parks	55			
Schools	66			
Churches	12			
Recreation Centers	10			
Commercial Uses	16			
Roads *	113			
	=====			
Total Land Area	1,874	(excl. the 476 acre project area)		

\* Based on an average 50 foot roadway width.

**4. Social Services.**

**a. Police/Fire Protection.** The present Mililani Fire Station, located just off Kamehameha Highway near Kuahelani, will adequately serve the expansion at Mililani. Additional fire protection is provided by Wahiawa, Pearl City, Waiiau and Waipahu Fire Stations. Currently there are three police officers assigned per 8-hour shift near this area. Plans to replace the Wahiawa Police Station with a new facility will be implemented in 1983.

**b. Public Transportation.** The Bus services Mililani Town by the following routes:

- o Route 52 (Circle Island) runs through Mililani on Kamehameha highway with a 20-minute base headway in each direction.
- o Route 84 circulates through Mililani and serves as an express route to the central business district and the University of Hawaii.
- o A small portion of Mililani is used by Route 83 (Wahiawa Express) as a link to the H-2 Freeway.

**c. Health Care Facilities.** The State agencies for education, health, and public welfare serve the residents needs and requirements. The neighborhood shopping center also provides medical and dental services. Other medical facilities include:

- o Wahiawa General Hospital, Wahiawa
- o Fronk Clinic, New Town
- o Straub Clinic, Pearlridge
- o Honolulu Home Care Program, Waipahu
- o Mililani Fire Station, Mililani Town

Together, these provide a full range of health care services, including 24-hour emergency service. Also, many of Mililani's

residents obtain ongoing medical services in the downtown Honolulu area located 18 miles away.

d. **Education.** The State Department of Education and Mililani Town Inc. together have planned necessary school locations. Three elementary schools (Kipapa, Mililani Waena, and Mililani Uka), Wheeler Intermediate School and Mililani High School presently serve the community.

e. **Recreation.** Currently, Mililani Town has four recreation centers that offer tennis, basketball, volleyball courts, and swimming pools. An eighteen hole golf course is also available for Mililani Town residents. Three proposed park sites totaling 40 acres will be dedicated to the City and County of Honolulu Department of Parks and Recreation. Their locations are noted on Figure 3. Ten existing parks at Mililani Town total 63 acres, of which seven have been dedicated to the City and County Department of Parks and Recreation, which has maintenance and operational responsibility. The three other parks were acquired by the City and County before the park dedication requirements were in effect.

## CHAPTER IV. ENVIRONMENTAL CONSEQUENCES OF THE PROPOSED ACTION

### A. DIRECT EFFECTS

1. **Water.** One of the major issues concerning water use in Hawaii is the balance between water withdrawal and water recharge. In terms of effects on the recharge to the Pearl Harbor aquifer, the project is expected to have insignificant impacts. Previous analysis for the 476 acres estimated that approximately .07 mgd of recharge per year to the Pearl Harbor aquifer occurred prior to development. [Ref. 3] Assuming a 57% reduction in permeable surface area resulting from development, an actual decrease of .03 mgd appears reasonable. This reduction in recharge accounts for .00013 (13 thousandths of 1%) of the estimated flow of 225 mgd through the aquifer. Because the project area has not been irrigated (during pineapple cultivation), there will be no reduction in the return of irrigation water to the aquifer.

In terms of water withdrawals, the Pearl Harbor aquifer has been evaluated and water use regulations have been instituted by the State's Department of Land and Natural Resources (DLNR). The Ground Water Use Act (HRS, Chapter 177) provided authority to the Board of Land and Natural Resources to regulate areas subject to overdraft. Ground Water Use Regulation 9 sets forth rules for the designation of ground water control areas by the DLNR. The Pearl Harbor Ground Water Control Area (PHGWCA) was established in order to protect and conserve ground water within the aquifer. (See Figure 6) A sustainable yield (allowable pumpage) of 225 mgd was established for the PHGWCA. The major PHGWCA users and their withdrawals follow on Table 4.

The Mililani Town water system master plan includes eight wells and two reservoirs which can theoretically supply all existing and planned development within the project area. The total projected water demand for Mililani Town is approximately 5.0 mgd. (It was 5.3 mgd at one time, but the number of dwelling units has been reduced.) Current overall Mililani water use, plus projected water demand from unsold houses in Unit 47 and from houses under construction in Units 48 and 49, totals 3.243 mgd. At the present time 384 dwelling units out of the 2,090 in the subject project

**TABLE 4**  
**EXISTING WATER USE IN THE PEARL HARBOR GROUND WATER CONTROL AREA**

User	Average Annual Use (MGD)
Board of Water Supply	76.95
U.S. Navy	21.35
U.S. Army	5.45
Private	5.65
Oahu Sugar Company	115.00
	224.40

have water hook-ups. This water is provided by Wells #1 to 5, with at least one well remaining idle as a stand-by. In addition, Well #6 has recently been approved as a stand-by. (The temporary precautionary closure of Well #5, due to a single reading of 0.09 ppb of the pesticide DBCP, does not reduce the present system capacity since it can be a stand-by). The total pumpage permitted by the DLNR and the BWS from these wells is presently 3.65 mgd (was previously 3.49 mgd). The remaining water allotment is 0.407 mgd (3.65 - 3.243). The construction sequence in the 476-acre project for approximately the next 3 years includes Units 50, 51, 36, 35, 53 and 54 (though not necessarily in that order). These 653 dwelling units would have a water demand of 0.297 mgd. This, plus 0.018 mgd for commercial Area "C", which is not in the subject project, would leave 0.092 mgd of the 3.65 mgd allotment. This is sufficient for the first phase of the Town Center, but this project will probably be delayed so more houses can be built (184 units at 500 gpd/unit).

The BWS determines a commitment of water to a planned project when the water system construction plans or an application for a building permit is submitted for review and approval. Of the 2,090 dwelling units in the subject project, only 384 have been guaranteed water. If the remaining water allotment was committed to housing (except for commercial area "C"), then a total of 1,221 dwelling units could be constructed (384 "existing" + 653 planned + 184 undesignated). Any development beyond this can only occur

as additional pumpage is granted to Mililani Town. Subsequent units will be granted their water allotment on a "first-come, first-served" basis.

Although all of Mililani Town's future water needs have not been guaranteed, sufficient water is available for approximately 3 years of development. Beyond this time the chances are very good that the approximately 1.35 mgd (5.0-3.65) needed to complete the 476 acres (including the Town Center) will be available. This optimism is based on the fact that the BWS is developing additional sources of water in Honolulu, Waianae, and the Windward areas in order to reduce water exports from the Pearl Harbor aquifer. This should make more water available for new uses in the PHGWCA (including Mililani Town), but the amount can not be predicted at this time. Mililani Town, Inc. has made a commitment to participate with the BWS in the development of these new sources when it becomes necessary. Also, the BWS' allocation of water or the sustainable yield of the aquifer may be increased by the time Mililani Town needs additional water. Future water supply for Mililani Town would be drawn from Wells #7 and #8 which are presently capped.

The BWS is considering other alternatives to increase the availability of water for domestic use, such as trading non-potable for potable water sources within the PHGWCA. The BWS is also encouraging the use of waste water treatment plant effluent and brackish water for irrigation in areas where adverse impacts to ground water resources are not expected. The BWS's policy requires conversion of sugar cane irrigation water to domestic use whenever sugar cane lands are urbanized. Therefore, the result in the long term will be no net increase in groundwater discharges from such conversions. Other possible mitigation measures to prevent over withdrawals from the aquifer include artificial recharge through deep well injection, with supplies coming from the Schofield high level dike. Engineering and energy costs would be quite high, however, for these alternatives. [Ref. 3]

In the unlikely event that none of these efforts to increase water availability make it possible for Mililani Town to obtain additional water, then no more than approximately 1,200 housing units would be built. The project is being constructed in



increments, so that infrastructure and community facilities are provided only as they are required. If the remaining 870 units (2,090-1,220) are not constructed then neither would their associate infrastructure. The Town Center might also be reduced in size or eliminated. Depending on market conditions, units that would have been constructed at Mililani Town would be constructed elsewhere in accordance with appropriate zoning.

2. Sewage. Treated effluent from the Mililani STP is presently discharged into Kipapa Stream which eventually reaches West Loch, Pearl Harbor via Waikele Stream. In terms of evaluating the effects of the STP effluent upon the receiving waters of Kipapa & Waikele Streams, and Pearl Harbor's West Loch, stream flow and water quality data are available. Data for Waikele Stream is obtained from a gaging station located in Waipahu Town, near the stream mouth. Average discharge at this gage over 22 years is 39.2 cfs.

Water quality data for Kipapa Stream is collected at a gaging station located above the Mililani STP discharge outfall. The stream at this location is unaffected by urban generated point and non-point discharges. Levels of phosphorous are low (.03 mg/l) in Kipapa Stream, similar low levels have also been observed elsewhere on Oahu for non-polluted streams. Significantly higher levels of phosphorous have been found in the lower reaches of Waikele Stream and are believed to be urban generated. [Ref. 24] Analysis of the water quality of Waikele Stream suggests it is influenced significantly by wastewater discharges from the Mililani area.

At the end of 1982, the average daily flow into the Mililani STP was 2.2 mgd. Planned development in the service area indicates that flows will increase to approximately 2.9 mgd by 1985 and to approximately 4.2 mgd by the end of 1987. [Ref. 43] According to preliminary calculations, approximately 0.16 mgd of sewage flow can be generated from the project area without exceeding Mililani Town's share of the STP capacity. [Ref. 34] In terms of additional hookups, an additional 1,845 people (485 single family units or 615 multi-family units) can be accommodated. [Ref. 34] An additional .54 mgd can be generated by both Melemanu Woodlands and Waipio Acres without exceeding the STP's capacity.

The State Department of Health has established a policy based on the Hearing Officer's recommendation regarding Mililani Town's STP enforcement class. The policy restricts future hookups if the rate of sewage flow is greater than 1% per month of the current flow, or until the stability of the STP operations are demonstrated by 12 months of compliance for BOD and total suspended solids. Further, this policy restricts hookups until the STP design is modified to establish a new operational capacity or until the flow is diverted from Waikele Stream.

The Mililani STP presently has a rated capacity of 2.8 mgd. Mililani Town, Inc. has completed the preliminary engineering design for Phase IV expansion of the STP [Table 5]. Phase IV expansion will increase the capacity of the plant to 4.6 mgd, which is sufficient for the proposed project. The City and County Department of Public Works is currently reviewing the construction plans. When these plans are approved, Mililani Town can proceed with the plant's expansion. Construction costs will be done by Mililani Town, Inc. and other users.

The Mililani STP NPDES permit has a requirement for the diversion of the effluent out of Kipapa Stream by 1983. Mililani's effluent will be diverted to the Oahu Sugar Company's canefields for irrigation by November 1983. In order to assure reliable secondary treatment through the sugarcane irrigation period, Mililani Town, Inc. will increase the STP capacity.

=====

**TABLE 5 MILILANI SEWAGE TREATMENT PLANT**

	Existing =====	Phase IV (1987) =====
Design Equivalent Population	22,046	46,667
Rated Capacity (mgd)	2.28	4.60
Average Daily Flow (mgd)	2.20	4.20
Maximum Flow (mgd)	4.00	9.75

Source : Ref. 43

To identify the possible hazards that could arise from the use of undiluted sewage effluent for irrigation on Hawaiian sugarcane fields, the University of Hawaii's Water Resources Research Center (WRRC) conducted a four year study using effluent from the Mililani STP. [Ref. 62] This study found that potentially harmful viruses were present in most samples of treated sewage effluent tested. Survival of poliovirus was minimal when the effluent was applied to an open field area, where the viruses were exposed to sunlight and dessication, but viruses were found to survive for up to two months in the cool, shady conditions provided by the canopy of a mature canefield. It was pointed out that the viruses detected in the effluent are not transmitted by physical contact, but must be ingested before they can affect a person. Therefore, it is unlikely that workers in the furrow-irrigated canefields could ingest viruses. The potential hazard appears to be negligible, since exposure to sunlight will kill some viruses in the ditch. Nevertheless, to minimize any potential hazard the WRRC suggested that methods to inactivate viruses should be explored, and precautionary sanitation measures should be practiced by field workers. [Ref. 62]

In terms of impacts to the basal aquifer, effluent reuse for sugarcane cultivation in Central Oahu is not expected to result in any substantial buildup of total dissolved solids in the basal water supply. The WRRC found that nitrogen could reach the ground water, but could be controlled through application practices. They further report that Mililani's wastewater, "... without the admixture of industrial waste water should be reasonably free of toxic chemicals but monitoring is a necessary and desirable requirement to assure the quality of the effluent." The monitoring program recommended by the WRRC will be followed by the City and County of Honolulu Public Works Department. The program will cover over 40 parameters, including the nitrogen series, viruses, heavy metals and pesticides. [Ref. 62] Since the aquifer is potentially part of the municipal water supply, the effluent reclamation project will be terminated if water quality problems develop.

As previously noted, construction of the diversion line and bypass for the effluent reclamation project is to be completed by September 1983. In the event that wet weather, crop cycle, or

other situations prevent Oahu Sugar Company from accepting the effluent, then it will be diverted to the Honouliuli STP via the Waipahu SPS. If the reclamation project is terminated, Mililani STP will eventually be abandoned by the City and County. [Ref. 47] The Honouliuli STP has the capacity to treat the flows from the Mililani-Waipio area during non-irrigation. Design capacity of the Honouliuli STP is 25 mgd, based on 1992 flows.

The effluent irrigation project will generate construction impacts, specifically on sugarcane lands and the streets of Waipahu. Noise and dust nuisance will be controlled according to State Department of Health Regulations. Construction activities will be restricted to certain days and hours, therefore traffic, noise and dust impacts will be minimal and temporary.

The project cost for the Effluent Disposal System with a bypass to the Waipahu SPS is \$5,875,400. The Federal share is 75 percent of the project cost, while the State contributes 10 percent, and the City 15 percent of the costs.

The diversion of effluent from Kipapa Stream is expected to significantly improve the water quality of West Loch, Pearl Harbor, and portions of Kipapa and Waikele Streams which are downstream of the sewer outfall. The decrease in nutrient loads should reduce the adverse effects of biostimulation presently occurring in portions of Waikele Stream near West Loch, Pearl Harbor.

Further, a beneficial effect is that the effluent, a valuable resource, will be conserved. The Board of Water Supply estimates with present growth trends, that the limit of groundwater resources will be reached by 2000. One future alternative for water resource consideration is the exchange of Mililani STP effluent for high quality irrigation water. If the effluent irrigation project fails to be implemented, the Mililani STP would be abandoned and the money already expended for the existing plant would be lost, as well as loss of the effluent.

**3. Storm Drainage.** Peak storm runoff estimates made by the previous State EIS for this project using the rational method vary

from 800 cfs to 2,130 cfs, however peak runoff from a 50-year storm is probably about 900 cfs. [Ref. 3] The project area represents 1% of the entire drainage basin. Mililani Town is relatively isolated from other developments, therefore it is unlikely that increased runoff from the project site would have a significant effect upon downstream areas within the drainage basin. Storm drainage facilities which discharge into Kipapa Stream have energy dissipators designed to reduce erosion and sedimentation problems. The drainage system will conform to the City and County Public Works Drainage Standards. As urbanization continues at Mililani, buildings and pavement will cover approximately 57% of the surface area resulting in a reduction in the area available for infiltration. [Ref. 8]

4. **Erosion and Sedimentation.** Long-term erosion and sedimentation is expected to decrease as a result of the project. Estimates suggest that erosion will increase about six times on cleared areas left exposed, but following construction and subsequent landscaping the rate of erosion will be one-eighth of its state at present (abandoned pineapple fields).

Kipapa Stream flow is intermittent and during most of the year water filters into the ground via the stream bed or is diverted for irrigation purposes. The majority of sediment is deposited in the stream bed. During periods of high stream flow the sediments/pollutants are dislodged and redeposited near the stream mouth or in Pearl Harbor.

Prior to urbanization, storm runoff from agricultural lands is likely to contain pollutants such as biocides and soil runoff. As urbanization continues at Mililani, the chemical composition of the runoff will include street surface contaminants. A study of surface water runoff in Honolulu found a considerable pollution potential exists from street runoff, especially in regard to BOD and bacteriological content. [Ref. 7] Water quality impacts from such contaminants are most likely to occur during periods of high stream flow (the rainy winter season) where they are discharged into the receiving water of Pearl Harbor's West Loch.

Preventative measures to mitigate erosion and sediment impacts

will continue to be employed at the project site. Lots bordering gulch areas will be graded in order to direct runoff into storm drains to reduce erosion on the sides of the gulches. In addition, regular street cleaning will keep pollutants at minimum levels. Major streets include Meheula Parkway, Lanikuhana Avenue, Kuahelani Avenue, and Kipapa Drive are cleaned once a week, while minor streets are cleaned monthly. It should be noted that the level of construction activity has recently decreased, so sedimentation levels will be slightly lower, compared with past levels. Approval of an erosion control plan pursuant to the City and County Grading Ordinance is a condition for granting a building permit.

**5. Solid Waste.** The City and County of Honolulu disposes of solid waste from single family residences in the project area. Private companies collect from multi-family and commercial developments. All of the refuse currently collected is taken to the Waipahu incinerator. Current refuse loading at the Waipahu incinerator, which is at maximum capacity, is 360 tons per day. The proposed project is estimated to generate approximately two tons of solid waste per household per year. For the 2,090 residential units planned, one additional refuse collection crew will be required. The cost for collection services is \$56.00 per ton. The cost to incinerate refuse is \$19.00 per ton versus \$7.00 per ton for landfill disposal. The project's refuse will continue to go to the Waipahu incinerator and the proposed Leeward Sanitary landfill (the Department of Public Works has not yet acquired a landfill site) until the Department of Public Works Program of Waste Energy Recovery (H-Power) is implemented. Private refuse collectors will collect refuse from commercial areas and condominium units within the project area.

**6. Traffic.** Vehicular access to the project will be via Lanikuhana Avenue and Meheula Parkway. All traffic entering or exiting Mililani Town must utilize Kamehameha Highway or the H-2 Freeway. Meheula Parkway runs from the town's western border to the H-2 Freeway's Mililani Interchange. The majority of the town's community facilities and higher density units are located along either side of Meheula Parkway, so it will carry the

majority of the traffic to and from the proposed project area. The secondary loop road, Lanikuhana Avenue, also passes through the project area and provides access in the southwest segment to Kamehameha Highway and Meheula Parkway. Kuaahelani, also a secondary loop road, provides access to the northwest portion of the area.

A simple traffic model for Mililani Town developed for the previous EIS was shown to be very accurate in predicting traffic volumes on Kamehameha Highway and the H-2 Freeway. It was determined that the project as then proposed (3,452 dwelling units) would add approximately 1,400 vehicles per hour (vph) to the roadway system during the morning peak hour. This represented an increase of 54% over the traffic anticipated from the approved development at that time. The previous EIS concluded that the project would not cause the capacity of Kamehameha Highway to be exceeded. However, congestion at the intersection of Meheula Parkway and Lanikuhana Avenue was identified as a potential problem, particularly the right turn from Lanikuhana onto Meheula for access to H-2. The projected right turn service demand was approximately 930 vph which would have significantly exceeded the capacity of the intersection as it then was designed. [Ref. 3, pp. 38-47 and Appendix F] The Lanikuhana/Meheula intersection has not yet been constructed. Lanikuhana Avenue presently stops at the southern boundary of the project area [see Plate 1].

The previous traffic study also concluded that if the Gentry-Waipio project (south of Mililani Town) was developed as proposed then an on-ramp to the H-2 Freeway would be needed to serve that project. Without an additional on-ramp for Gentry-Waipio, congestion on Kamehameha Highway would force most of the south-bound Mililani traffic onto Meheula Parkway for access to H-2. Under these circumstances the capacity of the Meheula Parkway on-ramp would be greatly exceeded.

Since this previous analysis was made the proposed project has been reduced to a total of 2,090 housing units (of which 235 units have already been constructed). Consequently, the traffic study has been revised [Appendix B]. Using the same trip generation factors from the previous study, the project will generate approximately 880 vph during the morning peak. This is slightly

more than half of the previously predicted traffic volume from the project area. It is now anticipated that this revised volume, the right turn service demand at the Lanikuhana-Meheula intersection would be approximately 800 vph with full project development. The proposed design of this intersection now includes a dedicated right turn lane. If right turns were also allowed from the second lane, then the total right turn capacity onto Meheula Parkway could be as high as 900 vph (depending on signal timing).

The proposed Town Center has not yet been designed, but a 575,000 square foot complex is envisioned. A preliminary analysis of the potential traffic impact (see Appendix B) indicates that during peak use of the Center (Saturday afternoon) the capacity of several turning movements at the Lanikuhana-Meheula intersection could be approached. However, with proper design of the access points, traffic could be balanced between the roadways serving the center so that no congestion would occur.

The revised traffic study [Appendix B] reaches the same conclusion as the previous EIS with regard to the potential effect of the Gentry-Waipio project on Mililani traffic. If the majority of south-bound Mililani commuters are forced to take the Meheula Parkway on-ramp, then the capacity of both the on-ramp and the Lanikuhana/Meheula intersection would be greatly exceeded. A second on-ramp could be constructed, but there would be no easy remedy for the Lanikuhana/Meheula intersection. Consequently, levels of service at several key points in the project area are likely to deteriorate [see Appendix B, Table B-2].

**7. Noise.** The principal source of noise at the project site is, and will continue to be, automobiles and trucks on Meheula Parkway, Lanikuhana Avenue, and the H-2 Freeway. Recent measurements at the project site indicate that day-night weighted average noise levels (Ldn) reach 67 dBA at 50 feet from the centerline of Meheula Parkway north of Kuahelani Avenue and 64 dBA at 300 feet from the centerline of H-2 (see Appendix C for data and explanation of terms). With full development of the project as proposed, traffic noise at these locations would increase to 70 and 65 dBA, respectively. If the Gentry-Waipio project causes a major shift in traffic to the Meheula Parkway on-ramp, then

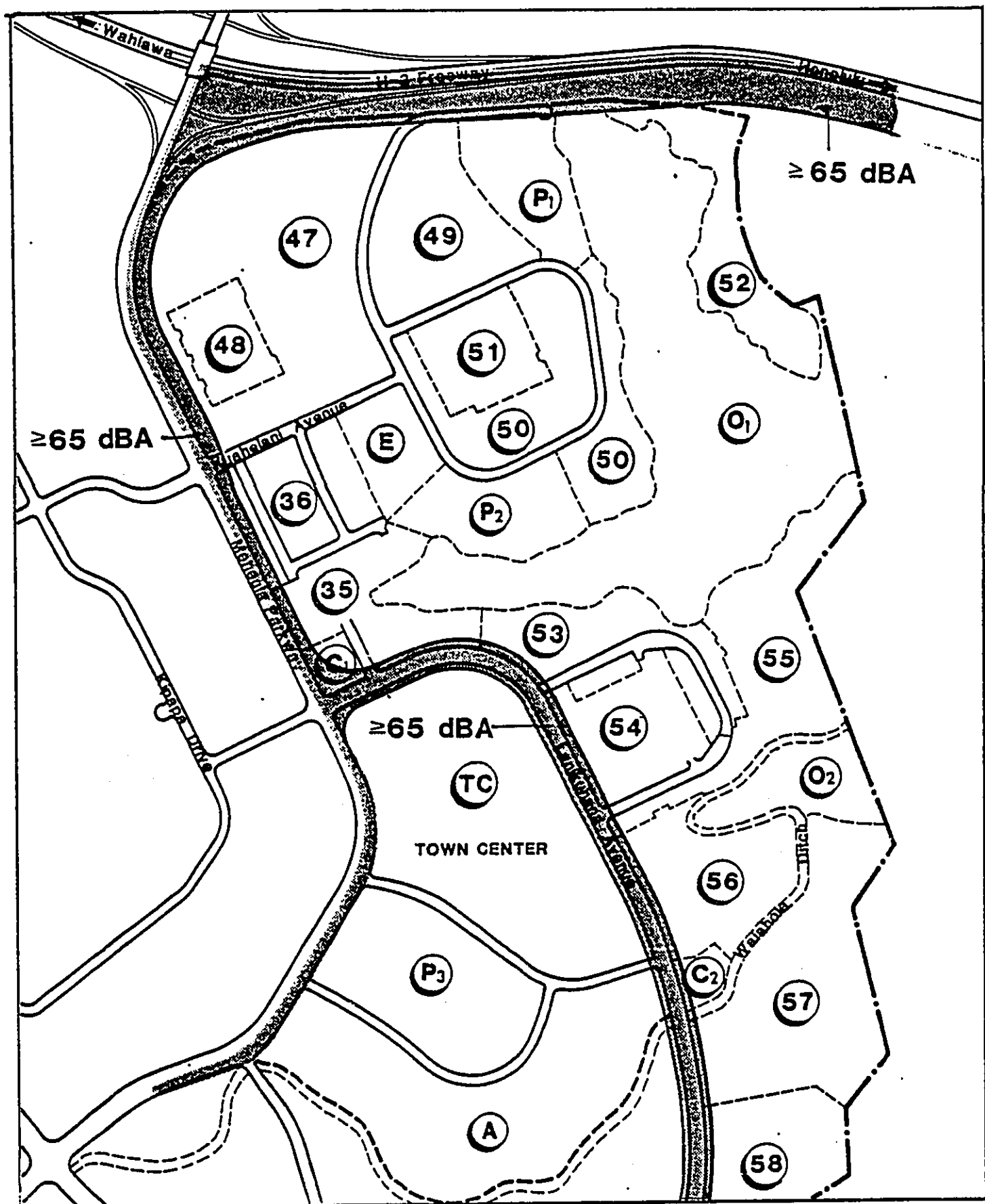


average noise levels would be raised by approximately 2 to 3 decibels along the Parkway.

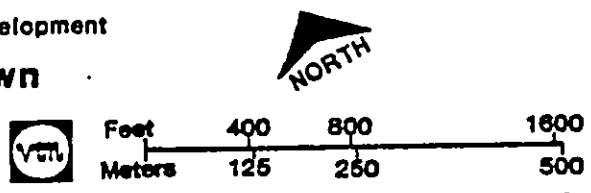
HUD's development standard is Ldn 65 dBA (exterior). At present and future project development, the block wall constructed along the project boundary provides sufficient noise shielding for ground floor units, but the second story of houses adjacent to the Parkway or Freeway would be exposed to noise levels in excess of HUD's standard. The units with a high probability of falling within HUD's "Normally Unacceptable" category Ldn 65-75 dBA would be those within approximately 80 feet of the centerline of Meheula Parkway and having a relatively clear line-of-sight. This would involve roughly 50 house lots (Figure 7). Without specific plans, additional traffic noise from the Town Center can not be predicted. It is possible that more homes adjacent to Lanikuhana Avenue in the vicinity of the Town Center would be exposed to average noise levels in excess of 65 dBA, but an accurate prediction can not be made without more specific plans for the Center.

As a mitigation measure, FHA insured properties will be required to comply with 24 CFR Part 51, Subpart B, Noise Abatement and Control. In order to qualify, the units within the "Normally Unacceptable" zone would need some form of sound control beyond that provided by ordinary construction methods. HUD's goal is a 5 decibel reduction, which can be achieved through noise attenuation techniques such as special window design.

Construction noise will be generated throughout the project site as it is incrementally developed. This may frequently create situations where new homes are being constructed adjacent to a section that is already occupied. These construction activities would be governed by State Public Health Regulations Chapter 44B, "Community Noise Control for Oahu", which sets a daytime (7 A.M. to 10 P.M.) standard of 55 dBA in residential areas. Construction activities may be granted a conditional use permit which restricts noise emissions that exceed 95 dBA (at the property line) to the hours between 9 A.M. and 5:30 P.M. The State Department of Health enforces these regulations and will set up noise monitoring equipment if a complaint is lodged.



Dept. Housing and Urban Development  
**EIS for Mililani Town**  
 478 acre Increment  
**Oahu, Hawaii**



**Figure 7**  
**Traffic Noise Impact**  
 Ldn 65 dBA  
 "Normally Unacceptable"

8. Air Quality. The effect on air quality from construction activities and traffic from the proposed project was thoroughly examined for the previous EIS [Ref. 52]. Traffic-related air quality impacts (carbon monoxide) were re-analyzed for this EIS using current methodologies ("Mobile-2" emission factors and "PAL" dispersion modeling — see Appendix D).

Land clearing, movement of vehicles on unpaved roads, and other activities will generate dust throughout the construction phase of the project. Since units will be developed incrementally, there will not be more than 50-100 acres under construction at any time. However, this will also spread out the dust-generating activities over a longer period of time. It has been estimated that the suspended particulates (TSP) generated by construction at Mililani Town could cause the State standards to be exceeded for as much as 600 meters (0.37 mile) downwind from the construction site [Ref. 52]. However, twice daily watering would reduce TSP emissions by approximately 40 to 50 percent. It should be pointed out that the project area was formerly cultivated, and is surrounded by cultivated lands which will continue to produce suspended particulates.

The methodology and results of the carbon monoxide (CO) modeling are discussed in Appendix D. The morning rush hour (6 to 7 A.M.) is the critical period for CO buildup, since winds are generally slow at this time. The study concentrated on the intersection of Meheula Parkway and Lanikuhana Avenue, since it was identified as a problem spot in the previous air quality assessment. The traffic analysis (appendix B) identified a heavy right turn volume from Lanikuhana onto Meheula for access to the H-2 Freeway.

Without the project (Case I) it is highly unlikely that the State 1-hour standard for CO (10 mg/m<sup>3</sup>) would be exceeded. With full project development (Case II), assumed to occur by 1995, the State 1-hour standard would be exceeded on the sidewalk immediately adjacent to the Lanikuhana Avenue right-turn lane. The CO level would drop below the standard within 40 feet away from the sidewalk. If the Gentry-Waipio project is fully developed without an additional interchange to H-2 (Case III), then congestion at the Meheula/Lanikuhana intersection would generate very high CO levels. Under these conditions the State 1-hour standard would be

exceeded for up to 200 feet away from the intersection, and the State 8-hour average CO standard ( $5 \text{ mg/m}^3$ ) would be exceeded for approximately 100 feet away. The more lenient Federal CO standards (1-hour  $40 \text{ mg/m}^3$ , 8-hour  $10 \text{ mg/m}^3$ ) would not be exceeded under the conditions examined in this study.

9. **Historic/Archeologic Resources.** Although there are no known archaeological sites within the project area two heiaus were located in Kipapa Gulch. No adverse impacts to cultural resources are anticipated. [Ref. 61] If during construction or land clearing, any artifacts are unearthed, work will be stopped and the State Historic Preservation Officer notified.

#### B. INDIRECT EFFECTS

1. **Land Use.** The urbanization of the project area has foreclosed the option of agricultural or other use. Urbanization at Mililani may stimulate further conversion of agricultural lands to urban uses in Central Oahu. Other effects include increased expenditure of public funds to provide services for community facilities.

2. **Housing Market.** HUD's mortgage insurance program is expected to slightly increase the rate of sales at Mililani, depending upon other economic factors. If interest rates and construction costs continue to rise, a greater proportion of Oahu's population will be priced out of the Mililani housing market. The construction of 224 housing units however will enable approximately 850 persons of low and moderate income to afford housing in Mililani by 1983.

The annual average income of home buyers at Mililani was \$43,480 in 1981. (Ref. 44) More than 87% of these purchasers previously owned a single family home, so the majority of the population moving into units at Mililani are trading on their equity. The households at Mililani can be characterized as upper middle income families of four, with both adults working, and with a median age

of 33 years. The present trend of families moving to Mililani with increasingly higher incomes is expected to continue.

The average single family unit price at Mililani Town in January 1982 was \$139,500. The family income required to qualify for a standard 80% loan (based on 3.5 times income and assuming no other debts) with a 17% interest rate would be \$70,000 per year. [Ref. 31] Under HUD's graduated payment mortgage, Section 245, Plan III Program the family income required on the same \$139,500 sales price is \$51,000 [See Appendix E].

According to the Bureau of the Census, the estimated median income for a four person family living in Hawaii in 1979 was \$24,582. [Ref. 30] Unless families utilize one of the newer financing methods or acquire an outside source of funds to make a substantial down payment, the majority of the State's population is unable to purchase a new home. Although sales have dropped recently at Mililani, the project's single family homes are expected to attract families with higher incomes.

New financing techniques can affect the housing market by providing various methods of attracting potential buyers. Mililani Town, Inc. has initiated a shared appreciation program for home mortgages in 1981. Mililani Town, Inc. presently plans to develop 224 units for low and moderate income families under inclusionary zoning provisions established as a condition to the project's zoning (see Appendix A). These units are scheduled for completion in 1983. Other types of financing techniques are utilized in the Hawaii real estate market which could affect sales at Mililani. Variable Rate Mortgages feature interest rates that change during the life of the mortgage. Graduated payment mortgages, where initial payments start low and gradually increase, are designed to match the rising income of a young family. Wrap-around mortgages, which are similar to agreements of sale, apply primarily to FHA and VA loans.

**3. Employment.** Families moving to Mililani Town are already employed in other sectors of the community. Short-term, temporary employment associated with construction will occur. Construction related employment from the expansion at Mililani will be slightly

reduced from previous levels since unit production has decreased. Long-term employment generated from the project will result from the development of the shopping center, with an estimated 85 employees. [Ref. 3] Business sales from the shopping center would be about \$135 per square foot. Therefore the first phase (100,000 square feet) of the shopping center would generate about \$14,000,000 per year in retail sales. [Ref. 3]

**4. Biological Resources.** There will be no negative impacts to vegetation since no endangered flora are located in the project's vicinity. [Ref 60] Revegetation of nearby gulch slopes is expected as a result of decreased erosion from the storm drainage system.

Because there are no critical habitats for endangered or threatened species in the project area, no adverse effects will result from the development. The gulch areas will continue to provide a habitat for introduced species. (See Chapter III, Wildlife)

The implementation of the proposed project is expected to have a positive effect upon stream fauna. Sedimentation of the stream, in the long term, will be reduced as abandoned pineapple fields are converted to urban use. The water quality of Waiale Stream and West Loch is expected to improve when the STP effluent is diverted, with positive effects on stream biota. However, household pesticides will replace agricultural pesticides to some extent, so the net gain in water quality might not be very significant.

### **C. URBAN AND COMMUNITY IMPACTS**

**1. Police Protection.** An increase in population in the project area will require a corresponding increase in police services. The City and County Police Department will provide service to the project area. Based on a ratio of 2.08 police employees per 1,000

population, the project will generate a workload increase of approximately 16 police employees. This represents an annual salary cost of roughly \$315,000. However, since most (over 95%) of the home buyers at Mililani have relocated from elsewhere on Oahu, the project will not cause "real growth" in population. Consequently, police services will be provided by reallocating existing resources. Tax revenue generated by the project will help pay for any additional police services that might be required. The police response times generally follow the National Criminal Justice goals of dispatching an officer within 2 minutes of an emergency call, and 8 minutes for a non-emergency call. [Ref. 56] The project should not affect response times.

2. Educational Facilities. The following projections for the Mililani expansion account for the aging of the population in the service area and out migration of students. Considering a moderate rate of growth (an addition of 100 homes annually) resulting from the expansion at Mililani, existing facilities are expected to accommodate the student enrollment in Table 6.

TABLE 6

MILILANI SCHOOL ENROLLMENT

School	Grade	Current Enrollment	Enrollment Generated By Project	Capacity of Facility
Kipapa & Mililani Waena	K - 6	1,531	200 - 450	1,625
Wheeler Intermediate	7 - 8	862	70 - 100	784
Mililani High	9 - 12	1,644	100 - 130	1,683

Although Wheeler Intermediate is over capacity (as of May 1982), several options will be utilized before additional facilities are built. First, existing remnant spaces are utilized, and when those are exhausted, students may shift to nearby schools or the Principal may request additional facilities. Such requests are evaluated by the DOE with all other School District requests. The schools with the most critical needs are then acted upon. [Ref. 59]

A rapid rate of growth (an addition of 200 homes annually) at Mililani would exceed existing capacity and require additional permanent construction or provision of portable classrooms. Portable classrooms cost between \$495,000 and \$660,000 compared with \$1,040,000 to \$1,500,000 for permanent classrooms. Administrative costs, salaries and maintenance are estimated to be approximately \$750,000 annually. [Ref. 33] Tax revenues generated from the project will provide funds for staff, facilities, and operation of existing and proposed schools.

**3. Fire Protection.** Existing facilities will adequately serve the project area. A new fire station in Waipio, planned within the latter stages of this projects development, will supplement the existing station in the event of a major fire. Response time to the project area is 1-1/2 to 3 minutes from the existing Mililani Fire Station. The projected response time for the proposed facility in Waipio is approximately 5 to 6 minutes.

**4. Parks and Recreation.** The development of new neighborhood, community, and district parks will create additional recreational opportunities for residents. Present park acreage at Mililani surpasses City and County recreational standards, as a minimum of 6 acres of parks are required for a service area population of 5,000. Therefore, the development of public parks totaling 40 acres, exceeds the City and County Department of Parks and Recreation standards. [Ref. 57] Tax revenue generated by the project will provide funds for expansion of district and neighborhood park facilities.



#### **D. COMMITMENTS OF NATURAL RESOURCES AND ENERGY**

The project's development will irreversibly commit land, material, water and energy resources required for construction and maintenance. Approximately 476 acres of agricultural land will be committed to residential and commercial development.

Materials such as concrete, cast iron, reinforcing steel, wood, etc. will be required for construction. This material will be irreversibly and irretrievably commit energy and resources.

The proposed project is expected to consume power at a rate of approximately 3,000 kilowatts per person per year. The expected population increase of 7,515 results in a total demand of 22,545,000 KW hours per year. There are no adverse impacts involved in transmitting electrical power to Mililani Town. The anticipated energy requirements of this project are included in HECO's medium-range planning and power consumption projections.

Fossil fuels are presently used to generate electricity, but HECO and the State of Hawaii are exploring alternate energy sources. Large scale development of geothermal, wind, solar and ocean energy are being studied, but their full development is not anticipated within the projects time frame. Although Mililani has considered the possibility of providing solar water heaters for residential units, it has opted for purchase option for interested buyers.

According to Mililani's survey results, approximately 8% of the home buyers at Mililani preferred in-house solar units, 59% preferred an optional purchase, while 33% wanted the rough-in option (possibly adding a solar unit in the future).

#### **E. UNAVOIDABLE ADVERSE IMPACTS**

The urbanization of agricultural land is considered to be the single most adverse impact resulting from the project. The total project area decreases agricultural lands on Oahu by 0.8%. Although this figure appears to be insignificant, the cumulative effect of

urbanization of Central Oahu's agricultural lands may be significant over the long term. Further, the removal of agricultural lands irreversibly eliminates future options, especially for diversified agriculture in the area. Although past efforts at diversified agriculture in the area have failed, new agricultural technology and water management practices could make such endeavors possible in the future. [Ref. 3] Other potential adverse impacts have been identified along with mitigative measures in previous sections of this EIS. These measures assure compliance with Federal, HUD, and local governmental requirements.

#### **F. COMPLIANCE WITH LAND USE PLANS, POLICIES, AND CONTROLS**

The proposed project has received approvals from both the State and County governments. The project area is designated as Urban District by the State Land Use Commission. The State Land Use Commission is guided in decision making by the goals, objectives, and policies of the State Plan. Therefore, the proposed project is in compliance with the State Plan.

The 476 acre segment of Mililani Town has received approval by the City Council of the City and County of Honolulu for urban uses. A Unilateral Agreement and Declaration for Conditional Zoning (see Appendix A) approved changes in zoning for the development of the project. This zoning has approved low density residential development within the 476 acres.

**CHAPTER V. COORDINATION, COMMENTS, AND RESPONSES**

**A. PREPARERS OF THE EIS**

**1. Prime Consultant**

VTN Pacific  
1164 Bishop Street  
Suite 906  
Honolulu, Hawaii 96813  
Telephone: (808) 521-5651

Ms. Cynthia Bower, Environmental Planner with VTN Pacific  
M.A. Coastal Planning  
Three years experience with Environmental and Planning Studies

Mr. Douglas Meller, Environmental Planner with VTN Pacific  
M.A. Urban and Regional Planning  
Five years experience with Environmental and Planning Studies

Mr. Fred Proby, Chief Environmental Scientist with VTN Pacific  
B.S. Environmental Biology  
Ten years experience with Environmental and Planning Studies

Mr. Clifford Arakawa, Chief Engineer  
B.S. Civil Engineering  
Twenty years of experience in Engineering

VTN Pacific has executed a disclosure statement specifying that it has no financial or other interest in the outcome of the project.

**2. Sub-Consultants**

Darby-Ebisu & Associates  
Existing and Projected Traffic Noise

## B. NOTICE OF INTENT

A Notice of Intent to prepare an EIS was published in the Federal Register on January 6, 1981. A similar Legal Notice was published in the Honolulu Star Bulletin and Honolulu Advertiser on January 7, 1981. In addition, the following listed parties were contacted by letter and asked to comment on the Notice of Intent. Parties who responded are designated with an asterisk. Copies of their responses are included in Appendix F.

### 1. Federal Agencies

- \* Commandant 14th Naval District
- \* Corps of Engineers  
Department of the Air Force
- \* Environmental Protection Agency  
Federal Highway Administration  
Fish and Wildlife Service
- \* Soil Conservation Service

### 2. State Agencies

- \* Department of Education
- \* Department of Health
- \* Department of Land and Natural Resources
- \* Department of Planning and Economic Development
- \* Department of Transportation
- \* Hawaii Housing Authority  
Office of Environmental Quality Control  
State Historic Preservation Office  
University of Hawaii Environmental Center
- \* University of Hawaii Water Resources Research Center

### 3. County Agencies

- \* Board of Water Supply
- \* Department of General Planning
- \* Department of Housing and Community Development
- \* Department of Land Utilization
- \* Department of Parks and Recreation
- \* Department of Public Works
- \* Department of Transportation Services
- \* Fire Department
- \* Police Department

#### 4. Others

- American Lung Association
- \* Hawaiian Electric Company
- Life of the Land
- Mililani Town Association
- Neighborhood Board Number 25
- West Oahu Soil and Water Conservation District

#### C. COMMENTS AND RESPONSES ON THE DRAFT EIS

All parties asked to comment on the Notice of Intent to prepare an EIS were sent a copy of the Draft EIS. The full distribution list is included in Appendix G. Comments were accepted beyond the minimum of 45 days for public review. Copies of comments and responses to the Draft EIS are included in Appendix G.

#### D. UNRESOLVED ISSUES

Two important issues remain unresolved. First, the present water allotment for Mililani Town is sufficient to construct, at most, 1,221 of the 2,090 proposed housing units. However, it will take 3 years for construction to reach this limit, in which time additional water is likely to have been made available. Although there is no guarantee of this, since Mililani Town must "compete" with other projects for future water allotments, Mililani Town, Inc. can work with the Board of Water Supply to develop additional sources. The U.S. Department of Housing and Urban Development can not resolve this issue, since water allocation is the responsibility of the State Department of Land and Natural Resources and the City and County Board of Water Supply. These agencies insure that water will not be granted to this project to the detriment of other users, or that building permits will not be given without adequate water being available. Likewise, HUD will not grant mortgage insurance where water service is not assured.

The second unresolved issue involves traffic congestion resulting from this project and the Gentry-Waipio project. It appears that if both projects reach full development, then the capacity of Kamehameha Highway and the H-2 on-ramp at Meheula Parkway will be exceeded. A suggested solution is to widen Kamehameha Highway and construct a second on-ramp for the Gentry-Waipio project. However, this is the responsibility of the State Department of Transportation which presently has no plans to widen Kamehameha Highway or provide a second on-ramp.

Since a shortage of water affects both projects, full development might not occur for some time, if at all. Given this uncertainty it is difficult to program transportation improvements to correspond with demand. The U.S. Department of Housing and Urban Development will monitor the traffic situation, and will consider denying mortgage insurance for future project increments should traffic congestion become a serious problem.

The rate of development of the proposed project is unknown, since new home construction is tied to sales, which in turn fluctuates with market and economic factors. If development at Mililani Town is relatively slow, as has been the case, then some possible impacts (school enrollment, water demand, traffic, noise, and air quality) will be delayed and significantly moderated over time.

## INDEX

Agricultural Lands: 8, 16, 27, 29-31  
Air Pollution: 19, 39-40, Appendix D  
Aquatic Life: See Stream Macrofauna  
Archaeological Sites: See Historic Resources  
Artesian Water: See Ground Water  
Bus Service: 25  
Climate: 18  
Community Facilities: 10-15, 25-26, 42-45  
Demographics: 24  
Drainage: 15, 33  
Economic Impacts: 16  
Effluent Disposal System: See Sewage  
Employment: 42  
Energy: 45  
Erosion: 33  
FHA Mortgage Insurance: 6, 7, 41  
Fire Protection: 25, 44  
Fish: See Stream Macrofauna  
Flood Hazard: 19  
Geology: 17-18  
Ground Water: 19-21, 27-29  
Historic Resources: 23, 40  
Housing: 4, 8-10, 15, 41  
Hydrology: See Ground Water  
Land Use: 8-10, 15-16, 23-24, 40, 46-47  
Noise: 37-39, Appendix C  
Parks: 11, 45  
Pearl Harbor Aquifer: See Ground Water  
Police Protection: 25, 43  
Population Characteristics: See Demographics  
Project History: 1, 4  
Public Transportation: 25  
Roads: 11  
Seismicity: 17-18  
Sewage: 29-33  
Solid Waste: 34-35

INDEX (Continued)

Stream Macrofauna: 22-23  
Streams: 19, 22, 29  
Sugarcane Irrigation: See Sewage  
Topography: 17  
Traffic Projections: 35-37, Appendix B  
Utilities: 11-15  
Vegetation: 22, 42  
Water Pollution: 19-20, 29-33  
Water Wells: 12-13, 20, 27-29, 50  
Wildlife: 22, 42  
Zoning: 4, 16



## ACRONYMS, AND ABBREVIATIONS

BOD: Biological Oxygen Demand  
BWS: City and County of Honolulu Board of Water Supply  
CFR: Code of Federal Regulations  
CFS: Cubic Feet Per Second  
dBA: A weighted noise level (equivalent to human hearing range)  
DBCP: Dibromochloropropane (pesticide used on pineapples)  
DLNR: State Department of Land and Natural Resources  
DLU: City and County of Honolulu Department of Land Utilization  
DOH: State Department of Health  
EDB: Ethylene dibromide (pesticide used on pineapples)  
EIS: Environmental Impact Statement  
FHA: Federal Housing Administration  
HRS: Hawaii Revised Statutes  
HUD: U.S. Department of Housing and Urban Development  
KW: Kilowatts  
Ldn: Weighted average day/night noise level  
MGD: Million gallons per day  
MM: Modified Mercalli Seismic Intensity Scale  
NEPA: National Environmental Policy Act, 1969 (P.L. 91-190)  
NPDES: National Pollution Discharge Elimination System  
PHGWCA: Pearl Harbor Ground Water Control Area  
PPM: Parts per million  
ROW: Right-of-Way  
STP: Sewage Treatment Plant  
VA: Veterans Administration  
VPH: Vehicles per hour  
WRRC: Water Resource Research Center

#### REFERENCES

1. Honolulu, City and County Department of Public Works. Revised Environmental Impact Statement for Mililani Sewage Treatment Plant Effluent Disposal System. 1978.
2. Honolulu, City and County Department of Accounting and General Services. Environmental Impact Statement for the Selection of Mililani Iki Elementary School Site. February 1978.
3. Belt Collins and Associates. Environmental Impact Statement for Mililani Town Expansion. May 1978.
4. Belt Collins and Associates. Environmental Impact Assessment for Proposed Rezoning of 55-Acre Golf Course Parcel in Mililani Town, Oahu. July 1981.
5. Belt Collins and Associates. Application for Amendment to the General Plan of the City and County of Honolulu and the Waipio Detailed Land Use Map. 1975.
6. Bolt, Bernanek and Newman. Noise from Construction Equipment and Operations, Building Equipment and Home Appliances. 1971.
7. Chun, Michael J., Reginald H.F. Young, and G.K. Anderson. Wastewater Effluents and Surface Runoff Quality. 1972.
8. Murabayashi, Edwin; and Fok, Yu-Si. Urbanization-Induced Impacts on Infiltration Capacity and on Rainfall-Runoff Relation in a Hawaiian Urban Area. Water Resources Research Center, Honolulu, 1979.
9. U.S. Department of the Interior, Geological Survey. Water Resources Data for Hawaii and other Pacific Areas. Water Data Report HI-80-1, 1980.
10. U.S. Department of Housing and Urban Development. Final Environmental Impact Statement for Village Park. Honolulu, February 1979.

REFERENCES (Continued)

11. U.S. Department of Housing and Urban Development. Final Environmental Impact Statement for Gentry-Waipio. Honolulu, October 1979.
12. M & E Pacific, Inc. Preliminary Engineering Report for the Mililani Town Wastewater Treatment Facility. Honolulu, 1977.
13. M & E Pacific, Inc. Mililani Town Water Master Plan. Honolulu, February 1978.
14. Walter Lum and Associates, Inc. Preliminary Soil Report, Mililani Town Unit 48.
15. Hawaii, State Department of Land and Natural Resources, Hydrologic Advisory Committee. Recommendations for Ground Water Use Regulation. Circular C80. Honolulu, February 1980.
16. Hawaii, State Water Commission. Hawaii's Water Resources: Directions for the Future. Honolulu, January 1979.
17. Hawaii, State Department of Land and Natural Resources. Regulation 9, Control of Ground Water Use. Honolulu, June 1979.
18. Honolulu, City and County. Housing Assistance Plan. Honolulu 1980.
19. U.S. Department of Housing and Urban Development, Economic and Market Analysis Division. Housing Market Analysis. Honolulu, June 1981.
20. Hawaii, State Department of Land and Natural Resources, Water and Land Development Division. Climatologic Stations in Hawaii. Report R42. Honolulu, January 1973.
21. U.S. Department of Housing and Urban Development. Draft Guidebook on Areawide Environmental Impact Assessments. Washington, D.C. 1981.

REFERENCES (Continued)

22. U.S. Department of the Interior, Geological Survey. Ground Water Status Report, Pearl Harbor Area, Hawaii. Honolulu 1979.
23. U.S. Department of Interior, Geological Survey. Water Resources Data for Hawaii and other Pacific Areas: 1979 and 1980. Honolulu, 1979 and 1980.
24. Honolulu, City and County Department of Public Works. Revised Environmental Impact Statement for Mililani Sewage Treatment Plant Effluent Disposal System. Honolulu, April 1978.
25. Hawaii, State Department of Health. Public Health Regulations, Community and Vehicular Noise Control for Oahu, Chapter 44a and B.
26. U.S. Department of the Interior, Fish and Wildlife Service, Biological Services Program. Stream Channel Modification in Hawaii. Part A: Statewide Inventory of Streams; Habitat Factors and Associated Biota. Honolulu, Hawaii, April 1978.
27. Hawaii, State Department of Planning and Economic Development. Data Book 1981. Honolulu, November 1981.
28. Mililani Town, Inc. Sales Office. Purchasers Profile for 1978. Honolulu, 1978.
29. Mililani Town, Inc. Sales Office. Purchasers Profile for 1979. Honolulu, 1979.
30. Hawaii, State Department of Planning and Economic Development. The Population of Hawaii, 1980: Final Census Results. Honolulu, Hawaii, March 1981.
31. Fred Nesor (Bank of Hawaii). Personal Communication, January 15, 1982.
32. Francis Keala (Chief of Police, City and County of Honolulu). Letter dated December 8, 1980. [See Pae F-27, Responses to Notice of Intent]

REFERENCES (Continued)

33. Charles G. Clark (Superintendent, State Department of Education). Letter dated December 16, 1980.
34. Ken Ishizaki (Project Manager, M & E Pacific, Inc.). Letter dated November 25, 1980.
35. Executive Office of the President. Council on Environmental Quality. Memorandum for Heads of Agencies. Analysis of Impacts on Prime and Unique Farmland in Environmental Impact Statements. August 30, 1976.
36. U.S. Department of the Interior, Fish and Wildlife Service, Endangered Species Program. Hawaiian Waterbirds Recovery Plan. Region 1, Portland, Oregon. August 1977.
37. Mililani Town, Inc., Comments on Preliminary Draft, 1982.
38. Melvin K. Koizumi (Deputy Director for Environmental Health). Letter dated January 16, 1981.
39. Hawaii, State Department of Health and City and County of Honolulu. Water Quality Management Plan for the City and County of Honolulu. December 1980.
40. Kazu Hayashida (Manager and Chief Engineer for the City and County Board of Water Supply). Letter dated January 7, 1981.
41. Honolulu, City and County Board of Water Supply. Environmental Impact Statement Honouliuli Wells. July 1981.
42. Mililani Town, Inc. Mililani Town Population Extrapolation. December 31, 1981.
43. M & E Pacific. Preliminary Engineering Report for the Mililani Town Wastewater Treatment Facility, Phase IV Expansion. July 1981.

REFERENCES (Continued)

44. Mililani Town, Inc. Sales Office. Purchasers Profile Report. 1981
45. Mililani Town, Inc. Projected Water Demand Schedule. September 1981.
46. U.S. Environmental Protection Agency. Environmental Assessment, Mililani Sewage Treatment Plant, Effluent Disposal System. August 1980.
47. Personal Communication with George Richardson (City and County of Honolulu, Department of Public Works). February 4, 1982.
48. Honolulu, City and County Department of Public Works. Prepared by Park Engineering, Inc. Facilities Plan for Mililani Sewage Treatment Plant Effluent Disposal System.
49. Hawaii, State Department of Agriculture. Groundwater Monitoring Program Data. Honolulu, August 1981.
50. Unpublished preliminary study of an alleged DBCP spill at Mililani landfill conducted by M & E Pacific, Inc. for the State Department of Health.
51. International Conference of Building Officials. Uniform Building Code. Whittier, California. 1979.
52. Morrow, J. W. Air Quality Impact Assessment Mililani Town: Increment Five. May 1978.
53. Environmental Protection Agency. Transportation Air Quality Analysis Sketch Planning Methods Volume 1. EPA 400/1-80-001a. December, 1979.
54. Furumoto, Augustine S. et. al. A Study of Past Earthquakes, Isoseismic Zones of Intensity and Recommended Zones for Structural Design for Hawaii. Engineering Bulletin Pace 72033, University of Hawaii, June 15, 1972.

REFERENCES (Continued)

55. Lt. Potter (U.S. Army Corps of Engineers). Personal Communication, May 4, 1982.
56. Major Reeves (Honolulu Police Department, Communications Division). Personal Communication, May 5, 1982.
57. Ramon Duran, Department of Parks and Recreation. Letter dated December 9, 1980.
58. State of Hawaii, Department of Planning and Economic Development. Data Book, 1981. Honolulu, November 1981.
59. Howard Lau. State Department of Education. Personal Communication, May 6, 1982.
60. Darrel Herbst. Endangered Species Officer, U.S. Fish and Wildlife Service. Personal Communication, August 23, 1982.
61. Earl Neller, Historic Sites, State Department of Land and Natural Resources. August 23, 1982.
62. Lau, L. Stephen. Water Recycling of Sewage Effluent by Irrigation: A Field Study on Oahu. Final Progress Report for August 1971 to June 1975. Water Resources Research Center, University of Hawaii. July 1975.
63. Dr. Lyle Wong, Head of Pesticides Branch, State Department of Agriculture. Personal Communication, January 18, 1983.
64. Mr. Tom Arizumi, Head of Drinking Water Program, State Department of Health. Personal Communication, January 19, 1983.

**Unilateral Agreement**

**Appendix A**



STATE OF HAWAII  
OFFICE OF  
**BUREAU OF CONVEYANCES**  
Recorded for record date **OCT 15 1979**  
day of 9:08 A.M., S.D. H.  
recorded in 14064 and  
in 485

RECORDATION REQUESTED BY:  
**MILITARY CITY, INC.**

AFTER RECORDATION, RETURN TO:  
**MILITARY TOWN, INC.**  
P.O. Box 2780  
Honolulu, Hawaii 96803

RETURN BY: MAIL ( ) PICKUP ( )  
Requestor to fill above.

Space above this line for Registrar's Use.  
TAX MAP KEY: 9-4-05: 4 & por. 3; 9-5-01:  
por. 8, 10, 11, 16 & 37;  
9-5-03: por. 1

**UNILATERAL AGREEMENT AND  
DECLARATION FOR CONDITIONAL ZONING**

THIS INDENTURE, made this 12th day of October, 1979, by **MILITARY TOWN, INC. and CASTLE & COOKE, INC.**, developer and owner, respectively, of those parcels of land described and shown in Exhibit "A" of Bill 77 (1979), hereinafter referred to as "Declarant",

**WITNESSETH:**

WHEREAS, the City Council of the City and County of Honolulu, State of Hawaii, hereinafter referred to as "Council", pursuant to the provisions of Ordinance No. 4300, relating to conditional zoning, is considering a change in zoning from AG-1 Restricted Agricultural and R-6 Residential Districts to P-1 Preservation, R-6 Residential, A-1 and A-2 Apartment and 8-2 Community Business Districts for the lands described in Exhibit "A" of Bill 77 (1979), and

WHEREAS, a public hearing regarding the change of zoning was held by the Council on September 19, 1979; and

WHEREAS, the Council recommended through its Planning and Zoning Committee that said change in zoning be reported out to the full Council for final consideration as to passage on third reading subject to the following conditions set forth in Exhibit "1" attached hereto and made a part hereof which shall be made a part of

the zoning ordinance; and  
WHEREAS, the Declarant who wishes to obtain the said change in zoning has agreed to execute this instrument pursuant to the provisions of said Ordinance No. 4300.

NOW, THEREFORE, the Declarant hereby makes the following Declaration:  
1. This Declaration is made pursuant to the provisions of Ordinance No. 4300, relating to conditional zoning. This Declaration shall become fully effective on the effective date of the zoning ordinance approving the change of zoning for the land from AG-1 Restricted Agricultural and R-6 Residential Districts to P-1 Preservation, R-6 Residential, A-1 and A-2 Apartment and 8-2 Community Business Districts for the lands described in Exhibit "A" of Bill 77 (1979).  
2. That the Declarant agrees to develop said lands in substantial conformance with aforesaid conditions and with the understanding that the issuance of a building permit by the appropriate agency of the City and County of Honolulu shall constitute satisfaction of this agreement.

3. That the conditions imposed are reasonable and rationally relate to the objective of preserving the public health, safety and general welfare and the further implementation of the General Plan of the City and County of Honolulu.

AND IT IS EXPRESSLY UNDERSTOOD AND AGREED that the conditions imposed in this Declaration shall run with the lands and shall bind and constitute notice to all subsequent lessees, grantees, assignees, mortgagees, lienors and any other persons who claim an interest in the lands, and the City and County of Honolulu of the State of Hawaii shall have the right to enforce this Declaration by appropriate action at law or suit in equity against all such persons, provided that the Declarant or its successors and assigns may at any time file a petition for removal of the conditions and termination of this Unilateral Agreement, such petition to be processed in the same manner as petitions for zone changes.

CASTLE & COOKE, INC., as landowner, executes and files this agreement in behalf of, at the request of, and at the expense of Hilliani Town, Inc., developer, under and pursuant to an unrecorded Option Agreement dated June 30, 1967, as amended, in favor of Hilliani Town, Inc., requiring Castle & Cooke, Inc. to make and join in in any necessary agreements relating to the development of lands subject to said option agreement, as amended.

IN WITNESS WHEREOF, the undersigned have executed this Declaration the day and year first above written.

MILILANI TOWN, INC.

By *[Signature]*  
 ITS VICE PRESIDENT  
 By *[Signature]*  
 ITS SECRETARY Developer

CASTLE & COOKE, INC.

By *[Signature]*  
 ITS VICE PRESIDENT  
 By *[Signature]*  
 ITS GROUP CONTROLLER Landowner

STATE OF HAWAII }  
 CITY AND COUNTY OF HONOLULU } ss:

On this OCT 12 1979 day of OCT 12 1979, 19 1979, before me appeared EUGENE FERGUSON and G. YIM, to me personally known, who, being by me duly sworn, did say that they are the VICE PRESIDENT and SECRETARY, respectively, of MILILANI TOWN, INC., a Hawaii corporation; that the seal affixed to the foregoing instrument is the corporate seal of said corporation; that said instrument was signed and sealed in behalf of said corporation by authority of its Board of Directors; and said officers acknowledged said instrument to be the free act and deed of said corporation.

*[Signature]*  
 Notary Public, First Circuit  
 State of Hawaii  
 My commission expires: MAY 21, 1982

STATE OF HAWAII }  
 CITY AND COUNTY OF HONOLULU } ss.

On this OCT 12 1979 day of OCT 12 1979, 19 1979, before me appeared MITSUOSHI SUKUDA and GEORGE MYASAKI, to me personally known, who, being by me duly sworn, did say that they are the VICE PRESIDENT and GROUP CONTROLLER, respectively, of CASTLE & COOKE, INC., a Hawaii corporation; that the seal affixed to the foregoing instrument is the corporate seal of said corporation; that said instrument was signed and sealed in behalf of said corporation by authority of its Board of Directors; and said officers acknowledged said instrument to be the free act and deed of said corporation.

*[Signature]*  
 Notary Public, First Circuit  
 State of Hawaii  
 My commission expires: MAY 21, 1982

CONDITIONS FOR UNILATERAL AGREEMENT

From AG-1 Restricted Agricultural and R-6 Residential Districts to P-1 Preservation, R-6 Residential, A-1 and A-2 Apartment and B-2 Community Business Districts

October 12, 1979

1. The applicant hereby agrees to reduce the proposed residential density to insure that the General Plan's present population distribution for the Milliani-Maipio area is not exceeded. The estimated population increase for the area, according to the present General Plan, is 9,250 persons.
2. The applicant agrees to execute an agreement with the Department of Public Works regarding the handling of sewage from the development. In the event that the Phase IV expansion of the Milliani sewage treatment plant is not appropriate, then the applicant shall contribute those funds which have been set aside for expansion of the Milliani sewage treatment plant to the City and County to be used for the construction of a sewer line to the Honolulu sewage treatment plant.
3. The applicant agrees to set aside 10% of the proposed housing units for low- and moderate-income families in a manner acceptable to the City and County of Honolulu.
4. The maximum height limit in the B-2 Community Business District in the town center area of the development shall not exceed 70 feet as measured from the grade.
5. The applicant agrees to reserve the proposed school site for school purposes for a period of at least five years, or until notification from the Department of Education that the site is not required; and
6. The applicant agrees to prepare a master street tree plan acceptable by the Department of Parks and Recreation for the 476-acre area prior to approval of any subdivision.

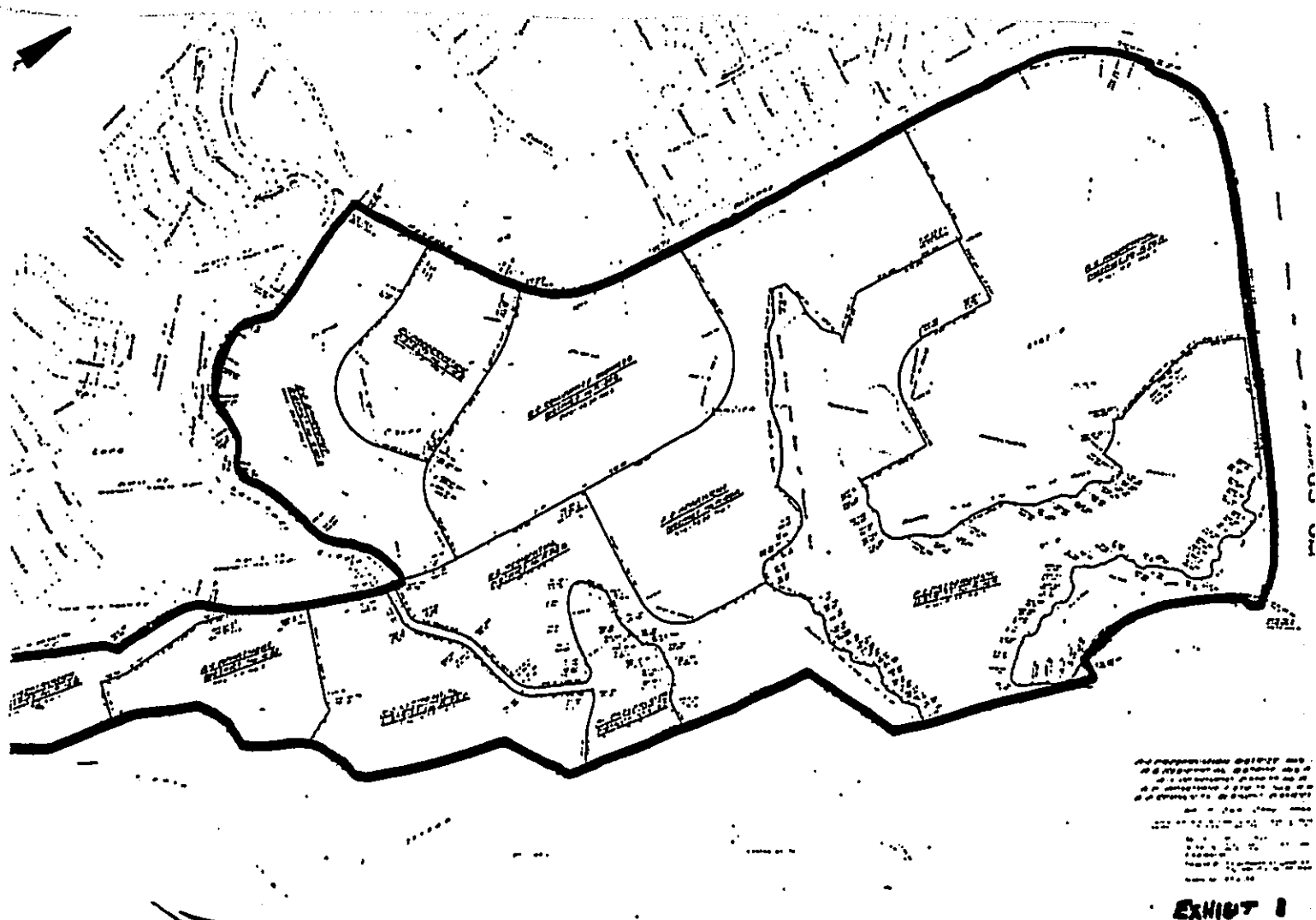


EXHIBIT 1

**Traffic Study**

**Appendix B**

## APPENDIX B TRAFFIC STUDY

The traffic model developed for the previous EIS was utilized for this analysis. However, fewer units are proposed, so the total trips generated will be less as shown in Table B-1. Following are the basic assumptions of the model:

- o The project generates traffic at the same rate as existing developed areas in Mililani: vehicles per hour from single family units equals the number of units times 1.67 workers per unit divided by 1.7 workers per auto times 45% of workers commuting during peak hour. For multi-family units a rate of 1.49 workers per unit is used.
- o The peak hour is in the morning, and represents 16% of the south bound daily traffic.
- o 20% of the peak hour traffic is north bound.
- o Overall, south bound commuters from Mililani use Kamehameha Highway in lieu of the H-2 Freeway at a rate of 2:1.
- o 80% to 100% of the south bound commuters from the project area (depending on location within the project) will use the H-2 Freeway.
- o "Case I" represents traffic conditions in 1985 without the proposed project, but with Lanikuhana Avenue completed to Meheula Parkway (Figure B-1).
- o "Case II" represents traffic with full development of the project in approximately 1995 (Figure B-2). Full development consists of 2,090 units: 1,245 single-family and 845 multi-family.
- o "Case III" represents traffic if the Gentry-Waipio project south of Mililani Town is constructed as proposed, but no new access to the H-2 Freeway is provided. Under these circumstances the Gentry-Waipio project would so congest Kamehameha Highway that nearly all Mililani Town commuters would have to take the H-2 Freeway via Lanikuhana Avenue and Meheula Parkway (Figure B-3).

TABLE B-1

REVISED TRAFFIC GENERATION FOR MORNING PEAK HOUR

Unit Type	Existing Development <sup>1</sup>		Previous Proposal <sup>2</sup>		Current Proposal <sup>3</sup>	
	Units	VPH	Units	VPH	Units	VPH
Single Family	3,952	1,747	1,092	483	1,245	550
Multi-Family	2,187	863	2,360	931	845	333
<b>TOTALS</b>	<b>6,139</b>	<b>2,610</b>	<b>3,452</b>	<b>1,414</b>	<b>2,090</b>	<b>883</b>

Notes:

1. "Existing" represents total approved development in Mililani Town other than the proposed project.
2. The "Previous Proposal" for the subject project as reported in the 1978 Environmental Impact Statement.
3. The 2,090 units proposed for the subject property, including 235 single family units already constructed (104 vph).

There are two potential points of congestion with full project development under "Case II". The left turn from Lanikuhana Avenue south-bound onto Kamehameha Highway has a projected demand of 236 vph versus a theoretical capacity of approximately 300 vph. If more Mililani residents take the H-2 Freeway, this intersection may not become a problem. The right turn from Lanikuhana Avenue onto Meheula Parkway (heading to the H-2 Freeway) is expected to be one of the heaviest turning movements, with a projected demand of 809 vph. The proposed design for this intersection (it has not yet been constructed) provides a dedicated right turn lane, but right turns from the second lane will also be necessary in order to meet the demand.

Mililani residents presently have the choice of taking either Kamehameha Highway or the H-2 Freeway into Honolulu. A large proportion presently use Kamehameha Highway, but if the Gentry-Waipio project is fully developed without a new freeway access, then congestion would force most Mililani commuters onto the H-2 Freeway. Consequently, the capacity of the Lanikuhana/Meheula intersection would be exceeded (especially the east-bound right turn) and the on-ramp at Meheula Parkway would not be able to accommodate the morning rush hour demand. Traffic might be able to adjust somewhat to equalize demand among the west and south legs of the Meheula/Lanikuhana intersection, but the on-ramp is a serious limiting factor. Its present capacity is approximately 2,000 vph, so an additional lane would be required to meet the projected 3,179 vph demand. Once onto the freeway, there would be no problem, since an additional south-bound lane is added at this point. Levels of service on critical roadway segments in the vicinity of the project are summarized in Table B-2 for the three traffic scenarios.

=====

TABLE B-2

LEVEL OF SERVICE

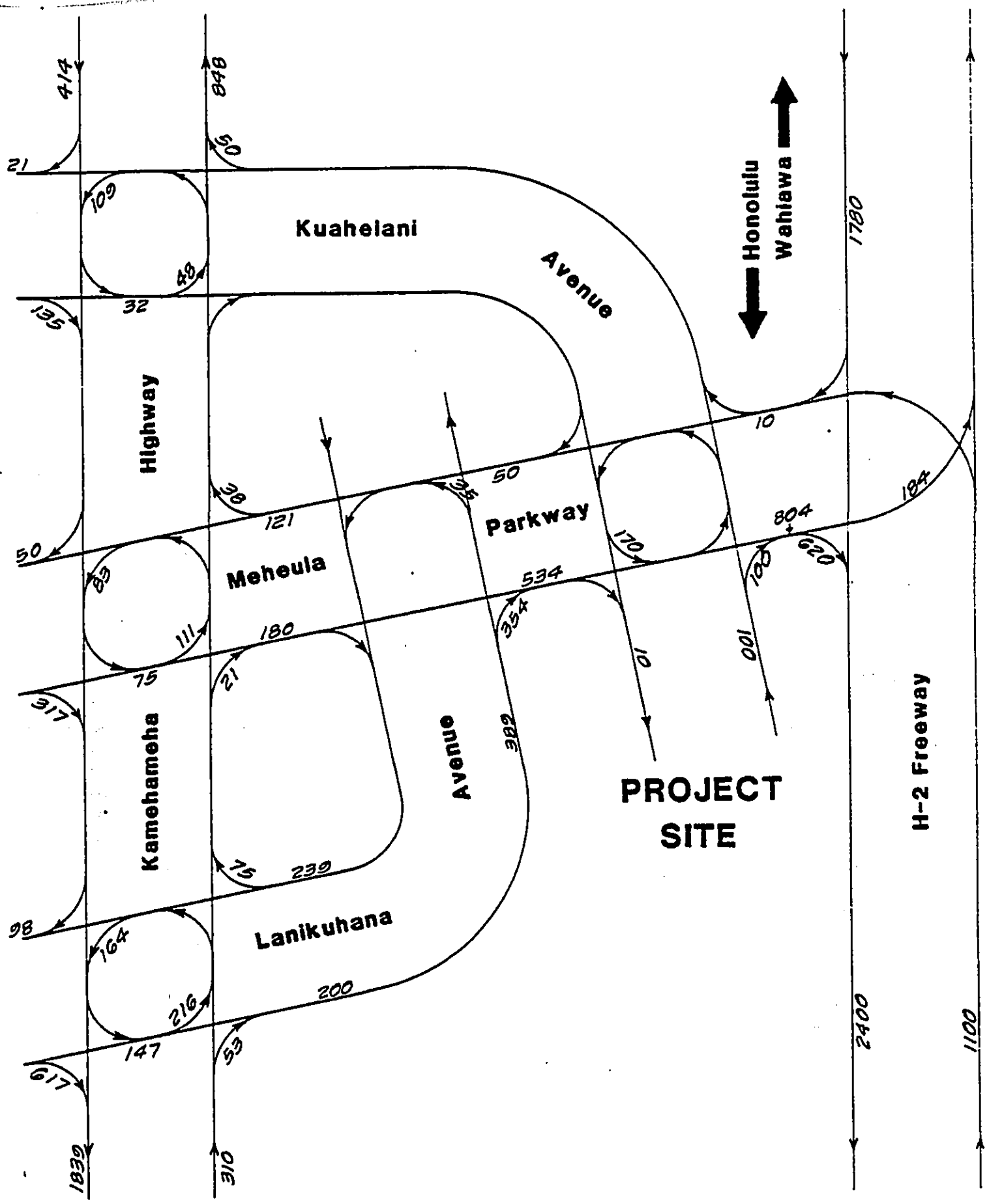
Critical Roadway Segment	Case I	Case II	Case III
=====	=====	=====	=====
Meheula Parkway Inbound Between:			
Lanikuhana & Kuahelani	B	C	E
Kuahelani & H-2	C	C	E
H-2 Inbound South of Meheula Parkway	A	B	D
Kam Highway Inbound S. of Lanikuhana Ave.	D	D	E

=====

Traffic generated by the proposed Mililani Town Commercial Center is difficult to predict, since no definite plans have been developed. A major regional shopping center with roughly 575,000 square feet of floor area has been envisioned. Using trip generation rates published by the EPA [Ref. 53], a shopping center this size would generate approximately 1,900 vph during the evening peak hour (usually Saturday). The roadway

plan for the Town Center provides for five access points; three on Lanikuhana Avenue, and two on an unnamed local street (Road A) bordering the southerly side of the Center. No direct driveway access to Meheula Parkway is proposed. The traffic generated by the Town Center can be roughly distributed based on Mililani's population areas and circulation system. Given the Center's location within Mililani Town, roughly 70% of the traffic can be expected to approach from and depart to the south using Lanikuhana Avenue and Meheula Parkway. The remaining traffic would be generated from the north and west (relative to the Center), and would pass through the Lanikuhana/Meheula intersection. The potential impact of the Town Center on this intersection is illustrated on Figure B-4. The heaviest movements are the left turn from Meheula Parkway onto Lanikuhana Avenue (322 vph) and the left turn from Lanikuhana onto Meheula (214 vph). This service demand would approach, but probably not exceed, the intersection capacity. This traffic model is speculative, so a more detailed analysis, based on actual plans for the Town Center, should be conducted prior to modifying the roadway system.





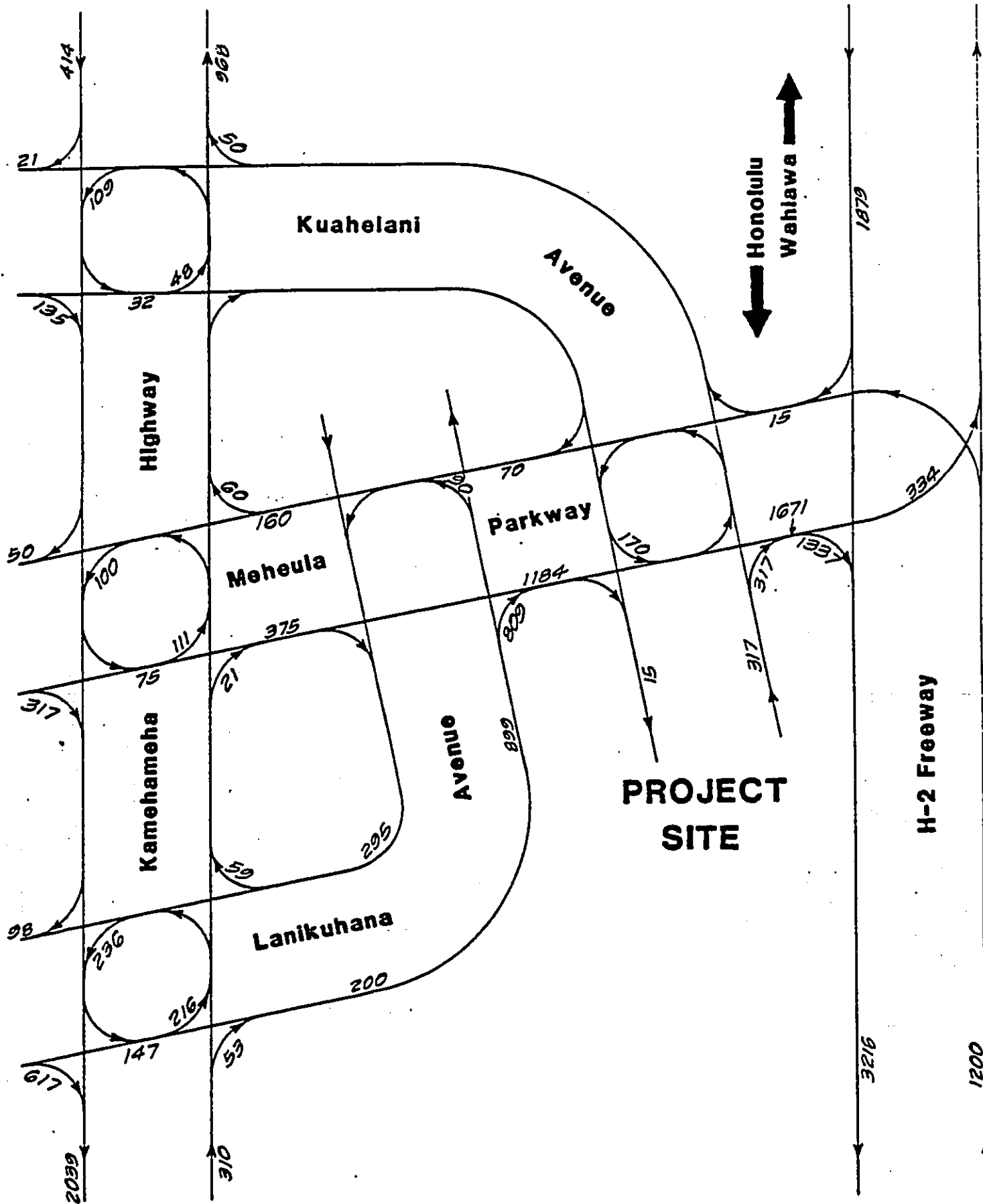
Dept. Housing and Urban Development  
**EIS for Mililani Town**  
 478 acre Increment  
 Oahu, Hawaii



vehicles per hour  
 NOT TO SCALE

B-5

**Figure B-1 Case I**  
**1985 A.M. Traffic**  
**(without project)**

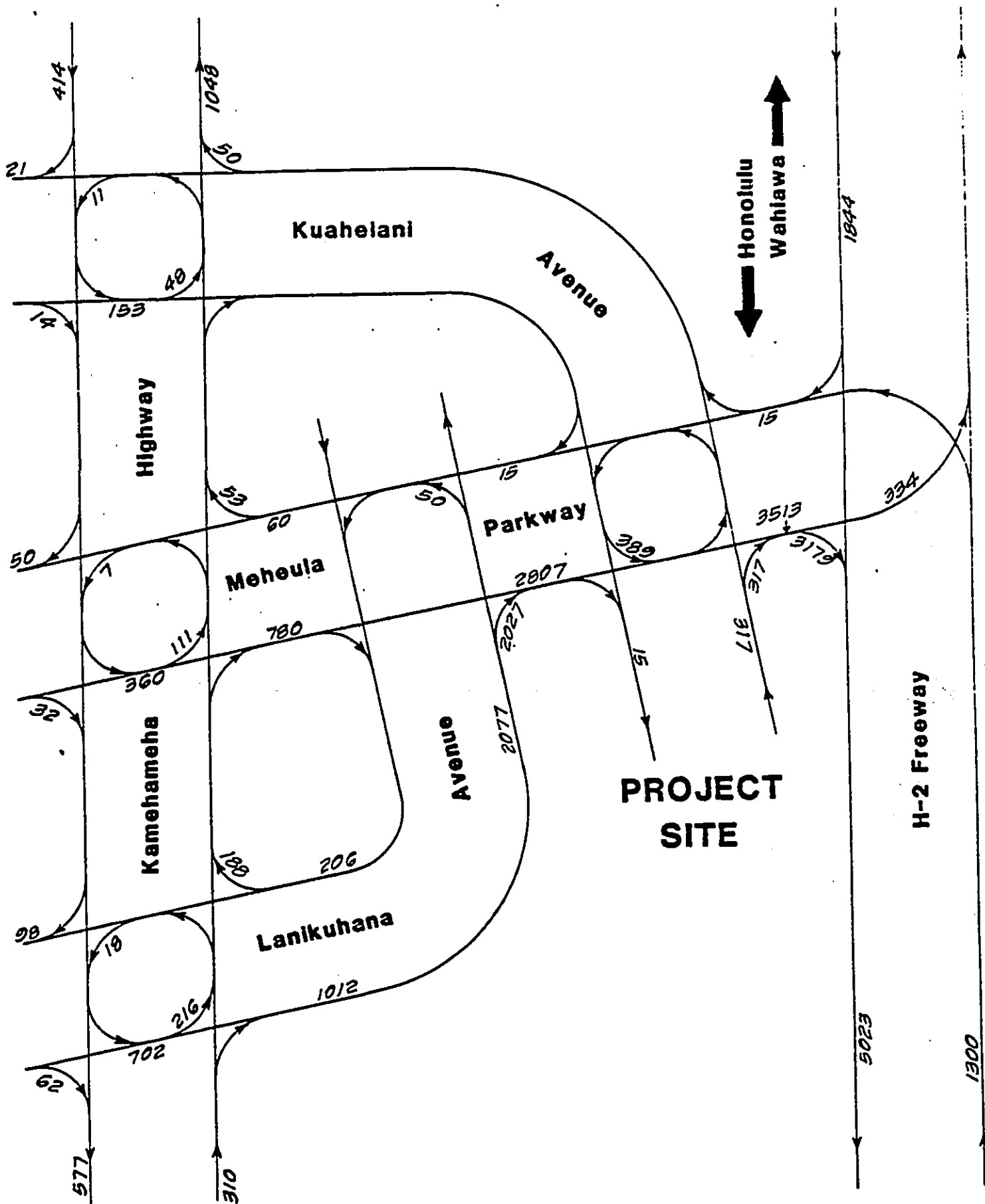


Dept. Housing and Urban Development  
**EIS for Mililani Town**  
 476 acre Increment  
 Oahu, Hawaii



Peak Hour  
 vehicles per hour  
 NOT TO SCALE  
 B-6

**Figure B-2 Case II**  
**1995 A.M. Traffic**  
**(with project)**

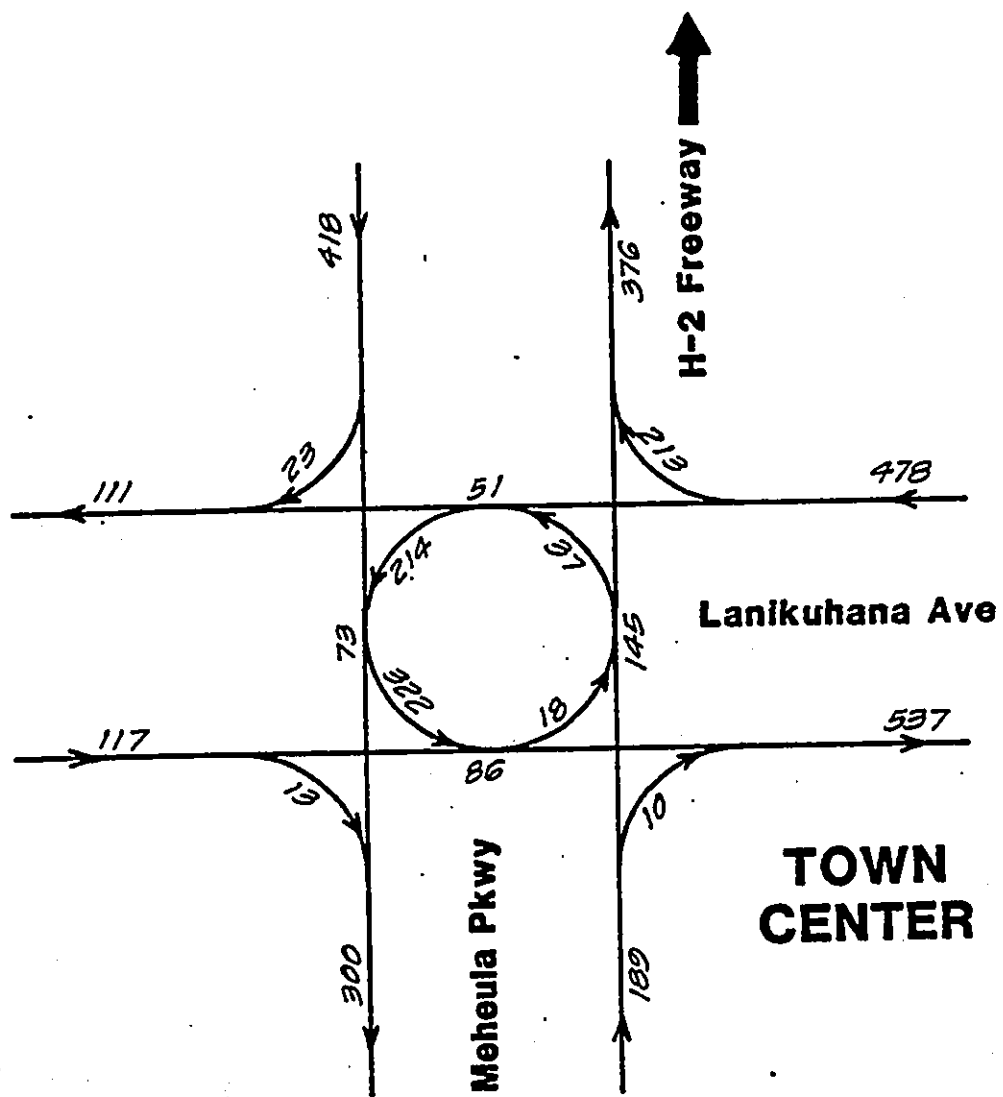


Dept. Housing and Urban Development  
**EIS for Mililani Town**  
 476 acre Increment  
 Oahu, Hawaii



Peak Hour  
 vehicles per hour  
 NOT TO SCALE  
 B-7

**Figure B-3 Case III**  
**1995 A.M. Traffic**  
 (with project and  
 Gentry-Waipio congestion)



Dept. Housing and Urban Development  
 EIS for Mililani Town  
 478 acre Increment  
 Oahu, Hawaii



vehicles per hour  
 NOT TO SCALE

B-8

Figure B-4 Case II  
 1995 P.M. Traffic  
 From Town Center

**Noise Study**

**Appendix C**

**DARBY-EBISU & ASSOCIATES, INC.**

*Acoustical Consultants*  
1051 Keolu Drive, Suite 201 • Kailua, Hawaii 96734  
(808) 261-3727

DEA Job #81-35P

March 29, 1982

VTN Pacific, Inc.  
1164 Bishop Street, Suite 906  
Honolulu, HI 96813

Attention: Mr. Fred Proby

Subject: Traffic Noise Measurements  
Mililani Town EIS  
476 Acre Increment

Dear Fred:

Enclosed are the noise measurement results for three locations in Mililani Town. Data was obtained using a BBN 614 Portable Noise Monitor System. Site 1 was 50 FT (Diamond Head) from the centerline of Meheula Parkway, with a microphone height of 5 FT AGL. Site 2 was 36 FT (makai) from the centerline of Kuahealani, with a microphone height of 11 FT AGL. Site 3 was in the 2nd Floor bedroom of an existing house on Lot #175, with microphone location approximately 90 FT (Diamond Head) from the centerline of the Parkway, and at approximately 15 FT AGL.

The data indicate that existing traffic noise levels along Meheula Parkway and mauka of Kuahealani Avenue are approximately 67  $L_{dn}$  at 50 FT distance from the centerline. Along the Parkway makai of Kuahealani toward Site #1, existing traffic noise levels are approximately 64  $L_{dn}$ .

At Site #2, dirt bikes caused instantaneous noise levels to exceed 80 dB. Traffic noise at this site was characterized by a median level (or  $L_{50}$ ) of approximately 59 to 61 dB between 5:00 AM and 7:00 PM, with 24-hour noise level of 64  $L_{dn}$ .

VTN Pacific, Inc.  
Attn: Mr. Fred Proby

March 29, 1982  
Page 2

I also made some spot noise measurements in the vicinity of Unit 49. Based on these spot measurements and the data from Site #2,  $L_{dn}$  estimates at 5 FT AGL were made as follows:

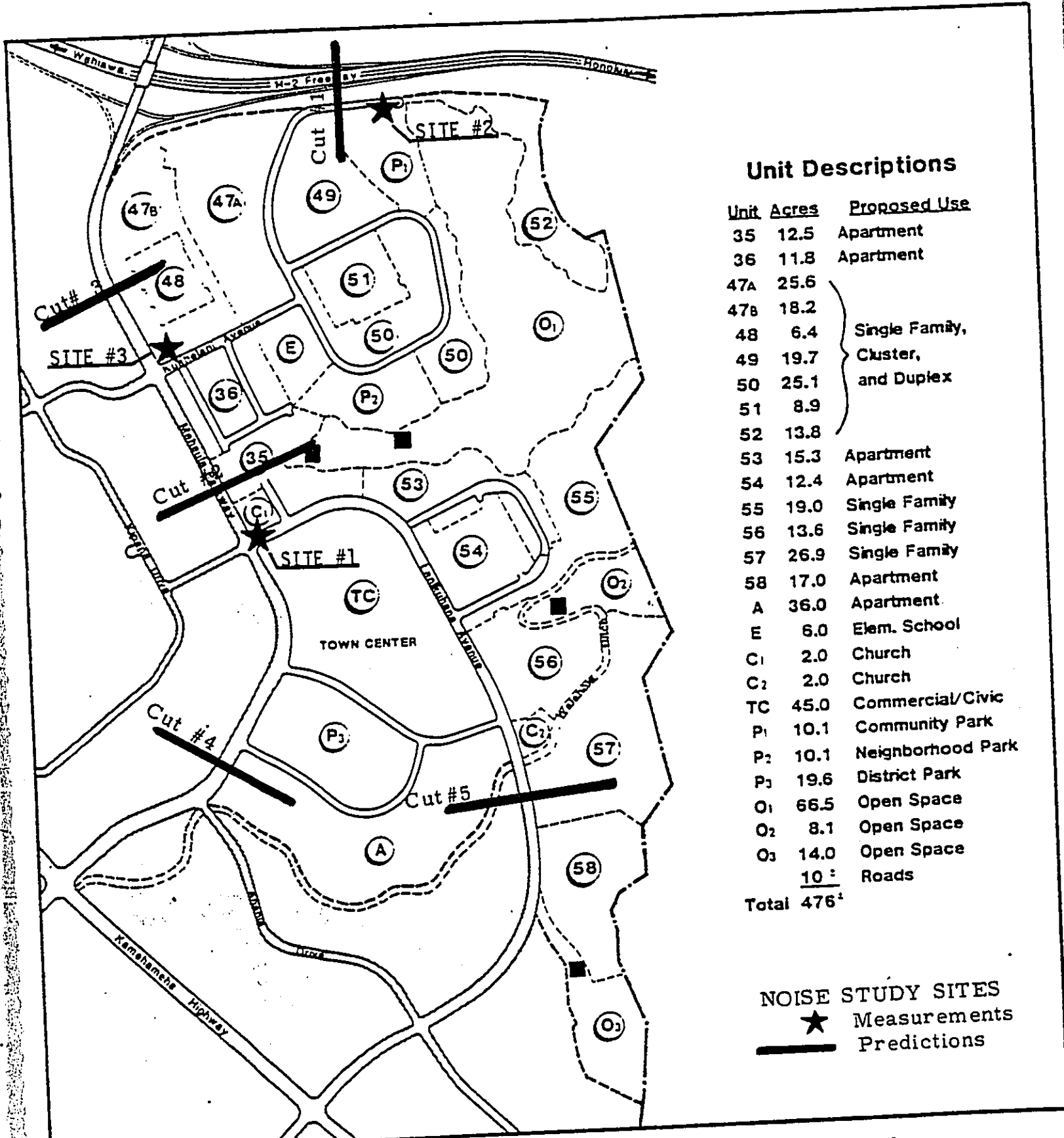
<u>Location</u>	<u>Estimated <math>L_{dn}</math></u>
Maiaku St. and Kuahelani Ave.	57 $L_{dn}$
Maiaku St. and Paikauhale St.	55 $L_{dn}$
Maka'Unulau at northeast corner of Unit #51	51 $L_{dn}$
55 FT makai of Site #2	60 $L_{dn}$

Sincerely



Yoichi Ebisu, P.E.

YE:ss  
Encls.

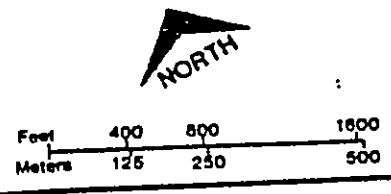


**Unit Descriptions**

Unit	Acres	Proposed Use
35	12.5	Apartment
36	11.8	Apartment
47A	25.6	Single Family, Cluster, and Duplex
47B	18.2	
48	6.4	
49	19.7	
50	25.1	
51	8.9	
52	13.8	
53	15.3	Apartment
54	12.4	Apartment
55	19.0	Single Family
56	13.6	Single Family
57	26.9	Single Family
58	17.0	Apartment
A	36.0	Apartment
E	6.0	Elem. School
C1	2.0	Church
C2	2.0	Church
TC	45.0	Commercial/Civic
P1	10.1	Community Park
P2	10.1	Neighborhood Park
P3	19.6	District Park
O1	66.5	Open Space
O2	8.1	Open Space
O3	14.0	Open Space
10		Roads
<b>Total</b>	<b>476<sup>±</sup></b>	

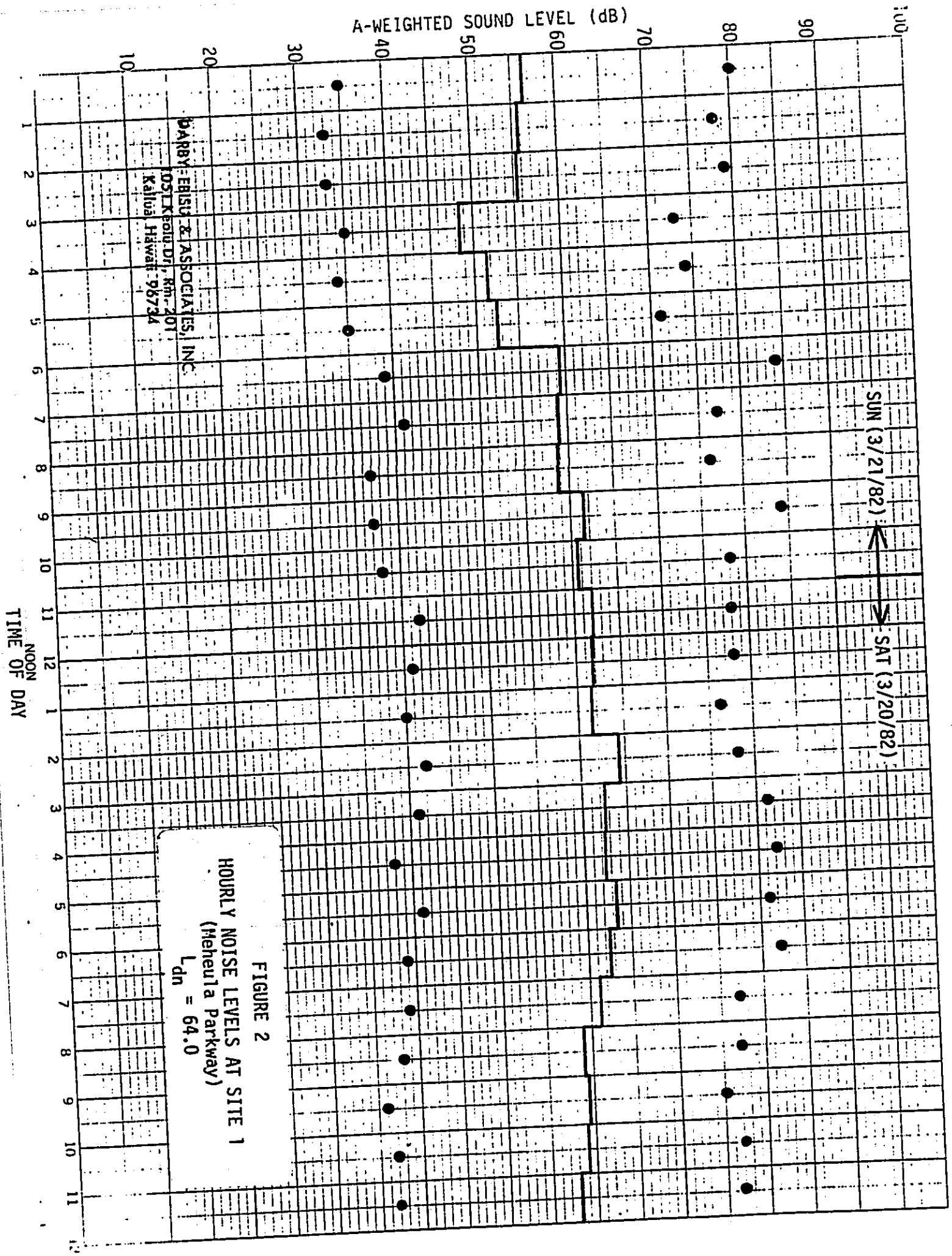
**NOISE STUDY SITES**  
 ★ Measurements  
 — Predictions

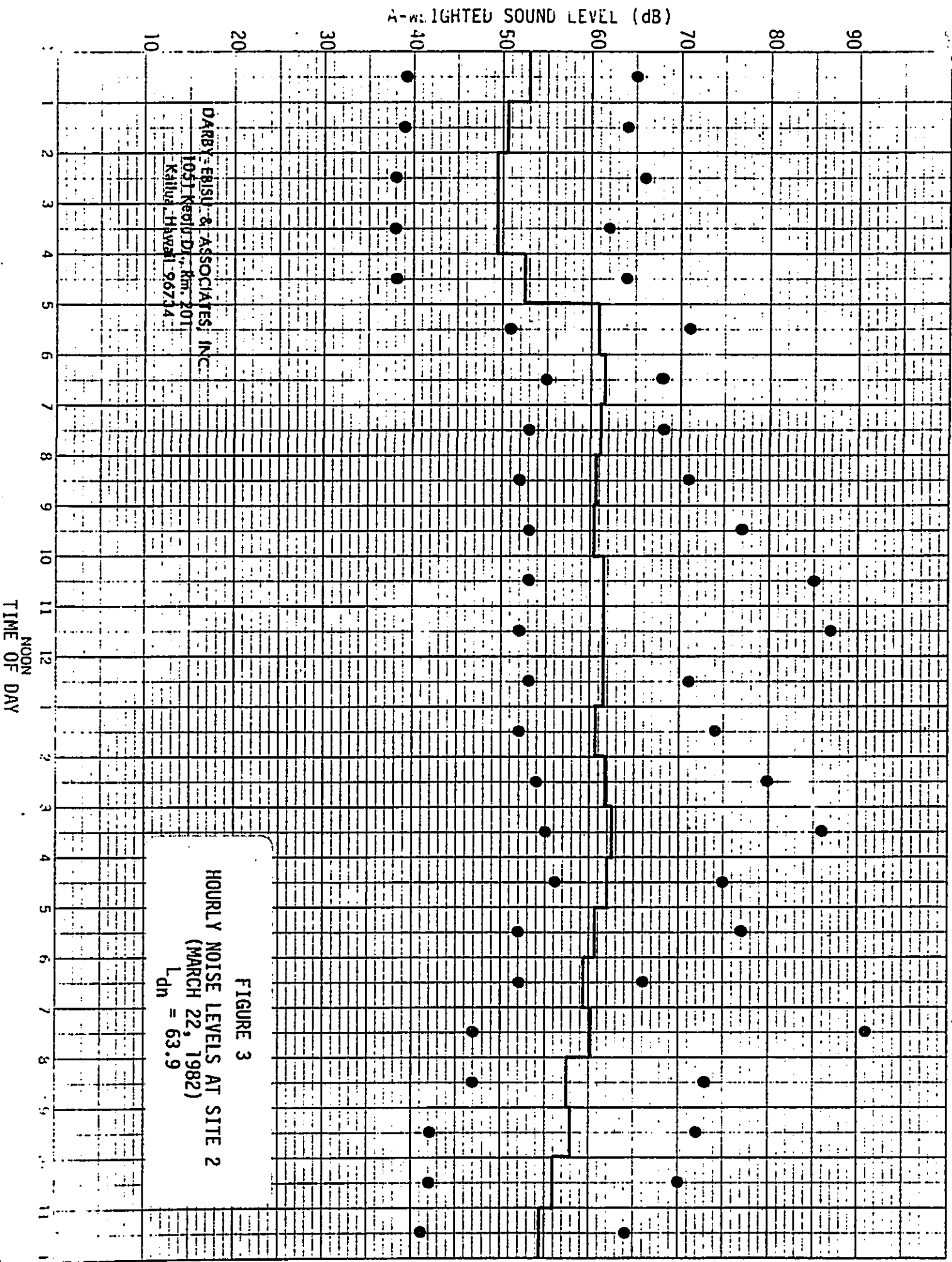
Dept. Housing and Urban Development  
**EIS for Millani Town**  
 476 acre Increment  
**Oahu, Hawaii**



**FIGURE 1**  
**TRAFFIC NOISE**  
**MEASUREMENT LOCATIONS**  
**(MARCH, 1982)**







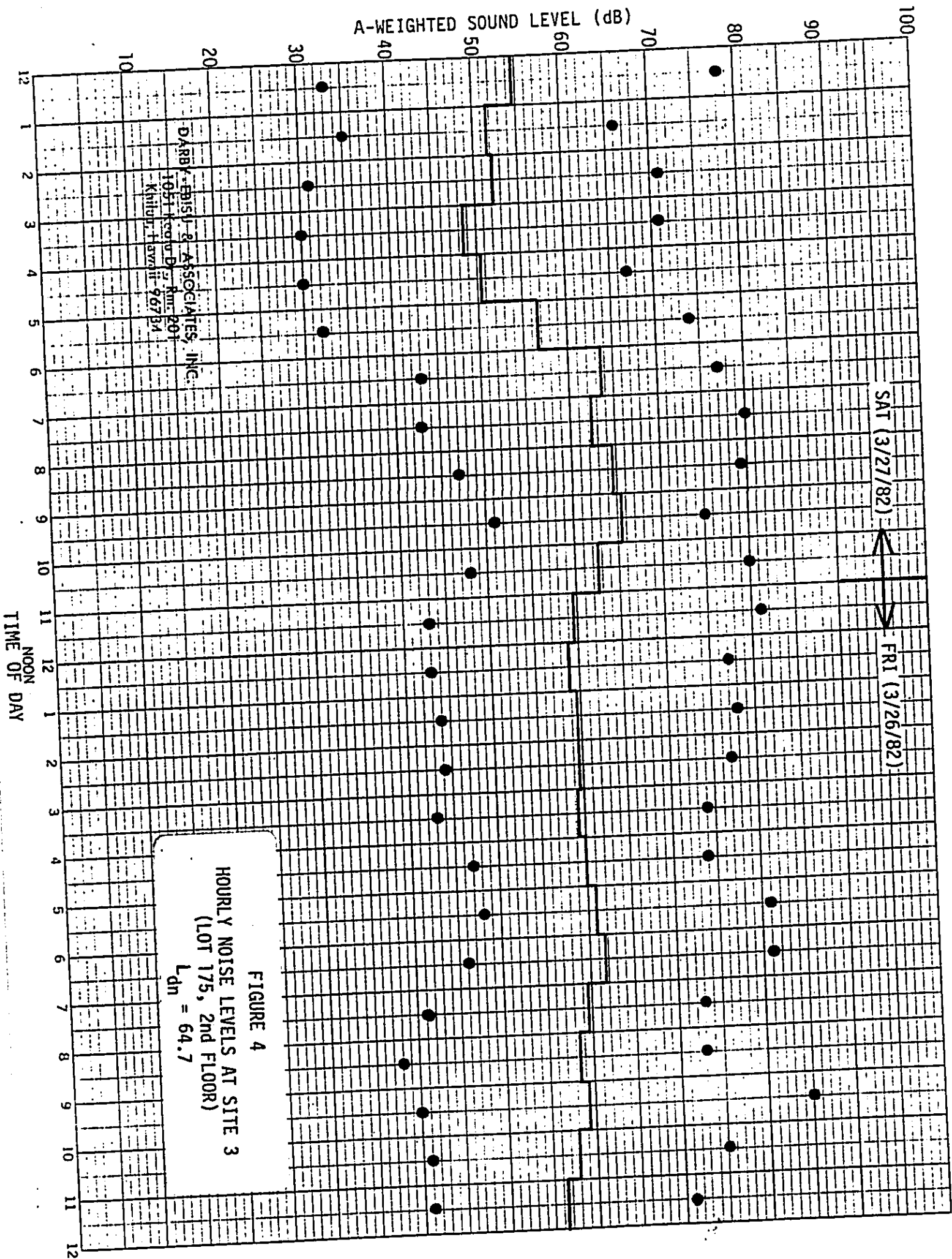


TABLE 1

PREDICTED TRAFFIC NOISE VERSUS DISTANCE  
MILILANI TOWN EIS, 476 ACRE INCREMENT

Cut #	Case #	VPH	Speed (MPH)	Ldn Versus Distances from C/L of Street						
				50'	75'	100'	150'	200'	300'	400'
2	I	534	30	64.0	61.3	59.5	56.8	54.9	52.3	50.4
	II	1,254	30	67.6	65.0	63.1	60.5	58.6	56.0	54.1
	III	2,822	27	70.2	67.5	65.7	63.0	61.1	58.5	56.6
3	I	804	35	67.3	64.7	62.8	60.1	58.3	55.6	53.7
	II	1,686	35	70.5	67.9	66.0	63.3	61.5	58.8	57.0
	III	3,528	32	72.8	70.1	68.2	65.6	63.7	61.1	59.2
4	I	180	30	59.3	56.6	54.7	52.1	50.2	47.6	45.7
	II	375	30	62.4	59.8	57.9	55.3	53.4	50.8	48.9
	III	780	30	65.6	63.0	61.1	58.5	56.6	54.0	52.1
5	I	628	30	64.7	62.0	60.2	57.5	55.7	53.0	51.1
	II	1,194	30	67.5	64.9	63.0	60.3	58.5	55.8	54.0
	III	2,283	30	70.2	67.6	65.7	63.1	61.2	58.6	56.9

- Assumptions:**
- a. 98% Auto, 1% MT, and 1% HT Vehicle Mix.
  - b. 180° Field-of-View.
  - c. Level and Soft Ground Conditions.
  - d.  $L_{dn} = L_{eq} (P.HR) + 2.5$ .

Traffic volumes are based on Mililani Town Traffic Study by VTN Pacific:

- Case I Represents base year (1985) conditions without project.
- Case II Represents 1995 conditions with full project development (2,090 units).
- Case III Represents Case II conditions with additional south-bound traffic routed to the H-2 Freeway On-Ramp at Meheula Parkway due to excessive congestion south of Mililani.

# CORRECTION

THE PRECEDING DOCUMENT(S) HAS  
BEEN REPHOTOGRAPHED TO ASSURE  
LEGIBILITY  
SEE FRAME(S)  
IMMEDIATELY FOLLOWING

TABLE 1

PREDICTED TRAFFIC NOISE VERSUS DISTANCE  
MILILANI TOWN EIS, 476 ACRE INCREMENT

Cut #	Case #	VPH	Speed (MPH)	Ldn Versus Distances from C/L of Street						
				50'	75'	100'	150'	200'	300'	400'
2	I	534	30	64.0	61.3	59.5	56.8	54.9	52.3	50.4
	II	1,254	30	67.6	65.0	63.1	60.5	58.6	56.0	54.1
	III	2,822	27	70.2	67.5	65.7	63.0	61.1	58.5	56.6
3	I	804	35	67.3	64.7	62.8	60.1	58.3	55.6	53.7
	II	1,686	35	70.5	67.9	66.0	63.3	61.5	58.8	57.0
	III	3,528	32	72.8	70.1	68.2	65.6	63.7	61.1	59.2
4	I	180	30	59.3	56.6	54.7	52.1	50.2	47.6	45.7
	II	375	30	62.4	59.8	57.9	55.3	53.4	50.8	48.9
	III	780	30	65.6	63.0	61.1	58.5	56.6	54.0	52.1
5	I	628	30	64.7	62.0	60.2	57.5	55.7	53.0	51.1
	II	1,194	30	67.5	64.9	63.0	60.3	58.5	55.8	54.0
	III	2,283	30	70.2	67.6	65.7	63.1	61.2	58.6	56.9

- Assumptions:**
- a. 98% Auto, 1% MT, and 1% HT Vehicle Mix.
  - b. 180° Field-of-View.
  - c. Level and Soft Ground Conditions.
  - d.  $L_{dn} = L_{eq} (P.HR) + 2.5$ .

Traffic volumes are based on Mililani Town Traffic Study by VTN Pacific:

Case I Represents base year (1985) conditions without project.

Case II Represents 1995 conditions with full project development (2,090 units).

Case III Represents Case II conditions with additional south-bound traffic routed to the H-2 Freeway On-Ramp at Meheula Parkway due to excessive congestion south of Mililani.

TABLE II

PREDICTED TRAFFIC NOISE VS. DISTANCE  
MILLILANI TOWN EIS, 476 ACRE INCREMENT

Cut #	Case #	P. HR. Volume	Speed (MPH)	L <sub>dn</sub> vs. Distance from $\downarrow$ of H-2									
				164'	196'	200'	210'	230'	246'	270'	301'	380'	480'
1	I	3400	60	73.4	72.7	72.6	67.3	65.5	64.2 (1)	62.5	61.0 (2)	58.6	56.7
1	II	4400	60	74.4	73.7	73.6	68.3	66.5	65.2	63.5	62.0	59.6	57.7
1	III	6000	55	74.8	74.1	74.0	68.7	66.9	65.6	63.9	62.4	60.0	58.1

- Assumptions:
- 98% Auto, 1% HT, & 1% HT Mix.
  - 180° Field-of-View.
  - $L_{dn} \approx L_{eq} (P. HR.) + 2.5$ .
  - Roadway Elevation: 706 FT.
  - Distance from  $\downarrow$  to South Edge of Cut: 164 FT.
  - Distance from  $\downarrow$  to South R/W: 196 FT.
  - Ground Elevation South of Cut: 747 FT.
  - Slope of Cut: 1 FT PER 2 FT.
  - Receiver Elevation Above Grade: 11 FT.

- Notes:
- Approximate location of Measurement Site #2 (3/22/82), estimated @ 50 FT south of R/W.
  - Approximate location of Spot Measurement Location, 55 FT south of Site #2, (3/22/82).
  - Prediction based on condition without a man-made wall along R/W. A natural noise barrier currently exists, and is formed by the south edge of the cut.
  - A 6 FT high man-made barrier along R/W will not be effective in generating further noise reductions, since it will be in the shadow of the natural barrier formed by the existing cut edge.
  - Further reductions in noise may be obtained by locating a 6 FT high barrier along the edge of the existing cut and to the north of the R/W.

**Air Quality Study**  
**Appendix D**



#### APPENDIX D AIR QUALITY STUDY

Air quality impacts relative to the proposed project were thoroughly analyzed in 1978 by James Morrow (air pollution specialist) for the previous EIS. It was found that the morning peak hour was the "worst case" for air quality since wind speeds tend to be lower than in the afternoon. Carbon monoxide (CO) predictions for 1985 without the project (Case I) indicated that the State 1-hour standard of  $10\text{mg}/\text{m}^3$  could be closely approached or exceeded at the major intersections along Kamehameha Highway. CO predictions for 1985 with the project (Case II) show that the project would have relatively little effect at the Kamehameha Highway intersections, except at Lanikuhana Avenue where the project would raise CO concentrations from  $5.6$  to  $11.0\text{ mg}/\text{m}^3$ . The effect of the project was greater at the intersection of Meheula Parkway and Lanikuhana Avenue where a maximum CO level of  $12.6\text{ mg}/\text{m}^3$  was predicted. These represent levels approximately 5 meters away from the intersection. Values at greater distances were not computed, but it was noted that the CO concentration would fall off rapidly away from the intersection.

Since the 1978 study, a number of changes have taken place which justify a reconsideration of air quality impacts relative to the project. These changes include:

- o Slightly more than half of the original number of housing units are currently proposed, with a different mix of single and multi-family units, resulting in approximately 44% less traffic generated by the project;
- o Completion of the project has been delayed, so that full development is not likely until 1995, as opposed to 1985;
- o Significant upward revisions have been made in the automobile CO emission factor (EPA's "Mobile-2" is used in the present analysis);
- o New techniques for predicting CO concentrations are available (EPA's "PAL" dispersion model is used in the present analysis).

For the present study the intersection of Lanikuhana Avenue and Meheula Parkway was examined in detail, since it was identified as a potential problem spot in the 1978 study, and it is adjacent to the project site. Three cases were considered:

- Case I 1985 without the project;
- Case II 1995 with full project development (2,090 units);
- Case III 1995 with full project development and congestion from the Gentry-Waipio project causing increased use of the Meheula on-ramp at the H-2 Freeway.

In all three cases, the morning peak hour traffic was used as indicated in Appendix B of this EIS. Under this condition, only the north-bound leg of Meheula and the west (north)-bound leg of Lanikuhana carry significant traffic flow. Figure D-1 shows the layout of this intersection, the receptor locations, and the CO concentrations obtained.

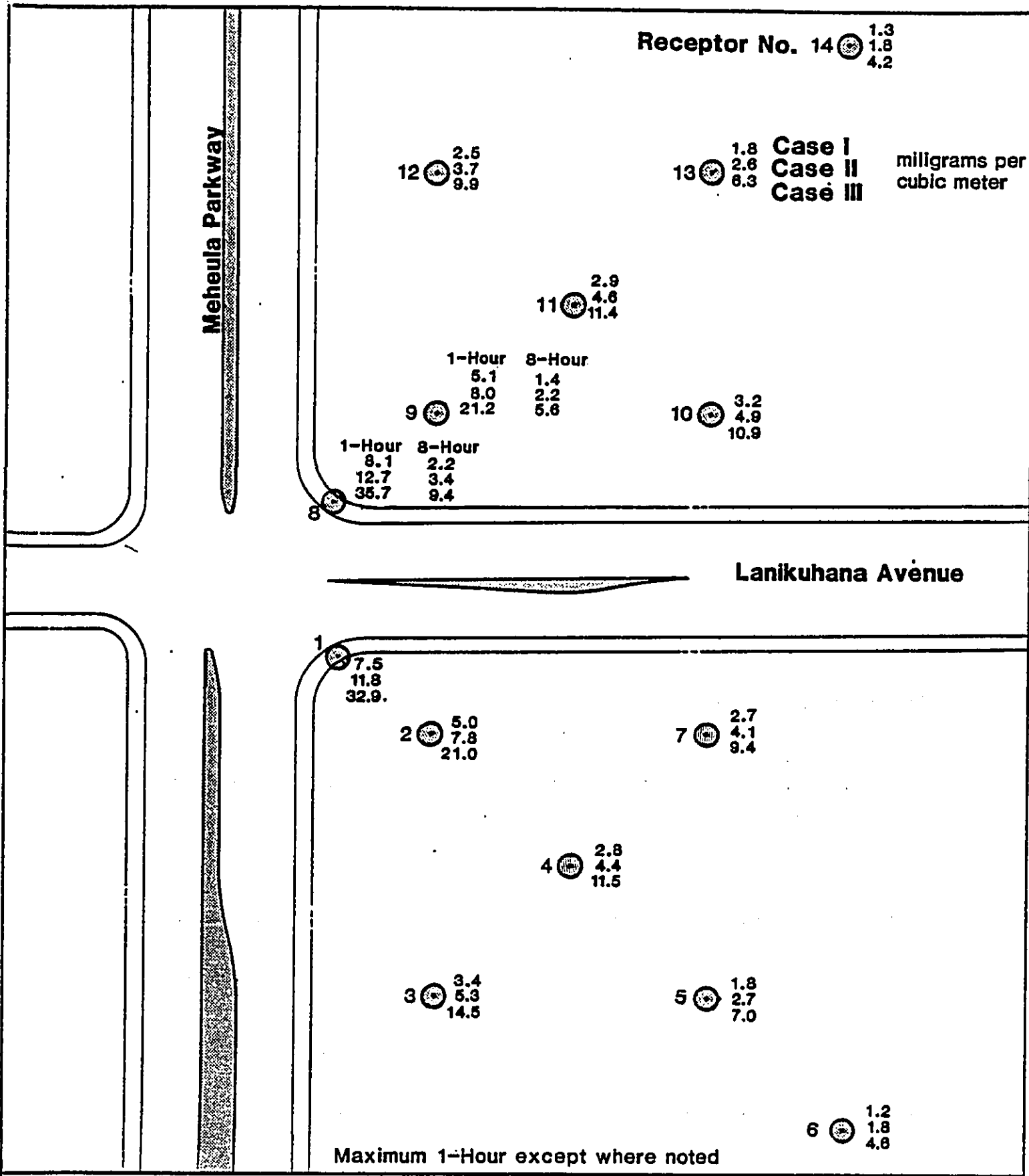
The critical assumptions used for the peak-hour concentrations are summarized below:

#### Meteorology

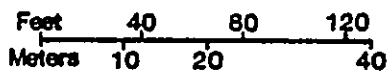
- o Wind Speed - 1.0 meters/second.
- o Wind Direction - computed for nine "downwind" directions then averaged; degrees = 180, 203, 225, 248, 270, 293, 315, 337, and 0.
- o Stability - Pasquill Class E "moderately stable".
- o Mixing Height - 834 meters.
- o Temperature - 75° F (294° K).

#### Emission Factors (from Mobile-2)

- o Vehicle Mix - 90% autos, 8% light trucks, 2% medium trucks, no gas or diesel heavy trucks.
- o Age Distribution - City and County of Honolulu.
- o Operating Mode - 90% "cold start" (morning commuters).
- o Ambient Temperature - 75° F.
- o 1985 CO Emissions in grams/mile/vehicle - 15 mph = 66.1, 25 mph = 41.9.
- o 1995 CO Emissions - 10 mph = 52.2, 15 mph = 39.1, 10 mph = 33.1, 25 mph = 27.1.



Dept. Housing and Urban Development  
**EIS for Millani Town**  
 476 acre increment  
**Oahu, Hawaii**



**Figure D-1**  
**Carbon Monoxide**  
**Concentrations**

- o CO Emissions at Idle (grams/minute/vehicle) - 1985 = 9.6, 1995 = 6.6

**Emission Rates (for input into PAL)**

- o Free Flowing Traffic - 25 mph for straight through, 15 mph for turns. Reduced by 5 mph for Case III.
- o Queuing Traffic - Calculated using the G/C ratio method as outlined in EPA's "Guidelines for Air Quality Maintenance Planning and Analysis: Volume 9" (Meheula Parkway G/C = 0.2, Lanikuhana Avenue G/C = 0.7).
- o Separate straight line or curved line sources input for queuing and free-flowing traffic.

**Receptors**

- o Location - 14 total, evenly arrayed on either side of Lanikuhana Avenue on the project side of Meheula Parkway; 2 located on the sidewalk at the intersection.
- o Height - 2 meters.

The results of the CO dispersion modeling are slightly less than the values obtained by Morrow in 1978. Under average wind conditions, the State standard is not exceeded under Case I conditions, even on the sidewalk adjacent to the intersection. With Case II, the additional traffic from the project results in CO concentrations slightly in excess of 10 mg/m<sup>3</sup> on the sidewalk, but the level drops to less than 5 mg/m<sup>3</sup> within 200 feet. Under Case III, traffic demand would be so high that the capacity of the intersection would probably be exceeded. In this event, CO concentrations would approach 30-35 mg/m<sup>3</sup> on the sidewalk, and would remain above 10 mg/m<sup>3</sup> for at least 200 feet away. The Federal 1-hour CO standard of 40 mg/m<sup>3</sup> would not be exceeded at any location under the conditions of this study.

In addition to the 1-hour analysis, the maximum 8-hour concentrations were determined for the two highest receptors (numbers 8 and 9 - see Figure D-1). For this, the emission rates were varied according to the hourly variation of traffic on Meheula Parkway recorded by the County Department of Transportation Services. The wind speeds used for the 8-hour average were: 1.0 m/s, 0500-0800; 2.0 m/s, 0900-1000; and 3.0 m/s,

1100-1200. These wind speeds follow the pattern recorded nearby at Waialua, but are slower than average (Figure D-2). The wind direction giving the highest 1-hour values for these four receptors was used for all eight hours, then adjusted to yield the average for the nine wind directions. Other assumptions are the same as used for the 1-hour analysis.

The results of the 8-hour CO modeling are shown on Figure D-1. Under Cases I and II the State standard of  $5 \text{ mg/m}^3$  is not exceeded. With the heavy traffic congestion of Case III it is expected that the standard would be exceeded on the sidewalk and up to 100 feet away. The higher Federal standard ( $10 \text{ mg/m}^3$ ) would not be exceeded with the average wind conditions used for this analysis.

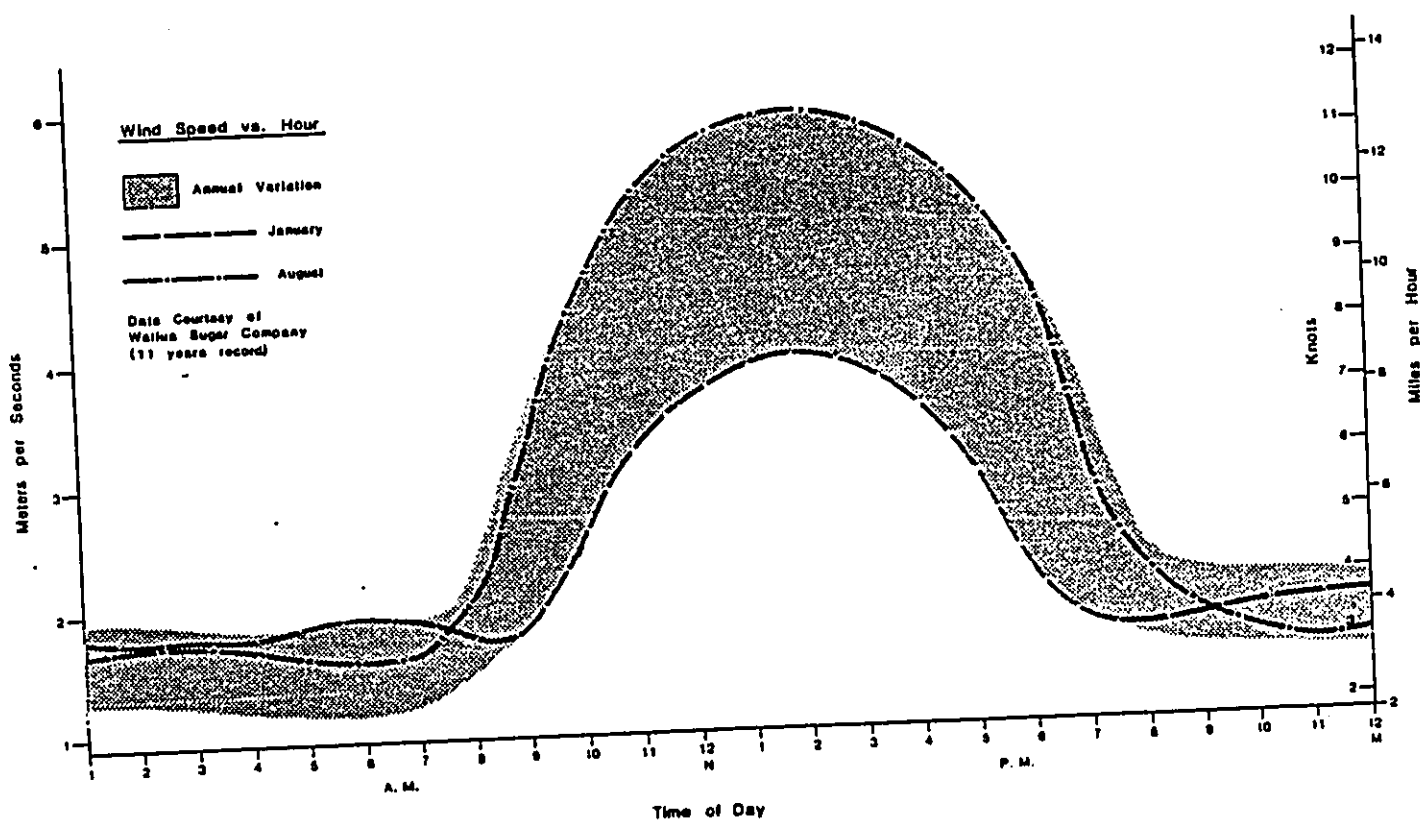


Figure D-2 Wind Speed Versus Time of Day

The frequency of occurrence of adverse morning meteorological conditions was estimated by Morrow to be 50% [Ref. 52]. The present analysis is based on the average of more than one wind direction so the frequency is likely to be greater than 50%, since a "variable" wind condition (typical of slow speeds) is represented. The highest values obtained with a single wind speed (SSW, 103 degrees) are approximately twice the average value shown on Figure D-1. For this circumstance, the frequency would be much less than 50%. At nearby Wheeler Field, the frequency of occurrence of a 1.0 m/s wind from all directions of a January morning (which typically has low wind speeds) is 30%. In January between 6 and 8 A.M. the frequency of occurrence of a SSW wind is only 0.5%. In August (typically having the highest morning winds) at the same time the frequency of this wind is 0.3%. These low frequencies indicate that it is unlikely for this "worst case" wind to occur for a full hour. The average values shown on Figure D-1 are therefore more representative of morning conditions. In the afternoon, wind speeds are significantly higher. A 1.0 m/s wind from any direction has only a 7.7% frequency of occurrence. Also, the traffic does not peak as heavily as in the morning, so congestion is not as worse. For these reasons it is unlikely that State CO standards would be exceeded in the Study Area on a regular basis in the afternoon.

**Income Calculations**

**Appendix E**

**APPENDIX E HUD MORTGAGE INCOME CALCULATIONS**

---

In contrast, when you apply the HUD Graduated Payment Mortgage, Section 245, Plan III Program, the family income required on the same \$139,500 price is \$51,000.

1. Sales Price =	\$139,500.00
2. Add Closing Costs =	<u>1,850.00</u>
3. Acquisition Cost	\$141,350.00
4. Maximum Mortgage Amount Under Section 203(b) =	135,000.00
5. Additional Down Payment	X <u>0.97</u>
6.	\$130,950.00
7. Divide Line 6 by the Highest Outstanding Bal. Factor	1.1145248
8. maximum Section 245 Mortgage Amount =	\$117,450.00
9. Ratio: Mortgage Amount to Sales Price =	84%
10. Principal, interest at 15.5% and 0.5%	
Mortgage Insurance Premium for 1st year	
\$117,450 x 10.6687 =	\$ 1,253.00
Real Property Tax	90.00
Hazard Insurance	102.00
Maintenance & Repair	40.00
Utilities	<u>110.00</u>
Total Housing Expense	\$ 1,595.00
11. Income required based on the residual approach	
a. Annual Housing Expense \$1,595 x 12 =	\$ 19,140.00
b. Apply average expense to income ratio	
\$19,140 divided by 0.5 =	\$ 38,280.00
c. Add income tax & social security - 25%	
\$38,280 divided by 0.75 = 51,040	
<b>Rounded Average Gross Income Required =</b>	<b>\$ 51,000.00</b>



**Responses To Notice Of Intent**

**Appendix F**

HEADQUARTERS  
NAVAL BASE PEARL HARBOR  
BOX 118  
PEARL HARBOR, HAWAII 96840

IN REPLY REFER TO:  
002:09P2:Job  
Ser 2656

23 DEC 1980

Honolulu Area Office  
Department of Housing and  
Urban Development  
300 Ala Moana Boulevard, Room 3318  
Honolulu, Hawaii 96850

Gentlemen:

Notification of Intent  
to Prepare an Environmental Impact Statement (EIS)  
for a Portion of Milliani Town, Waipio  
Oahu, Hawaii

Your letter of 26 November 1980 (9.155, Johnson/5465554) has been received and the Notification of Intent reviewed. The following comments are provided:

a. While the Navy interposes no objection in general to the development, there are at least two potential impacts which could have adverse effects on Navy property and operations:

(1) Navy potable water wells share the Pearl Harbor aquifer with others. Any degradation of water quantity or quality is of direct concern.

(2) The Navy's Waikale ammunition storage area is downstream from the proposed development and could be adversely affected by an increase in runoff and erosion. Additionally, an increase in the siltation rate at West Loch would require more frequent dredging.

b. The military area adjacent to the expansion (Upper Kipapa) is no longer used by the U. S. Navy for ammunition storage and is planned for use as a ground training area for the 25th Infantry Division, U. S. Army. It is suggested that further information be obtained from the appropriate officials.

It is hoped that the above items will receive appropriate attention in the upcoming EIS.

Thank you for the opportunity to submit comments.

Sincerely,



R. L. EISENBUD  
Lieutenant Commander, CEC, USN  
Deputy Facilities Engineer  
By direction of the Commander

FEDERAL AGENCIES



DEPARTMENT OF THE ARMY  
U. S. ARMY ENGINEER DISTRICT, HONOLULU  
FT SHAFTER, HAWAII 96858

FODED-PV

17 December 1980

Mr. Andrew I. T. Chang, Area Manager  
Honolulu Area Office  
US Department of Housing and Urban Development  
300 Ala Moana Blvd., Room 3318  
Honolulu, HI 96850

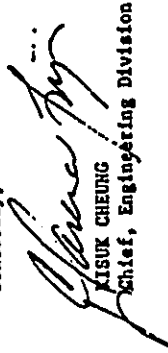
Dear Mr. Chang:

We have reviewed your Notification of Intent to Prepare an Environmental Impact Statement (EIS) for a Portion of Mililani Town, Waipio, Oahu, Hawaii, which was sent to us on 26 November 1980. We have prepared the following comments:

- a. A Department of the Army regulatory permit for the project is not required.
- b. The entire Mililani Town expansion site is designated an area of undetermined but possible flood hazards (Zone D), based on the Flood Insurance Study for the island of Oahu prepared by the Federal Insurance Administration.
- c. We will be happy to comment further on this project when the EIS is completed.

Thank you for your Notification of Intent on this project.

Sincerely,

  
F. S. CHEUNG  
Chief, Engineering Division



DEPT. OF HUD  
HON. AREA OFFICE

JAN 29 '81

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

215 Fremont Street  
San Francisco, Ca. 94105

87 JAN 381

Frank L. Johnson  
Dept. of Housing and Urban Development  
Honolulu Area Office  
Box 50007  
800 Ala Moana Boulevard  
Honolulu, HI 96850

Dear Mr. Johnson:


The Environmental Protection Agency (EPA) has received and reviewed the initiation of scoping request under Council on Environmental Quality (CEQ) Regulations (40 CFR Parts 1500 - 1508) for the project titled MILILANI TOWN EXPANSION, MAIPO, OAHU, HAWAII.

In accordance with Section 1501.6(b)(2) of the CEQ regulations the EPA has the attached comments for your consideration.

The EPA appreciates the opportunity to comment on the proposed project and requests five copies of the draft environmental impact statement when available.

If you have any questions regarding our comments, please contact Susan Sakaki, EIS Review Coordinator, at (415) 556-7858.

Sincerely yours,

  
Jake Mackenzie, Director  
Surveillance and Analysis Division  
Region IX

Attachment

General Comments

The DEIS should clarify what class of agricultural land would be impacted by development of this project. The DEIS should identify the U.S. Department of Agriculture classification and present use of agricultural land which would be affected. If this acreage is prime agricultural land (Class I), consideration should be given to the Council on Environmental Quality (CEQ) Memoranda (August 30, 1976 and August 11, 1980) which urge the protection of prime agricultural land to ensure productive use. Mitigation measures should be developed to avoid loss of any such valuable resource.

Air Quality Comments

The proposed draft EIS should, at a minimum, discuss the following air quality issues:

1. Consistency with HUD's Comprehensive Planning Assistance (701) Program.
2. Include emissions data for area sources for each alternative.
3. Investigate methods of water and space heating/cooling with low emissions and low energy consumption (solar energy or heat pumps).
4. Provide, for each alternative, the following information for all major access roads and intersections in the project vicinity:
  - a. Projected Average Daily Traffic (ADT).
  - b. Projected volume to capacity ratios.
  - c. An evaluation of the potential for violation of carbon monoxide (CO) National Ambient Air Quality Standards (NAAQS) using techniques given in Carbon Monoxide Hot Spot Guidelines (EPA-450/3-78-033 [034, 035]). Where these procedures are inappropriate or where further analysis is warranted, use Guidelines for Air Quality Maintenance Planning and Analysis Volume 9 [Revised: Evaluating Indirect Sources (EPA-450/4-78-001)].

bj  
i  
co

5. Discuss the potential mass transit options and steps that could be taken to implement transit options. Also, discuss the existing mass transit available in the project area.
6. Discuss existing air quality in the project area and air quality basin.

404(b) Permit Comments

If an Army Corps of Engineers Section 404 fill permit is required, the EPA will review the proposed EIS in accordance with 40 CFR 230 promulgated pursuant to Section 404(b) of the Clean Water Act. Our evaluation would focus on the maintenance of water quality, and the protection of wetlands, fishery and wildlife resources. The Draft EIS should address these concerns with particular emphasis on any anticipated impacts to affected marine life and habitat. If applicable, the DEIS should indicate the amount of dredging required, potential disposal sites, types of fill material to be utilized, and quantities to be discharged into "navigable waters."

Noise Comments

The DEIS should, at a minimum, address the following noise issues:

1. Measurement of the existing ambient noise levels and the projected increase in noise levels due to the project.
2. Projected levels of construction noise, impacts on the existing communities during the construction phase, and proposed measures to be implemented to mitigate for potential adverse impacts on those communities.
3. Land use considerations which may be instrumental in minimizing the noise impacts from traffic, commercial/industrial and recreational noise sources on new and existing residences and schools.
4. Conformance with State and local noise regulations and ordinances. The contact person for this information is:

Tom Anamizu  
State Department of Health  
1250 Punchbowl Street  
Honolulu, Hawaii 96813  
(808) 548-3075

5. All data on the potential noise impacts and the effects of mitigation measures should be expressed in decibel levels in accordance with accepted acoustical measurement procedures.

United States  
Department of  
Agriculture

Soil  
Conservation  
Service

P. O. Box 50004  
Honolulu, Hawaii  
96850

December 9, 1980

Andrew I. T. Chang  
Area Manager  
Department of Housing and Urban  
Development, Honolulu Area Office  
P.O. Box 50007  
Honolulu, HI 96850

Dear Mr. Chang:

Subject: Notification of Intent to Prepare an Environmental  
Impact Statement for a Portion of Milliani Town,  
Waipio, Oahu, Hawaii

Thank you for your letter of November 26, 1980, relative to  
subject matter.

We have no comments at this time but would appreciate receiving  
a copy of the EIS for review when it is completed.

Sincerely,

  
JACK P. KANALZ  
State Conservationist



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
 HONOLULU AREA OFFICE  
 300 ALA MOANA BLVD., RM. 318, P.O. BOX 5007  
 HONOLULU, HAWAII 96830  
 November 26, 1980

IN REPLY REFER TO:  
 9.155 (Johnson/  
 546-5554)

REGION IX

Department of Education  
 State of Hawaii  
 P. O. Box 2360  
 Honolulu, HI 96804

Ladies and Gentlemen:

The purpose of this letter and the enclosed Notice is to seek your assistance in identifying specific environmental concerns that should be addressed in the Draft Environmental Impact Statement on the subject project.

Within your agency's area of expertise, please identify sources of impact that would be generated if the project were implemented and what measures can be taken to mitigate or minimize those impacts.

For example:

How many additional students will be generated by the proposed action in grades K-6, 7-9 and 10-12?

Will implementation of the proposed action require the construction of school facilities to accommodate those students. If so, what is the anticipated cost of those facilities? What is the estimated annual cost to maintain those additional facilities including salaries, administrative costs and maintenance in 1981 dollars?

Of course we welcome your identifying any other concerns you may have.

We also recognize that the information your agency provides at this time cannot be interpreted by HUD as approval of the project for you will be invited to review and comment on the completed Draft Statement as well as the Final E.I.S., which will contain the full range of environmental assessments in accordance with HUD policies and guidelines.

If we can be of any assistance in expediting your response or clarifying any questions you might have, please contact Frank Johnson at 546-5554.

Sincerely,

*[Signature]*  
 Andrew I. T. Chang  
 Area Manager

Enclosure

STATE AGENCIES

HJ  
 1/5

GEORGE B. ANTONIO  
Superintendent



STATE OF HAWAII  
DEPARTMENT OF EDUCATION  
P. O. BOX 2346  
HONOLULU, HAWAII 96810

OFFICE OF THE SUPERINTENDENT

December 16, 1980

Mr. Andrew I. T. Chang  
Area Manager  
Dept. of Housing and Urban Development  
P.O. Box 50007  
Honolulu, Hawaii 96850

Dear Mr. Chang:

SUBJECT: Draft FIS, Millilani Town Expansion  
RE: 9.1SS (Johnson/546/5554)

Our estimation of student enrollment generated by the development of the 467 acre parcel for Millilani Town, Inc. is based on information obtained from Mr. Ken Toshi, Manager of Engineering and Land Development for Millilani Town, Inc. It is based on a revised plan to develop approximately 1,845 to 1,945 units, a range which may be subject to further revision.

Our review indicates that the following student enrollment may be generated.

SCHOOL	GRADE	APPROXIMATE ENROLLMENT
Kipapa & Millilani Waena Elementary	K-6	300 - 600
Wheeler Intermediate	7-8	100 - 150
Millilani High	9-12	150 - 200

Implementation of the proposed expansion of Millilani Town may or may not create shortages of classroom facilities depending upon the rate of growth. Moderate growth, in conjunction with aping of the service area and out-migration of students, will enable existing school facilities to accommodate the expected student enrollment. Rapid growth will exceed existing capacity, requiring additional permanent construction and relocation of portable classrooms.

AN EQUAL OPPORTUNITY EMPLOYER

Mr. Andrew I. T. Chang  
December 16, 1980  
Page 2

In answer to your question on the anticipated cost of classroom facilities, portable classrooms are used to accommodate temporary surges in enrollment while permanent classrooms are constructed for long-term needs. In the event of rapid growth, it is estimated that \$495,000 to \$660,000 will be needed for portable classrooms and \$1,040,000 to \$1,500,000 for permanent classrooms.

Estimated cost for these additional facilities in terms of salaries, administrative costs and maintenance will range in the vicinity of \$750,000 per year.

Should there be any further questions, please contact Mr. Howard Lau at 737-5231.

Sincerely,

*Charles G. Clark*  
CHARLES G. CLARK  
Superintendent

CGC:HL:jl

cc: Central District

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 3118, P.O. BOX 5007  
HONOLULU, HAWAII 96850  
November 26, 1980



REGION IX

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

Ladies and Gentlemen:

The purpose of this letter and the enclosed Notice is to seek your assistance in identifying specific environmental concerns that should be addressed in the Draft Environmental Impact Statement on the subject project.

Within your agency's area of expertise, please identify sources of impact that would be generated if the project were implemented and what measures can be taken to mitigate or minimize those impacts.

For example:

Sewerage

What is the current status of the NPDES permit for the Milliani Town STP.

We understand that the effluent from the STP did not comply with the NPDES permit. What were the issues concerning the non-compliance and what measures have been taken to assure compliance?

We would appreciate receiving a copy of the NPDES permit if it is available.

Water Quality

Is your agency aware of any recent water quality investigations along Kipapa-Waikele Streams or at West Loch that could assist HUD in addressing the water quality issue?

What is the current status of the pending revisions to Chapter 37A, Water Quality Standards of the Public Health Regulations?

2

Does the water quality from wells that serve this project comply with the federal and state water quality standards?


Have any significant findings been made concerning the contamination of the Del Monte wells at Kunia from pesticides discovered in April 1980? What is the current status of the investigation.

Of course we welcome your identifying any other concerns you may have.

We also recognize that the information your agency provides at this time cannot be interpreted by HUD as approval of the project for you will be invited to review and comment on the completed Draft Statement as well as the Final E.I.S., which will contain the full range of environmental assessments in accordance with HUD policies and guidelines.

If we can be of any assistance in expediting your response or clarifying any questions you might have, please contact Frank Johnson at 546-5554.

Sincerely,

  
Andrew I. T. Chang  
Area Manager

Enclosure





STATE OF HAWAII  
 DEPARTMENT OF HEALTH  
 P. O. BOX 3178  
 HONOLULU, HAWAII 96809

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
 HONOLULU AREA OFFICE  
 300 ALA MOANA BLVD., RM. 3118, P.O. BOX 5007  
 HONOLULU, HAWAII 96809

GEORGE A. L. TILM  
 DIRECTOR OF HEALTH  
 VERNICE C. WATIL, M.D.  
 DEPUTY DIRECTOR OF HEALTH  
 ROBERT H. THOMPSON, M.A.  
 DEPUTY DIRECTOR OF HEALTH  
 HONOLULU, HAWAII 96809  
 TADAO OKADA  
 DEPUTY DIRECTOR OF HEALTH

January 16, 1981

Area Manager  
 Honolulu Area Office  
 Department of Housing & Urban Development  
 P. O. Box 50007  
 Honolulu, Hawaii 96850

Attention: Mr. Frank Johnson  
 Dear Sir:

Subject: Request for Comments on Proposed Environmental Impact Statement (EIS) for a Portion of Millilani Town, Waipio, Oahu

Thank you for allowing us to review and comment on the subject proposed EIS. We submit the following comments for information and consideration:

Water Quality

1. The Millilani STP Enforcement Class is still awaiting the Hearing Officer's decision.
2. There are no water quality investigations along Kapapa-Waikele Streams. Sediment and water quality data are available for West Loch.

Drinking Water

1. The water quality from wells that serve this project generally comply with Federal and State water quality standards.
2. To date, the incidence of well contamination of the Del Monte Kuni Well seems to have been an isolated problem and has not been found to have contaminated any other drinking water wells in the vicinity.
3. Millilani Town, Inc., through violation of operating permit conditions, has been required to close the Millilani Town Landfill. The consequences of the violation are not presently known but should be investigated in view of the potential of serious groundwater contamination.

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.

Sincerely,  
 MELVIN T. KOIZUMI, Deputy Director  
 for Environmental Health



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
 HONOLULU AREA OFFICE  
 300 ALA MOANA BLVD., RM. 3118, P.O. BOX 5007  
 HONOLULU, HAWAII 96809

REGION IX

Department of Land and Natural Resources (Water & Land Development)  
 State of Hawaii  
 P. O. Box 671  
 Honolulu, Hawaii 96809

Ladies and Gentlemen:

The purpose of this letter and the enclosed Notice is to seek your assistance in identifying specific environmental concerns that should be addressed in the Draft Environmental Impact Statement on the subject project.

Within your agency's area of expertise, please identify sources of impact that would be generated if the project were implemented and what measures can be taken to mitigate or minimize those impacts.

For example:

- As a result of the designation of the Pearl Harbor Groundwater Control Area, will the DMR impose restrictions on the withdrawal of water by existing and proposed wells scheduled to serve the subject project or other projects in the area?
- Can you provide or suggest specific studies, reports or recommendations that could assist HUD in addressing the project's impact on the quality of groundwater?
- What mitigative measures are proposed to relieve the over-withdrawal of the Pearl Harbor Aquifer?

Of course, we welcome your identifying any other concerns you may have. We also recognize that the information your agency provides at this time cannot be interpreted by HUD as approval of the project for you will be invited to review and comment on the completed Draft Statement as well as the Final E.I.S., which will contain the full range of environmental assessments in accordance with HUD policies and guidelines.

If we can be of any assistance in expediting your response or clarifying any questions you might have, please contact Frank Johnson at 546-5554.

Sincerely,  
 Andrew I. T. Chung  
 Area Manager

Enclosure

IN REPLY REFER TO:  
 9.155 (Johnson/566-5554)

GEORGE A. ARITOSHI  
GOVERNOR OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
DIVISION OF WATER AND LAND DEVELOPMENT

P. O. BOX 373  
HONOLULU, HAWAII 96809

December 30, 1980

DIVISIONS:  
CONSERVATION AND  
RECREATION  
IN LANDS ENFORCEMENT  
PLANNING  
PLANNING AND ZONING  
LAND MANAGEMENT  
WATER AND LAND DEVELOPMENT



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 3318, P.O. BOX 50007  
HONOLULU, HAWAII 96850  
November 26, 1980

REGION IX

IN REPLY REFER TO:  
9.1SS (Johnson/546-  
5554)

Department of Planning and Economic Development  
State of Hawaii  
250 South King Street  
Honolulu, HI 96804

Mr. Andrew I. T. Chang  
Area Manager  
Dept. of Housing and Urban  
Development  
P.O. Box 50007  
Honolulu, Hawaii 96850

Dear Mr. Chang:

H  
I  
O

Notification of Intent to Prepare an EIS for a  
Portion of Milliani Town, Waipio, Oahu (9.1SS Johnson/546-5554)

The EIS for the proposed Milliani Town Expansion of 476 acres needs to address the project's impact on the Pearl Harbor aquifer and the fact that water use for the project has not been approved by government agencies.

The Board of Land and Natural Resources has designated the Pearl Harbor Region as a Ground Water Control Area and has established the sustainable yield for the area. If water use for the proposed expansion of Milliani Town is to come from the Pearl Harbor ground water source, the necessary approvals of the Board of Land and Natural Resources and the Honolulu Board of Water Supply must be received.

Very truly yours,

*Robert T. Chuck*

ROBERT T. CHUCK  
Manager-Chief Engineer

RTC:DL: dh

Ladies and Gentlemen:

The purpose of this letter and the enclosed Notice is to seek your assistance in identifying specific environmental concerns that should be addressed in the Draft Environmental Impact Statement on the subject project.

Within your agency's area of expertise, please identify sources of impact that would be generated if the project were implemented and what measures can be taken to mitigate or minimize those impacts.

For example:

What environmental issues remain unresolved that are concerns of your department that should be addressed by HUD in view of the City & County's approval of the Final EIS/rezoning request in 1978.

Of course we welcome your identifying any other concerns you may have.

We also recognize that the information your agency provides at this time cannot be interpreted by HUD as approval of the project for you will be invited to review and comment on the completed Draft Statement as well as the final E.I.S., which will contain the full range of environmental assessments in accordance with HUD policies and guidelines.

If we can be of any assistance in expediting your response or clarifying any questions you might have, please contact Frank Johnson at 546-5554.

Sincerely,

*Andrew I. T. Chang*

Andrew I. T. Chang  
Area Manager

Enclosure



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 3318, P.O. BOX 9000  
HONOLULU, HAWAII 96860  
November 26, 1980

REGION IX

IN REPLY REFER TO:  
9.155 (Johnson/  
546-5554)

Department of Transportation  
State of Hawaii  
869 Punchbowl Street  
Honolulu, HI 96813

Ladies and Gentlemen:

The purpose of this letter and the enclosed Notice is to seek your assistance in identifying specific environmental concerns that should be addressed in the Draft Environmental Impact Statement on the subject project.

Within your agency's area of expertise, please identify sources of impact that would be generated if the project were implemented and what measures can be taken to mitigate or minimize those impacts.

For example:

Are there any planning studies or proposed improvements to Kamehameha Highway or the H-2 Freeway that HUD should consider in addressing the existing and proposed traffic patterns for the proposed action?

The following traffic data would be helpful in HUD's assessment of traffic patterns, noise and air quality impacts:

Current traffic volumes, including 24-hour distribution and projected traffic volumes to the year 2000 with and without the proposed project at the following stations: (1) H-13-H (H-2 at Milliani Interchange); (2) H-13-P (H-2 at Kipapa Bridge); (3) H-13-R (H-2 at East Range Road Underpass); and Kamehameha Highway at Kipapa Bridge.


The plan, profile and cross sections of the H-2 Freeway adjacent to the 476-acre site would also be helpful.

Of course we welcome your identifying any other concerns you may have.

We also recognize that the information your agency provides at this time cannot be interpreted by HUD as approval of the project for you will be invited to review and comment on the completed Draft Statement as well as the Final E.I.S., which will contain the full range of environmental assessments in accordance with HUD policies and guidelines.

If we can be of any assistance in expediting your response or clarifying any questions you might have, please contact Frank Johnson at 546-5556.

Sincerely,

  
Andrew I. T. Chang  
Area Manager



DEPARTMENT OF PLANNING  
AND ECONOMIC DEVELOPMENT

Kalaniana'olaha Building 250 South King St. Honolulu, Hawaii - Mailing Address P.O. Box 2336 Honolulu, Hawaii 96804

GEORGE R. ARIYOSHI

HIDETO KONO

FRANK SARIVANE

December 29, 1980

Ref. No. 2533

Mr. Andrew Chang  
Area Manager  
Honolulu Area Office  
Department of Housing and  
Urban Development  
300 Ala Moana Blvd., Rm. 3318  
Box 50007  
Honolulu, Hawaii 96850

Dear Mr. Chang:

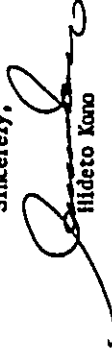
Subject: Notification of Intent to Prepare an Environmental Impact Statement for a Portion of Milliani Town, Waipio, Oahu

Thank you for your letter of November 26, 1980, informing us of your intent to prepare an Environmental Impact Statement on the proposed urban expansion of Milliani Town.

We have no specific comments to offer on the subject project at this time. However, we would like to suggest that your staff contact the Office of Environmental Quality Control (OEQC) which State office has been designated by Governor George R. Ariyoshi as the coordinative center for State receipt and review of all federal impact statements. Thus, arrangements should be made with the OEQC, and not the State A-95 Clearinghouse, to distribute the draft EIS to interested agencies and individuals upon its completion.

Should you have any questions, please do not hesitate to contact our Planning Division at 548-3042 or 548-4126.

Sincerely,

  
Hideto Kono

cc: Mr. Harry Akagi, Acting Director  
Office of Environmental Quality Control

RECEIVED  
 DEPT. OF HDU  
 HON. AREA OFFICE  
 JAN 7 '81  
 JAMES P. CARROLL  
 JAMES E. MCCORMACK  
 JOHN W. S. SUGA P. D.



STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION

Area Manager  
 Page 2

STP 8.6938

The 24-hour 1995 traffic forecasts for Interstate Route H-2 and Kamehameha Highway at the above-mentioned traffic count locations follow:

Station	Interstate Route H-2	24-hour traffic
H-13-P	Wahiawa Bound Honolulu Bound	24,100 23,800
H-13-R	Wahiawa Bound Honolulu Bound	17,400 18,300
H-13-N	Forecast not available. <u>Kamehameha Highway</u>	
C-13-J	Wahiawa Bound Honolulu Bound (*Require adjustments)	8,900* 10,800*

Should you have further questions, please do not hesitate to call Mr. James Tanaka at 548-6527.

Very truly yours,

*Ryokichi Higashijima*  
 Ryokichi Higashijima  
 Director of Transportation

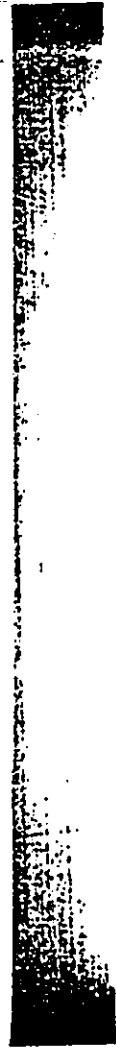
Area Manager  
 Department of Housing and Urban Development  
 Honolulu Area Office  
 P. O. Box 5000  
 Honolulu, Hawaii 96850

Dear Sir:

We provide the following information in response to your letter of November 26, 1980.

1. The plan and profile sheets for Interstate Route H-2, Milliani Interchange; and
2. The latest 24-hour accumulation traffic count sheets for the following locations:
  - a) Station H-13-N -- H-2 Freeway at Milliani Interchange (on/off ramps);
  - b) Station H-13-P -- H-2 Freeway at Kipapa Bridge;
  - c) Station H-13-R -- H-2 Freeway at East Range Road Underpass; and
  - d) Station C-13-J -- Kamehameha Highway at Kipapa Stream (Roosevelt Bridge).

Please be informed that the 1995 regional traffic assignments takes into account the proposed development. The 1995 housing forecast for Milliani Town was 20,000 units. This is approximately 6,000 units more than our latest inventory (1978).



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 3318, P.O. BOX 50007  
HONOLULU, HAWAII 96850  
November 26, 1980



REGION IX

IN REPLY REFER TO:  
9.JSS (Johnson/546-5554)

Hawaii Housing Authority  
P. O. Box 17907  
Honolulu, Hawaii 96817

Ladies and Gentlemen:

The purpose of this letter and the enclosed Notice is to seek your assistance in identifying specific environmental concerns that should be addressed in the Draft Environmental Impact Statement on the subject project.

Within your agency's area of expertise, please identify sources of impact that would be generated if the project were implemented and what measures can be taken to mitigate or minimize those impacts.

For example:

Does your agency anticipate to take an active role in providing housing for low and moderate income families in the proposed project? If so, will you seek assistance through HUD programs?

Of course we welcome your identifying any other concerns you may have.

We also recognize that the information your agency provides at this time cannot be interpreted by HUD as approval of the project for you will be invited to review and comment on the completed Draft Statement as well as the Final E.I.S., which will contain the full range of environmental assessments in accordance with HUD policies and guidelines.

If we can be of any assistance in expediting your response or clarifying any questions you might have, please contact Frank Johnson at 546-5554.

Sincerely,

*Andrew I. T. Chang*  
Andrew I. T. Chang  
Area Manager

Enclosure



STATE OF HAWAII  
DEPARTMENT OF SOCIAL SERVICES AND HOUSING  
HAWAII HOUSING AUTHORITY  
P. O. BOX 17887  
HONOLULU, HAWAII 96817

December 11, 1980

Mr. Andrew I. T. Chang  
Area Manager  
Department of Housing and Urban Development  
Honolulu Area Office  
300 Ala Moana Blvd., Room 3318  
Box 50007  
Honolulu, Hawaii 96850

Dear Mr. Chang:

SUBJECT: Draft Environmental Impact Statement - Millilani Town

Thank you for giving us the opportunity to comment on the proposed Millilani Town expansion for the draft Environmental Impact Statement.

We support the project if it fulfills its promise of providing housing units for families with low and moderate incomes in addition to those with above average incomes. This would be consistent with our goal of "Improvement of Housing Conditions & Opportunities for All of Hawaii's People" in accordance with the State Housing Plan. The State Housing Plan supports private development of housing units that satisfies the needs of island families provided in areas desired by residents and at affordable prices. Provision for housing the elderly and the disabled and handicapped would also be desirable.

The Hawaii Housing Authority can also provide for the housing needs of our community through various means at our disposal. If Millilani Town, Inc. desires our participation in the proposed expansion area, we would be happy to do so.

If further information is desired, please contact Harold Kurihara, Development Administrator, at 848-3256.

Sincerely,

*Paul A. Tom*  
PAUL A. TOM  
Executive Director

Paul A. Tom  
Executive Director  
WILLIAM A. HALL  
Asst. Exec. Director

IN REPLY REFER

TO 4-105/3036



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 3318, P.O. BOX 50007  
HONOLULU, HAWAII 96850  
November 26, 1980

REGION IX

IN REPLY REFER TO:  
9.155 (Johnson/546-5554)

Water Resources Research Center  
University of Hawaii  
2540 Dole Street  
Honolulu, Hawaii 96822

Ladies and Gentlemen:

The purpose of this letter and the enclosed notice is to seek your assistance in identifying specific environmental concerns that should be addressed in the Draft Environmental Impact Statement on the subject project.

Within your agency's area of expertise, please identify sources of impact that would be generated if the project were implemented and what measures can be taken to mitigate or minimize those impacts.

For example:

- Can the Center provide copies of WRC Technical Reports No. 63 and 100 to HUD for use in assessing the constituents of urban runoff?
- Can the Center suggest any additional current studies on water quality along the Kipapa-Waikele Streams or at West Loch that could assist HUD in addressing the water quality issue?

Of course we welcome your identifying any other concerns you may have.

We also recognize that the information your agency provides at this time cannot be interpreted by HUD as approval of the project for you will be invited to review and comment on the completed Draft Statement as well as the Final E.I.S., which will contain the full range of environmental assessments in accordance with HUD policies and guidelines.

If we can be of any assistance in expediting your response or clarifying any questions you might have, please contact Frank Johnson at 546-5554.

Sincerely,

*Andrew I. T. Chang*  
Andrew I. T. Chang  
Area Manager

Enclosure

UNIVERSITY OF HAWAII

Water Resources Research Center

4 December 1980

Mr. Andrew I. T. Chang  
Area Manager  
Dept. of Housing & Urban Development  
P. O. Box 50007  
Honolulu, HI 96850

Dear Mr. Chang:

Ref: Your letter 9.155 (Johnson/546-5554) November 26, 1980

We are forwarding to you separately Technical Reports 100 which you requested and TR 127 which may be useful. TR 63 is now out of print but xerox copies can be purchased directly from Hamilton Library, University of Hawaii.

Persons who can be contacted for additional information on water quality are:

Dr. Roger Fujioke, telephone 948-8021  
Dr. Paul Ekeru, telephone 948-8008 or -7847

Both of them are with the Water Resources Research Center, University of Hawaii, 2540 Dole Street, Honolulu, HI 96822.

I hope this is of some help to you.

Sincerely,

*Edwin T. Murabayashi*  
Edwin T. Murabayashi  
Research Associate

ETH:jm

UNIVERSITY OF HAWAII EMPLOYEE  
2540 Dole Street, Honolulu, Hawaii 96822



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 3318, P.O. BOX 5007  
HONOLULU, HAWAII 96850  
November 26, 1980

WRITELY REFERED:  
9.JSS (Johnson/546-  
5554)

REGION IX

Board of Water Supply  
City and County of Honolulu  
630 South Beretania Street  
Honolulu, HI 96813

Ladies and Gentlemen:

The purpose of this letter and the enclosed notice is to seek your assistance in identifying specific environmental concerns that should be addressed in the Draft Environmental Impact Statement on the subject project.

With your agency's area of expertise, please identify sources of impact that would be generated if the project were implemented and what measures can be taken to mitigate or minimize those impacts.

For example:

Have any recent studies (since 1978) been completed or underway that could assist RUP in review of the water withdrawal from the Pearl Harbor Groundwater Control Area?

What is the Board's policy on providing new water service to large developments in the Pearl Harbor Groundwater Control Area? How much water is available for new services in view of the restrictions imposed by the State Board of Land and Natural Resources in the spring of 1980?

What is the Board's position providing water services to the subject project?

What is the current status of well numbers 5, 6, 7 and 8.

What is the average daily pumpage at each of the Millien wells in the past 12 months?

What mitigative measures are being taken or proposed to mitigate the over withdrawal of water from the Pearl Harbor Aquifer?

Of course we welcome your identifying any other concerns you may have.

COUNTY AGENCIES

BOARD OF WATER SUPPLY  
CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA  
HONOLULU, HAWAII 96843

RECEIVED  
DEPT. OF PLANNING  
HON. AREA  
JAN 12 9 11 AM '81

EILEEN ANDERSON, Mayor  
YOSHIE H. FUJIMAKI, Chairman  
DAN QUON PANG, Vice Chairman  
RYOKICHI HIGASHIMURA  
Donna H. Howard  
Michael J. Chun  
ROBERT A. SOUZA  
CLAUDE T. YAMAMOTO

KAZU HAYASHIDA  
Manager and Chief Engineer

January 7, 1981

Area Manager  
Department of Housing and  
Urban Development  
300 Ala Moana Boulevard  
Room 3318, Box 50007  
Honolulu, Hawaii 96850

Dear Sir:

Subject: Your Letter of November 26, 1980, on  
the Hilliani Town Expansion

We have the following information requested in your  
letter:

1. *Have any recent studies (since 1978) been completed or underway that could assist HUD in review of the water withdrawal from the Pearl Harbor Groundwater Control Area?*

We have just completed a study, Municipal Water Use Plan, which indicates our program to maintain the pumpages allocated to us by the State Department of Land and Natural Resources (DLNR) in the Pearl Harbor Control Area. However, for any information regarding the administration of the total water resources in that basin, we suggest that you contact DLNR.

2. *What is the Board's policy on providing new water service to large developments in the Pearl Harbor Groundwater Control Area? How much water is available for new services in view of the restrictions imposed by the State Board of Land and Natural Resources in the spring of 1980?*

We are not making water commitments in advance because of our tight water situation. Until we develop new sources, water commitment determinations for new developments are being made only when construction drawings or building permits are submitted to us for review and approval. Developments that require action by the City's Department of Land Utilization must first be approved by that department before we will take any action.

2  
We also recognize that the information your agency provides at this time cannot be interpreted by HUD as approval of the project for you will be invited to review and comment on the completed Draft Statement as well as the Final E.I.S., which will contain the full range of environmental assessments in accordance with HUD policies and guidelines.

If we can be of any assistance in expediting your response or clarifying any questions you might have, please contact Frank Johnson at 546-5554.

Sincerely,

Andrew I. T. Chang  
Area Manager

Enclosure



Area Manager

-3-

January 7, 1981

We are developing sources in the Honolulu, Windward, and Waianae areas to relieve the demands in the Pearl Harbor area. Also, we are keeping within the amounts allocated by the Department of Land and Natural Resources in the Pearl Harbor Groundwater Control Area.

In addition to source development, we are continuing our water conservation program. As part of this program, flow-restrictive devices for all new construction are now being required by the Plumbing Code.

We are also encouraging the use of treated sewage effluent and brackish water for irrigation in areas where adverse effects to potable groundwater resources are not anticipated.

Should you have questions or require additional information, please call Lawrence Whang at 548-5221.

Very truly yours,



KAZU HAYASHIDA  
Manager and Chief Engineer

Area Manager

-2-

January 7, 1981

Also, we cannot guarantee that water can be made available when we review your project. The issuance of a water commitment will depend on whether we have adequate reserve pumping capacity to accommodate your project.

Presently, we do not have any figures on the amount of water available for new services. Our water commitment file is being finalized.

3. What is the Board's position providing water service to the subject project?

Water has been committed for Millilani Town units 47A, 47B, and 49 when Millilani Well No. 5 becomes operational. Water service for other units will depend on the reserve pumping capacity available when the water service application is made.

4. What is the current status of well numbers 5, 6, 7 and 8?

a. Millilani Well No. 5: This well has been conditionally certified by the Board of Land and Natural Resources. Approval for use from the Department of Health is still pending.

b. Millilani Well Nos. 6, 7, and 8 have all been drilled. Use of these wells require the approvals from both the Department of Health and the Department of Land and Natural Resources.

5. What is the average daily pumpage at each of the Millilani wells in the past 12 months?

We do not have individual pumpages at each well field. However, at Millilani Wells I, consisting of four wells, the average daily pumpage for the past 12 months was 2.68 million gallons per day.

6. What mitigative measures are being taken or proposed to mitigate the over withdrawal of water from the Pearl Harbor Aquifer?



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 3318, P.O. BOX 6007  
HONOLULU, HAWAII 96850  
November 26, 1980

REGION IX

IN REPLY REFER TO:  
9.155 (Johnson/546-5554)

Department of General Planning  
City and County of Honolulu  
650 South King Street, 8th Floor  
Honolulu, HI 96813

Ladies and Gentlemen:

The purpose of this letter and the enclosed Notice is to seek your assistance in identifying specific environmental concerns that should be addressed in the Draft Environmental Impact Statement on the subject project.

Within your agency's area of expertise, please identify sources of impact that would be generated if the project were implemented and what measures can be taken to mitigate or minimize those impacts.

For example:

Has the department's publication Data Book for the Millilani/Waipio/Melemanu Neighborhood (No. 25) 1977 been updated and made available?

What environmental issues remain unresolved that are concerns of your department that should be addressed by HUD in view of the City and County Department of Land Utilization's approval of the Final EIS prepared by Belt Collins & Associates in May 1978?

Of course we welcome your identifying any other concerns you may have.

We also recognize that the information your agency provides at this time cannot be interpreted by HUD as approval of the project for you will be invited to review and comment on the completed Draft Statement as well as the Final E.I.S., which will contain the full range of environmental assessments in accordance with HUD policies and guidelines.

If we can be of any assistance in expediting your response or clarifying any questions you might have, please contact Frank Johnson at 546-5554.

Sincerely,

*Andrew I. T. Chang*  
Andrew I. T. Chang  
Area Manager

Enclosure

DEPARTMENT OF GENERAL PLANNING  
CITY AND COUNTY OF HONOLULU

450 SOUTH KING STREET  
HONOLULU, HAWAII 96813



FRANK P. FAH  
UNITED STATES

GEORGE S. MORISUCHI  
CHIEF PLANNING OFFICER

DGP11/80-3366 (CT)

December 4, 1980

Mr. Andrew I. T. Chang, Area Manager  
Honolulu Area Office  
Department of Housing and Urban  
Development  
P. O. Box 50007  
Honolulu, Hawaii 96850

Dear Mr. Chang:

Environmental Impact Statement Preparation  
Notice for Millilani Town Expansion,  
November 26, 1980--HUD Ref. No. 9.155

The Data Book for the Millilani/Waipio/Melemanu Neighborhood (No. 25) has not been updated. However, if you have need for specific updated information, you may contact Mr. Steven Young, Head, Data Systems Branch of the Department (ph. 523-4404).

Insofar as the project impacts are concerned, your preparation notice seems to cover the major issues. We will be interested particularly in the water situation since the Pearl Harbor aquifer has been designated a ground water control area; and the cumulative impacts of the new and proposed developments on Kanehameha Highway and Interstate H-2. The number of units in the Gentry-Waipio area was limited because of highway constraints.

Thank you for affording us the opportunity of reviewing your EIS preparation notice.

Sincerely,

*Ned Wiederholt*  
NED WIEDERHOLT  
Acting Chief Planning Officer

NW:fmt

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT  
**CITY AND COUNTY OF HONOLULU**

650 SOUTH KING STREET  
HONOLULU, HAWAII 96813  
PHONE 525-1101



BARRY CHUNG  
DIRECTOR  
MYRA M. TAKAHASHI  
DEPUTY DIRECTOR

FRANK F. PARI  
MANAGER  
EDWARD S. HIRATA  
DEPUTY MANAGER

December 10, 1980

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 318, P.O. BOX 5007  
HONOLULU, HAWAII 96850  
November 26, 1980



IN REPLY REFER TO:  
9.155 (Johnson/546-5554)

REGION IX

Department of Housing and  
Community Development  
City & County of Honolulu  
650 South King Street, 14th Floor  
Honolulu, Hawaii 96813

Ladies and Gentlemen:

The purpose of this letter and the enclosed Notice is to seek your assistance in identifying specific environmental concerns that should be addressed in the Draft Environmental Impact Statement on the subject project.

Within your agency's area of expertise, please identify sources of impact that would be generated if the project were implemented and what measures can be taken to mitigate or minimize those impacts.

For example:

Does your agency anticipate to take an active role in providing housing for low and moderate income families in the proposed project? If so, will you seek assistance through HUD programs?

Of course we welcome your identifying any other concerns you may have.

We also recognize that the information your agency provides at this time cannot be interpreted by HUD as approval of the project for you will be invited to review and comment on the completed Draft Statement as well as the Final E.I.S., which will contain the full range of environmental assessments in accordance with HUD policies and guidelines.

If we can be of any assistance in expediting your response or clarifying any questions you might have, please contact Frank Johnson at 546-5554.

Sincerely,

*Andrew I. T. Chang*  
Andrew I. T. Chang  
Area Manager

Enclosure

Department of Housing and Urban  
Development  
Honolulu Area Office  
300 Ala Moana Blvd., Room 3318  
P. O. Box 50007  
Honolulu, Hawaii 96850

Gentlemen:

Subject: Notification of Intent to Prepare and  
Environmental Impact Statement for a  
Portion of Hiliilani Town, Waipio, Oahu, HI

Thank you for forwarding the subject notification for our review and comment.

The provisions of Ordinance No. 79-89 and the Unilateral Agreement dated October 12, 1979 should be included in the Environmental Impact Statement.

Very truly yours,

*Barry Chung*  
Barry Chung

DEPARTMENT OF LAND UTILIZATION  
**CITY AND COUNTY OF HONOLULU**  
450 SOUTH KING STREET  
HONOLULU, HAWAII 96813

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 3118, P.O. BOX 5007  
HONOLULU, HAWAII 96800  
November 26, 1980



FRANK P. JOHNSON  
MAYOR

IN REPLY REFER TO:  
9-155 (Johnson/546-5554)

REGION IX

FRANK P. JOHNSON  
MAYOR

LULI/80-5479(LC)  
777Z-34

December 10, 1980

Department of Land Utilization  
City and County of Honolulu  
650 South King Street, 7th Floor  
Honolulu, HI 96813

Ladies and Gentlemen:

The purpose of this letter and the enclosed Notice is to seek your assistance in identifying specific environmental concerns that should be addressed in the Draft Environmental Impact Statement on the subject project.

Within your agency's area of expertise, please identify sources of impact that would be generated if the project were implemented and what measures can be taken to mitigate or minimize those impacts.

For example:

Were there any changes made to Table I-1 on page I-8 of the Belt Collins Final Environmental Impact Statement for the subject project during review or approval of the EIS by HUD?

What environmental issues remain unresolved that are concerns of your department that should be addressed by HUD in view of your department's approval of the Final EIS.

Of course we welcome your identifying any other concerns you may have.

We also recognize that the information your agency provides at this time cannot be interpreted by HUD as approval of the project for you will be invited to review and comment on the completed Draft Statement as well as the Final E.I.S., which will contain the full range of environmental assessments in accordance with HUD policies and guidelines.

If we can be of any assistance in expediting your response or clarifying any questions you might have, please contact Frank Johnson at 546-5556.

Sincerely,

Andrew I. T. Chang  
Area Manager

Enclosure

Mr. Andrew I. T. Chang  
Department of Housing  
and Urban Development  
P.O. Box 5007  
Honolulu, Hawaii 96850

Dear Mr. Chang:

Environmental Impact Statement (EIS)  
Millilani Town, Inc.

This is in response to your November 26, 1980 Notice of Intent to prepare an EIS for a portion of a Millilani Town proposal.

The EIS prepared by Belt, Collins and Associates in May, 1978 for Millilani Town, Inc. described the anticipated environmental effects of a proposed 476-acre expansion of Millilani Town.

The affected land area was the subject of an amendment to the General Plan Detailed Land Use Map adopted on October 14, 1976. As a result, a subsequent zoning request was earmarked for an environmental assessment under the provisions of Chapter 343, HRS. This department upon receipt of the rezoning request required Millilani Town, Inc. to prepare an EIS.

The Final EIS document was accepted by this department, the authorized representative of the Mayor of the City and County of Honolulu, on August 1, 1978.

The EIS brought out three issues of regional significance which were evaluated during the rezoning process. These issues were:

1. Water Supply

There was a need to project water demands on the Pearl Harbor basin lens through 1985 based on developments in the service area which were not yet built or occupied, but zoned for urban use.

2. Sewage Disposal

Rezoning would require expansion of the existing Millilani Sewage Treatment Plant.

The National Pollutant Discharge Elimination System (NPDES) permit for the existing system expired on March 3, 1980. The NPDES permit would have to be modified. There was some question as to whether the existing permit could be modified.

3. Traffic

The impact of the expanded Millilani Town on peak-hour traffic flows on the H-2 and Kam Highway would tax the capacity of H-2 access roads in the Millilani Town vicinity. There was a question of what cumulative impacts the Millilani Town expansion and the Gentry-Waipio development would have on traffic and whether the State Department of Transportation intended to construct the new H-2 interchange at the Gentry-Waipio site.

The rezoning was subsequently granted in its entirety by the City Council with conditions. Ordinance No. 79-89 (10/18/79) is attached for your information.

The zoning was granted with a Unilateral Agreement and Declaration for Conditional Zoning.

In general the conditions are: (see ordinance for details)


1. The applicant agrees to develop residential densities only under the density allowed by the present DLUM;
2. Applicant agrees to execute an agreement with the Department of Public Works regarding the Phase IV expansion of the Millilani Sewage Treatment Plant;
3. Applicant agrees to set aside 10% of proposed housing units for low-moderate income families;
4. Maximum height in the B-2 zoning district in town center area shall not exceed 70 feet measured from grade;
5. Applicant agrees to set aside a school site; and
6. Applicant agrees to prepare a master street tree plan for the 476-acre area.

At this time, issues that appear unresolved are:

1. Current status of water commitments.
2. Current status of sewage agreement for the expansion of Phase IV of the Millilani Sewage Treatment Plant.
3. Future plans for the connection of the H-2 in the vicinity of the Gentry-Waipio Development.

Please contact Mrs. Lorrie Chee of our staff at 523-4077 if you should have any questions regarding the above. The final EIS document is also available for your review.

Very truly yours,

  
TYBONE T. KUSAO  
Director of Land Utilization

TKK:sl  
Attach.



REGION II

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 3318, P.O. BOX 5007  
HONOLULU, HAWAII 96860  
November 26, 1980

IN REPLY REFER TO:  
9.155 (Johnson/546-5554)

Department of Parks and Recreation  
City and County of Honolulu  
650 South King Street, 14th Floor  
Honolulu, Hawaii 96813

Ladies and Gentlemen:

The purpose of this letter and the enclosed Notice is to seek your assistance in identifying specific environmental concerns that should be addressed in the Draft Environmental Impact Statement on the subject project.

Within your agency's area of expertise, please identify sources of impact that would be generated if the project were implemented and what measures can be taken to mitigate or minimize those impacts.

For example:

Are there any additional conditions or requirements imposed by your department subsequent to your department's review of the Draft EIS/zoning request contained in Salt Collins Final EIS? (Letter dated February 8, 1978 signed by Robert S. Fukuda, Director)

Of course we welcome your identifying any other concerns you may have.

We also recognize that the information your agency provides at this time cannot be interpreted by HUD as approval of the project for you will be invited to review and comment on the completed Draft Statement as well as the Final E.I.S., which will contain the full range of environmental assessments in accordance with HUD policies and guidelines.

If we can be of any assistance in expediting your response or clarifying any questions you might have, please contact Frank Johnson at 546-5554.

Sincerely,

*Andrew I. F. Chang*  
Andrew I. F. Chang  
Area Manager

Enclosure

DEPARTMENT OF PARKS AND RECREATION  
CITY AND COUNTY OF HONOLULU

610 SOUTH KING STREET  
HONOLULU, HAWAII 96813



FRANK F. GURAN  
DIRECTOR

FRANK F. GURAN  
DIRECTOR

December 9, 1980

Mr. Andrew Chang, Area Manager  
Department of Housing and  
Urban Development  
Honolulu Area Office  
300 Ala Moana Boulevard, Room 3318  
Honolulu, Hawaii 96813

Dear Mr. Chang:

SUBJECT: EIS FOR A PORTION OF MILILANI TOWN  
WAIPIO, OAHU, HAWAII

We are satisfied with the recreational areas planned for the proposed 476-acre Mililani Town Expansion.

Three proposed public park sites, totaling 35 acres, have been established to serve the project's needs. Mililani Town, Inc. will be dedicating these three park sites to the City.

Should you have any questions, please call Mr. Jason Yuen at 523-4695.

Warm regards.

Sincerely,  
*Frank F. Guran*  
FRANK F. GURAN, Director

RD:sn

Attach. (Map)

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., ROOM 3318  
P. O. BOX 5007  
HONOLULU, HAWAII 96860

November 26, 1980

REPLY REFER TO:  
9.155 (Johnson/566-5554)



REGION IX

Department of Public Works  
City and County of Honolulu  
650 South King Street, 11th Floor  
Honolulu, Hawaii 96813

Ladies and Gentlemen:

The purpose of this letter and the enclosed Notice is to seek your assistance in identifying specific environmental concerns that should be addressed in the Draft Environmental Impact Statement on the subject project.

Within your agency's area of expertise, please identify sources of impact that would be generated if the project were implemented and what measures can be taken to mitigate or minimize those impacts.

For example:

Sewage Disposal

What is the status of the plant expansion program at Millilani Town SFP including its connection to the Waipahu SFP?

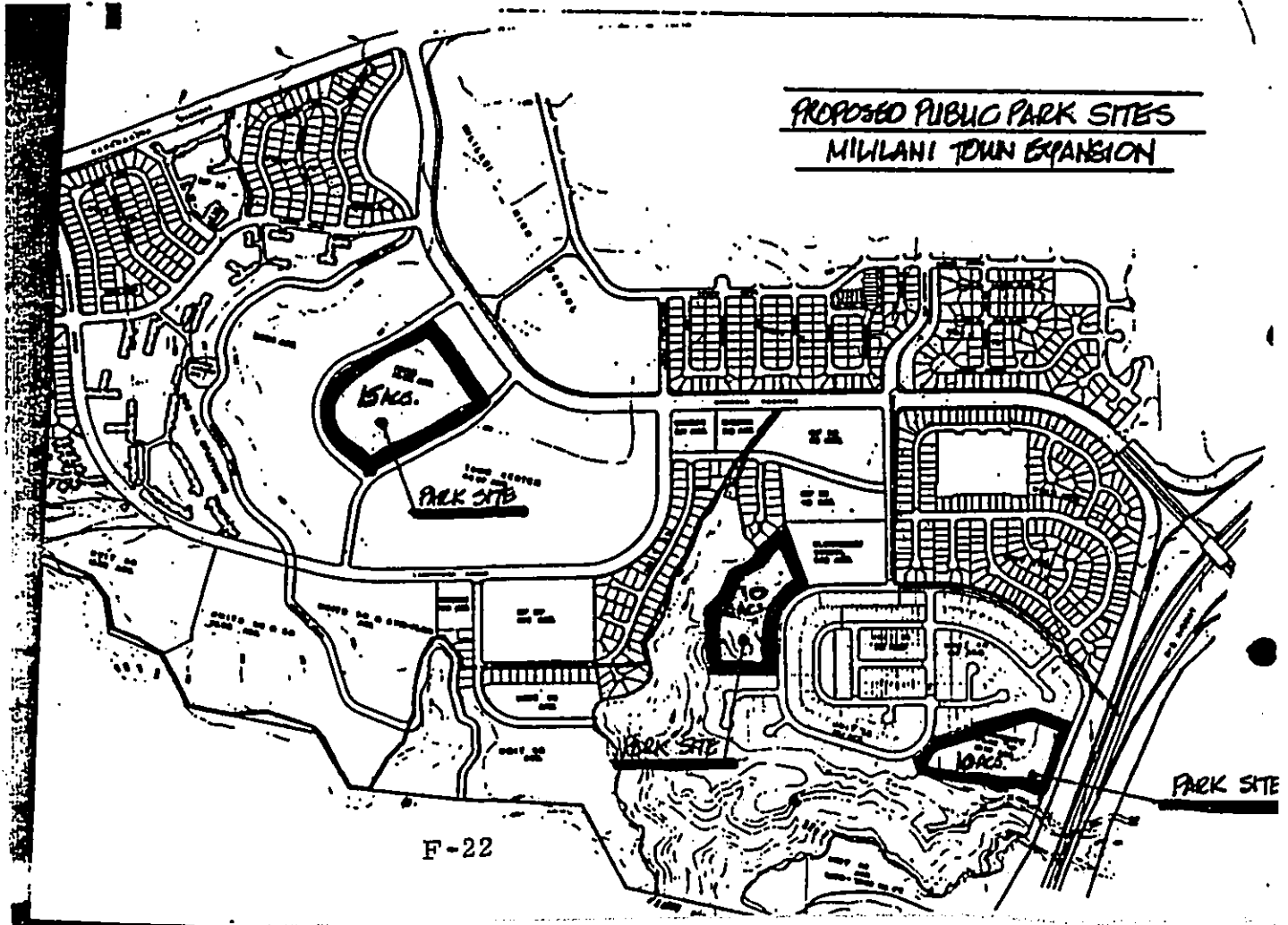
Has an agreement been made with Oahu Sugar Co. on their use of the effluent from Millilani Town SFP for irrigating sugar cane? If so, we would appreciate receiving copy.

What is the current and projected loading at the Millilani Town SFP? With and without the proposed project? With and without Gentry project?

Any change in the 1983 limitable to terminate pumping sewage (0.59 MGD maximum) from the Gentry-Waipio Project to the Millilani SFP?

Solid Waste Disposal

What is the status of the City & County acquiring a new leeward landfill site?



DEPARTMENT OF PUBLIC WORKS  
**CITY AND COUNTY OF HONOLULU**  
630 SOUTH KING STREET  
HONOLULU, HAWAII 96813



MALLACE MIYAHARA  
DIRECTOR AND CHIEF ENGINEER

ENV 80-379

December 22, 1980

Department of Housing and Urban  
Development  
Honolulu Area Office  
P. O. Box 50007  
Honolulu, Hawaii 96850

Attention: Mr. Frank Johnson  
Gentlemen:

Re: Proposed EIS for a Portion of Milliani Town,  
Waipio, Oahu

This is in response to your letter 9.1SS dated November 26, 1980,  
requesting comments on the proposed project.

A. Sewage Disposal

1. The expansion of the Milliani STP is being planned by the consulting firm of M&E Pacific, Inc., who is presently finalizing the design phase. Bids for the construction of the effluent line to the Waipahu SPS scheduled in September 1981 has not been changed.
2. An agreement has been signed with Oahu Sugar Company on the use of the Milliani effluent for irrigating OSC's fields. A copy of the agreement is attached.
3. The existing and projected plant flows under the two options are shown on the attached Table.
4. There has been a change in the 1983 timetable to terminate Milliani STP. The revised date is mid 1981 when the flows from Gentry-Waipio will be diverted to the Honolulu sewer system.

What is the current status of the HPOWER program?  
Concerning the Waipahu incinerator, what is its current loading and capacity? What is the operational cost per ton of refuse?  
What facilities are to be used by the City and County or private collectors of solid waste generated by the proposed project?  
Of course we welcome your identifying any other concerns you may have.  
We also recognize that the information your agency provides at this time cannot be interpreted by HUD as approval of the project for this will be invited to review and comment on the completed Draft Statement as well as the Final E.I.S., which will contain the full range of environmental assessments in accordance with HUD policies and guidelines.  
If we can be of any assistance in expediting your response or clarifying any questions you might have, please contact Frank Johnson at 546-5554.

Sincerely,

*Andrew I. T. Chang*  
Andrew I. T. Chang  
Area Manager

Enclosure



TABLE  
 CURRENT AND PROJECTED FLOWS AT MILLILANI STP

	Current (mgd)	Projected (mgd)
With Millilani expansion	2.03	4.19 (Year 2000)
Without Millilani expansion	2.03	2.91
With Gentry-Waipio	2.03	4.19*
Without Gentry-Waipio	1.85	4.19

\*Gentry Waipio to be diverted in 1981.

B. Drainage

1. The drainage master plan for the development must evaluate and provide where necessary, detention of storm runoff to control discharges to pre-development quantities and minimize sediment disposition and pollution to the downstream waterway.

C. Solid Waste Disposal

1. At the present time we have not acquired a Leeward sanitary landfill site. We plan to have our consultant prepare an environmental statement for a site in Ewa in the coming year if problems with the U. S. Navy can be resolved.

2. We received bids on HPOWER in October 1980. The most favorable bid was offered by C-E/AMFAC for an 1,800 ton per day solid waste resource recovery facility. A request has been submitted to the City Council to fund the project. The contract award is expected to be made in April 1981.

3. The current loading at the Waipahu Incinerator is 500 tons per day of refuse. Design capacity was 600 tons per day. The approximate cost to incinerate a ton of refuse is \$19.

4. Up to 1984, refuse from the proposed project will go to the Waipahu incinerator. After 1984, the refuse will go primarily to the HPOWER facility. If the HPOWER project fails to materialize, the refuse will continue to go to the Waipahu incinerator and the proposed Leeward sanitary landfill.

5. The overall impact regarding solid waste disposal will be the generation of approximately two (2) tons per household per year. For the 2,900 units planned, this would mean the addition of approximately two (2) more refuse collection crews and the addition of 16 tons of refuse per day to be disposed of. The cost of the collection services is about \$56 a ton and landfill disposal cost is approximately \$7 per ton.

Very truly yours,

*Wallace Miyahira*  
 WALLACE MIYAHIRA  
 Director and Chief Engineer

cc: Div. of Engineering  
 Div. of Refuse Collection and Disposal  
 Div. of Wastewater Management

DEPARTMENT OF TRANSPORTATION SERVICES  
**CITY AND COUNTY OF HONOLULU**  
HONOLULU MUNICIPAL BUILDING  
550 SOUTH KING STREET  
HONOLULU, HAWAII 96813



December 23, 1980

AKIRA FUJITA  
DIRECTOR  
TELE 780-3344

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., Rm. 3118, P.O. BOX 50007  
HONOLULU, HAWAII 96850  
November 26, 1980



IN REPLY REFER TO:  
9.155 (Johnson/546-5554)

REGION IX

Fire Department  
City and County of Honolulu  
1455 South Beretania Street, Room 305  
Honolulu, Hawaii 96814

Ladies and Gentlemen:

The purpose of this letter and the enclosed Notice is to seek your assistance in identifying specific environmental concerns that should be addressed in the Draft Environmental Impact Statement on the subject project.

Within your agency's area of expertise, please identify sources of impact that would be generated if the project were implemented and what measures can be taken to mitigate or minimize those impacts.

For example:

Will the proposed project require hiring additional firemen to service the project area? If so, how many?

What is the estimated annual cost to maintain the additional firemen in 1981 dollars?

As a result of implementing the project, will additional facilities be required to service the project area? If so, what kind of facilities and equipment would be required? What would be the estimated cost for these facilities and equipment in 1981 dollars?

What is the estimated response time to service the proposed project area?

Of course we welcome your identifying any other concerns you may have.

We also recognize that the information your agency provides at this time cannot be interpreted by HUD as approval of the project for you will be invited to review and comment on the completed Draft Statement as well as the Final E.I.S., which will contain the full range of environmental assessments in accordance with HUD policies and guidelines.

If we can be of any assistance in expediting your response or clarifying any questions you might have, please contact Frank Johnson at 546-5554.

Sincerely,

*Andrew I. T. Chang*  
Andrew I. T. Chang  
Area Manager

Enclosure

Mr. Andrew I. T. Chang, Area Manager  
Department of Housing and Urban Development  
P. O. Box 50007  
Honolulu, Hawaii 96850

Dear Mr. Chang:

Subject: Your letter dated November 26, 1980 Regarding  
Notification of Intent to Prepare an Environmental  
Impact Statement for Milliani Town Expansion  
(Ref: 9.155 - Johnson/546-5554)

The Environmental Impact Statement should include a traffic study which addresses the traffic impact of the proposed expansion on the surrounding street system.

Based on the traffic study, the street system in the project should be master-planned for the entire area to minimize the traffic impact.

The following information on bus service is presented for your use:

1. Route 52 (Circle Island) through Milliani on Kanehameha Highway 20-minute base headway each direction.
2. Route 84 Milliani-CBD-UH Express circulating through Milliani.
3. A small portion of Milliani is used by Route 83 Waiala Express as a link to H-2.
4. Bus service for the project will depend on availability of equipment and plans.

Bus schedules, route descriptions and maps are attached.

Very truly yours,

*Akira Fujita*  
AKIRA FUJITA  
Director

Attach.

**CITY AND COUNTY OF HONOLULU**

FIRE DEPARTMENT

1435 S. BERETANIA STREET, ROOM 305  
HONOLULU, HAWAII 96814

FRANK P. PAI  
Mayor



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 2318, P.O. BOX 50007  
HONOLULU, HAWAII 96860  
November 26, 1980

IN REPLY REFER TO:  
9.1SS (Johnson/546-5554)

REGION IX

Your Ref:  
9.1SS (Johnson/546-5554)

December 8, 1980

Mr. Andrew I. T. Chang  
Area Manager  
U.S. Dept. of Housing &  
Urban Development  
P.O. Box 50007  
Honolulu, Hawaii 96850

Dear Mr. Chang:

The proposed Millilani Town Expansion project will not require an additional Fire Department station or personnel. The present Millilani Fire Station is manned by fifteen firefighting personnel with five firefighters on duty daily. Supportive fire protection is provided by Mahiawa, Pearl City and Maipahu Fire Stations.

Our CIP for Fiscal Years 1980-1985 calls for a construction of a new fire station in the Crestview area which is approximately three miles and five to six minutes away from the proposed project.

Should your staff need further assistance, please have them call Assistant Chief Lawrence Suganuma at 955-8304.

Sincerely,

*Boniface K. Aiu*  
BONIFACE K. AIU  
Fire Chief

BKA:LS:eya

RECEIVED  
DEPT. OF HUD  
HON. AREA OFFICE  
Dec 10 10 41 AM '80

Police Department  
City and County of Honolulu  
1455 South Beretania Street  
Honolulu, HI 96814

Ladies and Gentlemen:

The purpose of this letter and the enclosed Notice is to seek your assistance in identifying specific environmental concerns that should be addressed in the Draft Environmental Impact Statement on the subject project.

Within your agency's area of expertise, please identify sources of impact that would be generated if the project were implemented and what measures can be taken to mitigate or minimize those impacts.

For example:

Will the proposed project require hiring additional police officers to service the proposed project? If so, how many?

What would the estimated annual cost to maintain the additional officers in 1991 dollars?

Are additional costs anticipated for the construction of an additional police station?

What would be typical response times to the project area?

Of course we welcome your identifying any other concerns you may have.

We also recognize that the information your agency provides at this time cannot be interpreted by HUD as approval of the project for you will be invited to review and comment on the completed Draft Statement as well as the Final E.I.S., which will contain the full range of environmental assessments in accordance with HUD policies and guidelines.

If we can be of any assistance in expediting your response or clarifying any questions you might have, please contact Frank Johnson at 546-5554.

Sincerely,

*Andrew I. T. Chang*  
Andrew I. T. Chang  
Area Manager

Enclosure

POLICE DEPARTMENT  
CITY AND COUNTY OF HONOLULU

1485 ADULTS, BERTSANA STREET  
HONOLULU, HAWAII 96814 AREA CODE 808/531-3111



FRANCIS KEALA  
5-17

OUR REFERENCE HS-ES

December 8, 1980

Mr. Andrew I. T. Chang, Area Manager  
Department of Housing and Urban Development  
300 Ala Moana Boulevard, Room 3318  
P. O. Box 50007  
Honolulu, Hawaii 96850

Dear Mr. Chang:

Notification of Intent to Prepare an Environmental Impact  
Statement for a Proposed Expansion of Hiliilani Town, Waipio, Oahu  
(Reference 9.155, Johnson/546-5554)

Our concerns are basically the same as were stated on January 24, 1978, when we reviewed the request for a zone change to accommodate this project.

First, the addition of about 2900 housing units would mean an increase of over 9000 residents, which will increase considerably the demand for police services in the area. At the current ratio of 2.5 police employees per 1000 population, we could anticipate a workload increase in the area equivalent to 22 to 24 police employees. The annual cost would be perhaps \$483,000 in salaries alone. There are presently three officers assigned per 8-hour shift to beats near this area (Beats 220-222), so response times would vary. Since the project also includes a large commercial and public facility plan, an elementary school, and 135 acres for open and recreational use, additional services may be required. This expansion will definitely have an impact on police operations in District II. There are plans to replace the Maialaea Police Station with a new facility in 1983.

Second, the project would add approximately 5800 vehicles to the area. Although the central roadway, Heheula Parkway, and the adjoining secondary roadways would provide for adequate vehicular movement to and from Hiliilani Town, the additional traffic will put considerable strain on the H-1 Freeway, which is already quite congested with traffic from the Maialaea and Waipahu areas during rush hours.

We hope that this information will be of assistance to you.

Sincerely,

FRANCIS KEALA  
Chief of Police

By   
HAROLD FALK  
Deputy Chief of Police

15-1

HAWAIIAN ELECTRIC COMPANY, INC.  
Box 2750 / Honolulu, Hawaii / 96840

AP

RICHARD L. O'CONNELL, P.E.  
MANAGER, ENVIRONMENTAL DEPARTMENT

December 15, 1980

ENV 2-1  
HV/G

RECEIVED  
DEPT. OF HUD  
HON. ARI. & OFFICE  
Dec 17 0 15 AM '80

Mr. Andrew I. T. Chang  
Area Manager  
Department of Housing and  
Urban Development  
Honolulu Area Office  
300 Ala Moana Boulevard, Room 3318  
P.O. Box 50007  
Honolulu, Hawaii 96850

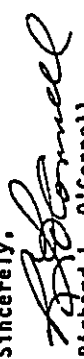
Dear Mr. Chang,

**OTHERS**

Subject: Proposed Expansion of Kiliiani Town, Waipio, Oahu, Hawaii

Thank you for the opportunity to review the proposed project. Several members of the staff of Hawaiian Electric Company have reviewed this project at this time. Estimates of the projected daily electrical power demand for the various land uses of the proposed project and transmission requirements do not appear to present a significant impact on our facilities.

Sincerely,



Richard L. O'Connell  
Manager, Environmental Department

RL0:ca1

**Responses To Draft EIS**

**Appendix G**

**DRAFT EIS DISTRIBUTION LIST**  
(Pursuant to P.L. 92-500 and Chapter 343, HRS)

**For A**  
**476-Acre Development at Mililani Town, Hawaii**

**U.S. Department of Housing and Urban Development**  
**Honolulu Area Office**

**September 1982**

	Page
<b>A. U.S. GOVERNMENT</b>	-----
Advisory Council on Historic Preservation	
Office of Architectural and Environmental Preservation	
Western Division Project Review	
Department of Agriculture	
Coordinator of Environmental Quality Activities	
* State Conservationist, Soil Conservation Service	G-5
Department of the Air Force	
* Fifteenth Air Base Wing	G-6
Department of the Army	
* U.S. Army Corps of Engineers	G-7
U.S. Army Support Command, Hawaii	
Department of Commerce	
Secretary of Environmental Affairs	
Department of the Interior	
Fish and Wildlife Service, Endangered Species Program	
Fish and Wildlife Service, Honolulu	
National Park Service	
* Office of Environmental Project Review	G-8
Transportation Section OEPR	
Department of the Navy	
* Naval Base Pearl Harbor	G-9
Department of Transportation	
* Federal Highway Administration, Region 9	G-10
Federal Highway Administration, Honolulu	
* Fourteenth Coast Guard District	G-11
Environmental Protection Agency	
* Office of Federal Activities	G-11
* Policy and Resources Management	G-12

**DRAFT EIS DISTRIBUTION LIST (Continued)**

	Page
	====
United States House of Representatives	
The Honorable Daniel K. Akaka	
The Honorable Cecil Heftel	
United States Senate	
The Honorable Daniel K. Inouye	
The Honorable Spark M. Matsunaga	
Veterans Administration	
* Loan Guarantee Service	G-14
Regional Director	
<b>B. STATE OF HAWAII</b>	
* Department of Accounting and General Services	G-15
* Department of Agriculture	G-16
* Department of Defense	G-18
* Department of Education	G-19
* Department of Health	G-20
* Department of Land and Natural Resources	G-20
* Department of Planning and Economic Development	G-22
Department of Social Services and Housing	
* Department of Transportation	G-22
Environmental Quality Commission	
* Office of Environmental Quality Control	G-23
University of Hawaii	
Environmental Center	
Marine Programs	
* Water Resources Research Center	G-24
<b>C. CITY AND COUNTY OF HONOLULU</b>	
* Board of Water Supply	G-25
* Building Department	G-26
* Department of General Planning	G-27
* Department of Housing and Community Development	G-28
* Department of Land Utilization	G-29



**DRAFT EIS DISTRIBUTION LIST (Continued)**

	Page
	-----
* Department of Parks and Recreation	G-35
* Department of Public Works	G-36
* Department of Transportation Services	G-37
* Fire Department	G-38
* Police Department	G-39

**D. REGIONAL LIBRARIES**

Bishop Museum Library  
Hamilton Library  
Hilo Regional Library  
Kaimuki Regional Library  
Kaneohe Regional Library  
Leeward Community College Library  
Legislative Reference Bureau  
Lihue Regional Library  
Municipal Reference Center  
Pearl City Regional Library  
State Archives  
State Library, Main Branch  
Wailuku Regional Library  
Windward Community College Library

**E. OAHU LIBRARIES**

Aiea Library  
Aina Haina Library  
Ewa Beach Community School Library  
Hawaii Kai Library  
Kahuku Community School Library  
Kailua Library  
Kaimuki Library  
Kalihi-Palama Library  
Liliha Library  
Manoa Library

**DRAFT EIS DISTRIBUTION LIST (Continued)**

Page

----

McCully-Moiliili Library  
Mililani Library  
Wahiawa Library  
Waialua Library  
Waianae Library  
Waikiki-Kapahulu Library  
Waimanalo Community School Library  
Waipahu Library

**F. NEWS MEDIA**

Honolulu Advertiser  
Honolulu Star Bulletin  
The Sun Press

**G. QUASI-PUBLIC ORGANIZATIONS**

American Lung Association  
Life of the Land  
\* Mililani Town Association  
Neighborhood Board No. 25  
\* Oahu Metropolitan Planning Organization

G-41

G-44

**H. UTILITIES**

\* Hawaiian Electric Company

G-45

\* = Agencies responding to the Draft EIS



United States  
Department of  
Agriculture

Soil  
Conservation  
Service

P.O. Box 50004  
Honolulu, HI  
96850

CIVIL  
DEPT. OF HUD  
COMMUNITY OFFICE

11/4/82

November 4, 1982

Robert K. Fukuda, Area Manager  
Department of Housing and Urban Development  
300 Ala Moana Blvd., Rm. 3318  
Honolulu, Hawaii 96850

Dear Mr. Fukuda:

Subject: Draft Environmental Impact Statement for the Milliani Town, Inc.,  
476 Acre Development HUD-R09-EIS-82-04D

We have reviewed the above-mentioned draft as you requested.

The soils on the proposed project area are classified as Mahiawa silty clay, 0-8 percent slopes and Manana silty clay, 8-15 percent slopes. Both of these soil types are good for agricultural use but are not considered prime agricultural land because they have not been irrigated. While we normally do not advocate conversion of agricultural lands, in this case the site is zoned urban and is surrounded by urbanized land.

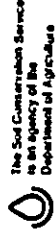
The area adjacent to Kipapa Gulch is classified as Helemano silty clay, 30-50 percent slopes. Due to severe erosion hazard and slippage problems, it has severe limitations for development. Corrective treatment could be expensive. Control of storm runoff from the development, as advocated in the draft, is an important consideration both during and after construction.

Sincerely,

FRANCIS C. H. LOH  
State Conservationist

US Government

915



SCS-AS-1  
10-78



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 3318, P.O. BOX 50007  
HONOLULU, HAWAII 96850



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS 18TH AIR BASE WING (PACAF)  
HICKAM AIR FORCE BASE, HAWAII 96853

REGJUN IX

IN REPLY REFER TO:  
9.188 (Johnson)  
546-5583

REPLY TO DEEV (Mr Yamada, 449-1831)

25 OCT 1982

JT [H]

SUBJECT: Draft Environmental Impact Statement for the Mililani Town, Inc., 476 Acre Development, HUD-R09-EIS-82-04D (Your Ltr, 10 Sep 1982)

Mr. Francis C.H. Lum  
State Conservationist  
Soil Conservation Service  
U.S. Department of Agriculture  
P.O. Box 50004  
Honolulu, Hawaii 96850

cc. Office of Environmental Quality Control  
550 Halekaunila Street, Room 301  
Honolulu, HI 96813

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

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

Dear Mr. Lum:

SUBJECT: Final Environmental Impact Statement For a 476-Acre Development at Mililani Town, Hawaii --- HUD-R09-EIS-82-04F

Thank you for your review of the subject EIS. We appreciate your clarification that the project site is not considered Prime agricultural land, although the "Agricultural Land of Importance" map does so designate the southerly half of the site.

*William T. Morioka*  
WILLIAM T. MORIOKA

Chief, Engrg & Envtl Png Div  
Directorate of Civil Engineering

Cy to: Department of Housing and Urban Development  
Honolulu Area Office  
300 Ala Moana Blvd, Rm 3318  
Honolulu, HI 96850

Sincerely,  
*Robert K. Fukuda*  
Robert K. Fukuda  
Area Manager, 9.18

RMF:dab



DEPARTMENT OF THE ARMY  
PACIFIC OCEAN DIVISION  
CORPS OF ENGINEERS  
FT. SHAFTER, HAWAII 96850

REV 17 '82

FODED-FV

15 November 1982

Mr. Robert K. Fukuda, Area Manager  
Department of Housing & Urban  
Development  
Honolulu Area Office  
P.O. Box 50007  
Honolulu, HI 96850

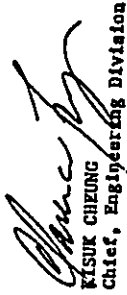
Dear Mr. Fukuda:

Thank you for the opportunity to review the Draft Environmental Impact Statement for the Hilliani Town 476 Acre Development Project. As stated in our comments of 17 December 1980:

Q-7

- a. A Department of the Army permit is not required.
- b. The entire Hilliani Town expansion site is designated an area of undetermined but possible flood hazards (Zone D), based on the Flood Insurance Study for the island of Oahu prepared by the Federal Insurance Administration.

Sincerely,

  
KISUK CHEUNG  
Chief, Engineering Division



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 3318, P.O. BOX 50007  
HONOLULU, HAWAII 96850

MICHMINIX

JPH : [unclear]

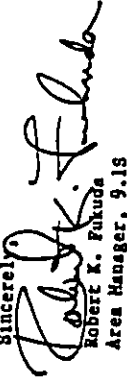
Mr. Kisuk Cheung, Chief  
Engineering Division  
Pacific Ocean Division  
Corps of Engineers  
Department of the Army  
Fort Shafter, Hawaii 96858

Dear Mr. Cheung:

SUBJECT: Final Environmental Impact Statement For a 476-Acre Development  
at Hilliani Town, Hawaii --- HUD-R09-E18-82-04P

Thank you for your review of the subject EIS. The information you provided is appreciated.

Sincerely,

  
ROBERT K. FUKUDA  
Area Manager, 9.18

RKF:dab

IN REPLY REFER TO:  
9.188 (Johnson)  
546-5583



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
OFFICE OF THE SECRETARY

PACIFIC SOUTHWEST REGION  
BOX 36098 • 480 GOLDEN GATE AVENUE  
SAN FRANCISCO, CALIFORNIA 94102  
(415) 886-8200

In Reply Refer To:  
ER-82/1659  
November 9, 1982

Mr. Frank L. Johnson  
Housing and Urban Development  
Honolulu Area Office  
300 Ala Moana Boulevard  
Honolulu, Hawaii 96850

Dear Mr. Johnson:

The Department of the Interior has reviewed the environmental impact statement for a 476-acre development at Millilani Town, Hawaii and offers the following comments.

Q P. 42, paragraph 1 - While the reduction of sediment erosion and curtailment of treated sewage effluent discharge into the stream may improve water quality, the expected increase in discharge of pollutants from urban storm water runoff may have significant adverse effects upon aquatic life.

In a comparison with nationwide trends in contaminants of fish, the Columbia National Fisheries Research Laboratory has found that residues of dieldrin, a cis-chlordane, and lead to be highest in tissues of fish taken from Waialeale and Manoa streams on Oahu. These high values have been reported from these watersheds since 1971 and are believed to stem from agricultural and household pesticides, prior use of lead arsenate for termite treatment, and lead from vehicular emissions. The effects of these substances upon indigenous stream fauna and the tolerances of the fauna to environmental concentrations of the chemicals are not known. We therefore suspect that an increase in urban residential areas within the Waialeale watershed may not constitute a substantial benefit to stream life.

Thank you for giving us the opportunity to review and comment on this project.

Sincerely,

*Patricia S. Port*

Patricia Sanderson Port  
Regional Environmental Officer

cc:  
Director, OEPR w/incoming  
Director, National Park Service  
Director, Fish and Wildlife Service  
Director, Minerals Management Service  
Director, Geologic Survey



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 3318, P.O. BOX 50007  
HONOLULU, HAWAII 96850

REGION IX

608 P33

Ms. Patricia Sanderson Port  
Regional Environmental Officer  
Office of the Secretary  
U.S. Department of the Interior  
Box 36098 450 Golden Gate Avenue  
San Francisco, California 94102

Dear Ms. Sanderson:

SUBJECT: Final Environmental Impact Statement For a 476-Acre Development at Millilani Town, Hawaii ----- HUD-809-218-82-04F

Thank you for your review of the subject EIS. The information on contamination of fish is helpful. The text of the EIS will be revised to reflect your comments.

Sincerely,

*Robert K. Fukuda*

Robert K. Fukuda  
Area Manager, 9-IS

RKF:dab

IN REPLY REFER TO:  
9-155 (Johnson)  
546-5583



HEADQUARTERS  
NAVAL BASE PEARL HARBOR  
BOX 110, ALA MOANA  
PEARL HARBOR, HAWAII 96850

IN REPLY REFER TO:  
002:09P2:jml  
Set 2327  
7 OCT 1982



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 3318, P.O. BOX 50007  
HONOLULU, HAWAII 96850

IN REPLY REFER TO:  
9-155 (Johnson)  
546-5583

MEMORANDUM

JML: [unclear]

Captain M.M. Dallam, CEC  
Headquarters, Naval Base Pearl Harbor  
P.O. Box 110  
Pearl Harbor, Hawaii 96850

Dear Captain Dallam:

SUBJECT: Final Environmental Impact Statement For a 476-Acre Development  
at Mililani Town, Hawaii --- HUD-R09-RIS-82-04F

Thank you for your review of the subject EIS.

As requested, the Final EIS will reference the City and County's grading ordinance. Approval of a grading plan, including erosion control measures, is a condition for building permits.

Sincerely,  
  
Robert K. Fukuda  
Area Manager, 9.15

RKF:dab

Honolulu Area Office  
Department of Housing and  
Urban Development  
300 Ala Moana Boulevard, Room 3318  
Honolulu, Hawaii 96850

Gentlemen:

Draft Environmental Impact Statement (DEIS)  
for a 476-Acre Development at Mililani Town, Hawaii  
U. S. Department of Housing and Urban  
Development, Honolulu Area Office

The subject DEIS, provided by your letter of 10 September 1982, has been received and reviewed. Prior U. S. Navy comment of 23 December 1980 appears on Page P-1, under Federal Agencies. The following comments will be made at this time:

1. The discussion of Erosion and Sedimentation on Page 33 correctly indicates that there is hazard from surface runoff during the construction period, especially during times of heavy rainfall. This will result in increased sedimentation in West Loch of Pearl Harbor, into which flow from Kipapa Stream empties.
2. There is, however, no mention of the Grading Ordinance of the City and County of Honolulu, which was instituted specifically to cover projects of this nature. It is recommended that this Ordinance be cited, possibly in the appendix, and indicate that the developer will adhere to its provisions.

Thank you for the opportunity of reviewing and making comment upon this DEIS. Please insure that a copy of the Final Statement is forwarded for further attention.

Sincerely,

M. M. DALLAM  
CAPTAIN, CEC, U. S. NAVY  
FACILITIES ENGINEER  
BY DIRECTION OF THE COMMANDER



U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
REGION NINE  
Two Embarcadero Center, Suite 530  
San Francisco, California 94111

California  
Hawaii  
Hawaii  
Hawaii  
Hawaii

October 29, 1982  
IN REPLY REFER TO  
HRE-09

REPLY TO  
HRE-09

Mr. Robert K. Fukuda  
Honolulu Area Manager  
300 Ala Moana Boulevard, Room 3318  
P. O. Box 50007  
Honolulu, Hawaii 96850

Dear Mr. Fukuda:

We have reviewed the draft environmental impact statement (HUD-809-EIS-82-040) for the Millilani Town Development on the Island of Oahu and provide the following comments:

1. The traffic study contained in Appendix B needs to describe the traffic impacts on the highways affected by the proposed development. The traffic impacts would be assessed by comparing the existing level of traffic service on the surrounding highways with the future level of traffic service after the development project is built. The levels of traffic are described in the Highway Capacity Manual.
2. The proposed, new H-2 interchange in the vicinity of the Millilani Memorial Park Access Road is in the conceptual stage; there are no firm plans to construct this interchange. Also, the Hawaii Department of Transportation has no future plans to improve the existing Waiala Interchange or the existing Kamehameha Highway. The subject draft EIS cannot assume that improvements to these highway facilities will occur.
3. Given the lack of future plans to improve the existing capacities of Kamehameha Highway and the Waiala Interchange, severe congestion with a highly unstable or even a forced-flow traffic operation can be expected. Continued development of the Millilani, Gentry-Maipio and Amfac subdivisions may tax the existing highway infrastructure to a critical limit. Therefore, the EIS needs to address the cumulative impacts of existing and future developments on highway traffic service. The EIS for each proposed development needs to assess that development's additive impact when combined with the impacts of other existing and proposed developments in the area.

We appreciate this opportunity to review the subject draft EIS and would like to receive two copies of the final statement when it becomes available.

Sincerely yours,

*Willie Kieselburg Jr.*  
Willie Kieselburg, Jr.  
Director, Office of Right-of-Way  
and Environmental Programs



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 3318, P.O. BOX 50007  
HONOLULU, HAWAII 96850

IN REPLY REFER TO:  
9.155 (Johnson)  
546-5583

RECRUM IX

John J. BJJ

Mr. Willie Kieselburg Jr.  
U.S. Department of Transportation  
Federal Highway Administration  
Region 9  
Two Embarcadero Center, Suite 530  
San Francisco, California 94111

Dear Mr. Kieselburg:

SUBJECT: Final Environmental Impact Statement For a 476-Acre Development at Millilani Town, Hawaii --- HUD-809-EIS-82-040

Thank you for your review of the subject EIS.

1. As you requested, levels of service at critical points on the surrounding roads have been included in the Final EIS.
2. The analysis of traffic does not assume that a new H-2 interchange will be constructed. It is clearly stated that if a new interchange is not constructed, then serious traffic congestion may result as the area reaches full development (Pages 35, 49, B-3).
3. The EIS does address these cumulative impacts. Case III of the traffic analysis assumes traffic from Gentry-Maipio will cause south-bound traffic to take the Hebeula Parkway interchange instead of Kamehameha Highway. This circumstance is carried through to the noise and air quality.

Sincerely,  
*Robert K. Fukuda*  
Robert K. Fukuda  
Area Manager, 9.15

RKF:dab





DEPARTMENT OF TRANSPORTATION  
UNITED STATES COAST GUARD

RECEIVED  
DEPT. OF HUD  
HON. AREA OFFICE

Oct 6 '82

11000

Serial 541  
5 October 1982

Department of Housing and Urban Development  
Honolulu Area Office  
P. O. Box 50007  
Honolulu, HI 96850

Dear Mr. Fukuda:

The Fourteenth Coast Guard District has reviewed the Draft Environmental Impact Statement for Milliani Town, Inc., 476 Acre Development, and has no objection or constructive comments to offer at the present time.

Sincerely,

*J. E. Schwartz*

J. E. SCHWARTZ  
Commander, U. S. Coast Guard  
District Planning Officer  
By direction of

Commander, Fourteenth Coast Guard District



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

29 SEP 1982

RECEIVED  
DEPT. OF HUD  
HON. AREA OFFICE

Oct 13 '82

Dear Mr. Johnson:

I am writing to verify the official filing of your EIS entitled:

Draft: Milliani Town Development, Mortgage Insurance, Island of Oahu,  
City and County of Honolulu, Hawaii (HUD-R09-EIS-82-04D)  
(#820636)

This EIS was received by the Office of Federal Activities on September 23, 1982. It has been determined the above document meets the requirements for filing an EIS as set forth under Section 1506.9 of the CEQ Regulations. Accordingly, EPA has scheduled publication of the Notice of Availability in the Federal Register dated October 1, 1982 and the public review period is scheduled to terminate on November 15, 1982.

If you have any questions or concerns relating to this matter, please do not hesitate to contact me or Ms. Jan Lott Shaw of my staff on (202) 382-5073.

Sincerely,

*Kathi L. Wilson*

Kathi L. Wilson  
Management Analyst  
Office of Federal Activities (A-104)

Mr. Frank L. Johnson  
Honolulu Area Office  
US Department of Housing  
and Urban Development  
PO Box 50007  
300 Ala Moana Boulevard  
Honolulu, Hawaii 96850



RECEIVED  
DEPT. OF HUD  
HONOLULU AREA OFFICE  
NOV 14 1982  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
215 Fremont Street  
San Francisco, Ca. 94105

Mr. Frank L. Johnson  
Dept. of Housing and Urban Development  
Honolulu Area Office  
Box 50007  
800 Ala Moana Boulevard  
Honolulu, HI 96850

NOV 15 1982

Dear Mr. Johnson:

The Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) titled MILLILANI TOWN EXPANSION, WAIPO, OAHU, HAWAII. We have the enclosed comments regarding this DEIS.

We have classified this DEIS as category 10-2. Definitions of the categories are enclosed. The classification and date of EPA's comments will be published in the Federal Register in accordance with our public disclosure responsibilities under Section 309 of the Clean Air Act.

We appreciate the opportunity to review this DEIS. Please send three copies of the Final Environmental Impact Statement (FEIS) to this office at the same time it is officially filed with our Washington, D.C. office. If you have any questions, please contact Mr. Rick Hoffmann, Acting Chief, EIS Review Section, at (415) 974-8191 or FTS 454-8191.

Sincerely yours,

*Charles W. Murray*

Charles W. Murray, Jr.  
Assistant Regional Administrator  
for Policy, Technical, and  
Resources Management

Enclosures (2)

cc: Mr. Melvin K. Koizumi  
Deputy Director for Environmental Health  
State Department of Health

General Comments

1. We have recently reviewed another significant expansion proposed for Oahu - the Kaka'ako project. The FEIS for Millilani should discuss the likely cumulative impact of these two projects plus any other proposed Oahu projects that might be under consideration.

The population projections for these projects should be compared with those which form the basis for air and water quality planning.

The FEIS should present evidence of coordination and consultation with the Oahu Metropolitan Planning Organization (OMPO).

Ground Water Comments

1. The DEIS states on page 20, "The State Department of Agriculture tests for agricultural chemicals in wells throughout the State and has not found appreciable levels in Millilani's wells." Recently the pesticide DBCP has been found in wells serving Millilani and at least one well has been shut down. Since the communities of Oahu may be facing a water supply shortage in the foreseeable future, the FEIS should consider in greater detail the impacts of possible DBCP contamination and the overall water supply issue.

2. It is expected that Millilani's effluent will be diverted for disposal to the Oahu Sugar Company's canefields. The FEIS should detail: what the quality of the underlying aquifer is; what other effects might result (besides total dissolved solids buildup); and whether the ground water serves or will serve as a municipal water supply.

Water Quality Comments

1. The FEIS should elaborate upon the discussion of the project's impacts on the sewage treatment plant. The FEIS should explain whether the project's projections are in conformance with the 208 water quality management plan prepared by the City and County of Honolulu. The FEIS should discuss how the proposed expansion will be financed.

ELS CHEGGOKI CONES

Environmental Impact of the Action

10--Lack of Objections

EPA has no objection to the proposed action as described in the draft impact statement; or suggests only minor changes in the proposed action.

ER--Environmental Reservations

EPA has reservations concerning the environmental effects of certain aspects of the proposed action. EPA believes that further study of suggested alternatives or modifications is required and has asked the originating Federal agency to reassess these aspects.

EU--Environmentally Unsatisfactory

EPA believes that the proposed action is unsatisfactory because of its potentially harmful effect on the environment. Furthermore, the Agency believes that the potential safeguards which might be utilized may not adequately protect the environment from hazards arising from this action. The Agency recommends that alternatives to the action be analyzed further (including the possibility of no action at all).

Adequacy of the Impact Statement

11 Category 1--Adequate

The draft impact statement adequately sets forth the environmental impact of the proposed project or action as well as alternatives reasonably available to the project or action.

Category 2--Insufficient Information

EPA believes that the draft impact statement does not contain sufficient information to assess fully the environmental impact of the proposed project or action. However, from the information submitted, the Agency is able to make a preliminary determination of the impact on the environment. EPA has requested that the originator provide the information that was not included in the draft statement.

Category 3--Inadequate

EPA believes that the draft impact statement does not adequately assess the environmental impact of the proposed project or action, or that the statement inadequately analyzes reasonably available alternatives. The Agency has requested more information and analysis concerning the potential environmental hazards and has asked that substantial revision be made to the impact statement.

If a draft impact statement is assigned a Category 3, no rating will be made of the project or action, since a basis does not generally exist on which to make such a determination.



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 3318, P.O. BOX 50007  
HONOLULU, HAWAII 96860

REGION IX

IN REPLY REFER TO:  
9.18S (Johnson)  
546-5583

JML : . MMJ

Mr. Charles W. Murray Jr.  
U.S. Environmental Protection Agency  
Region IX  
215 Fremont Street  
San Francisco, California 94105

Dear Mr. Murray:

SUBJECT: Final Environmental Impact Statement For a 476-Acre Development  
at Milliani Town, Hawaii ---- HUD-R09-E18-82-04F

Thank you for your review of the subject EIS.

The allocation of land for residential development is established by the State and the County. It is understood by these planning agencies that if all the private land on Oahu were developed to the maximum extent theoretically permitted by existing State and County zoning, then the residential and commercial floor space provided would be much greater than the floor space needed to accommodate projected growth in Oahu population and employment. Realistically, either actual build-out will not be at maximum possible densities or else some development proposals will be totally scrapped because of lack of a market. Population growth on Oahu is primarily dependent on jobs not on the availability of housing. Consequently, the real issue is the impact which the economy might have on the viability of this or any other development proposed.

For the most part, air quality planning in Hawaii is dependent upon the federal emission control strategy for motor vehicles, not population projections. The proposed project will have a smaller population than originally proposed, so there will be no conflict with previous water quality plans.

The Oahu Metropolitan Planning Organization has been given an opportunity to comment on the Draft EIS.

RECEIVED  
DEPT. OF VETERANS  
BENEFITS OFFICE  
NOV 18 1982



Mr. Murray


Ground Water:

1. Millilani Well #5 has been temporarily closed as a precaution. Subsequent monitoring has shown DBCP levels to be at or below the detection limit of 0.02 ppb. The State Department of Health is waiting for more information on the health effects of DBCP before placing this well back into production. As this is an isolated instance, it does not appear at this time that DBCP contamination will affect overall water supply.
2. The aquifer underlying the effluent reuse demonstration project is potable water that is potentially part of the municipal water supply. The University of Hawaii Water Resources Research Center (WRRC) in their final report on recycling of effluent from the Millilani STP [Reference 62 in the F818 not 39 in the DEIS], found that nitrogen could reach the ground water, but could be controlled through application practices. They further report that Millilani's wastewater, "... without the admixture of industrial waste water should be reasonably free of toxic chemicals but monitoring is a necessary and desirable requirement to assure the quality of the effluent." The monitoring program recommended by the WRRC will be followed by the City and County of Honolulu Public Works Department. The program will cover over 40 parameters, including the nitrogen series, viruses, heavy metals and pesticides. The reclamation project will be terminated if water quality problems develop. This information has been added to the Final EIS.

Q-14

Water Quality Comments:

1. The Millilani STP is part of the 208 water quality management plan. The plan was developed at a time when a greater population density was envisioned for Millilani, so the current proposal is not in danger of exceeding projected treatment capacity. Plans have been developed for the orderly phasing of improvements to the STP in conjunction with growth at Millilani. These improvements are being financed by Millilani Town, Inc. and other users.

Sincerely,  
  
 Robert K. Fukuda  
 Area Manager, 9.18

RAF:dab

NOV 15 1982

In Reply Refer to 262

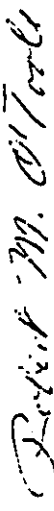
Mr. Robert K. Fukuda, Area Manager  
 Department of Housing & Urban Development  
 Honolulu Area Office  
 300 Ala Moana Blvd., Rm. 3318  
 P. O. Box 50007  
 Honolulu, HI 96850

SUBJ: Draft Environmental Impact Statement for the Millilani Town  
 Development, Oahu, Hawaii

This is in reply to your request to review the Draft Environmental  
 Impact Statement for the Millilani Town Development, Oahu, Hawaii.

After study and review of the draft for the proposed development, we  
 have no adverse comments or suggestions for improvement.

We appreciate the opportunity to review and comment on the draft  
 statement.



ROBERT M. O'TOOLE  
 Director  
 Loan Guaranty Service

HIKOE MURAKAMI  
COMPTROLLER  
MAHE H. TOUNGAKA  
DEPUTY COMPTROLLER

LETTER NO. (P) 2026.2



STATE OF HAWAII  
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES  
P. O. BOX 114, HONOLULU, HAWAII 96850

RECEIVED  
OFFICE OF THE  
COMPTROLLER  
NOV 13 1982

NOV 12 1982

Mr. Frank L. Johnson  
HUD, Honolulu Area Office  
P. O. Box 50007  
300 Ala Moana Boulevard  
Honolulu, Hawaii 96850

Dear Mr. Johnson:

Subject: Draft Environmental Impact Statement  
for the Mililani Town, Inc.,  
476-acre Development  
HUD-R09-EIS-82-04D  
Ref. 9.1 SS (Johnson/546-5583)

We have reviewed the subject draft environmental impact  
statement (DEIS) and have no comments to offer.

Thank you for the opportunity to review the subject DEIS.

Very truly yours,

*Hideo Murakami*  
HIKOE MURAKAMI  
State Comptroller

State of Hawaii

RECEIVED  
OFFICE OF THE GOVERNOR  
DEPT. OF LAND AND NATURAL RESOURCES



JACK K. SUWA  
CHAIRMAN, BOARD OF AGRICULTURE  
SUZANNE M. PETERSON  
DEPUTY TO THE CHAIRMAN

State of Hawaii  
DEPARTMENT OF AGRICULTURE  
1428 So. King Street  
Honolulu, Hawaii 96814  
October 21, 1982

Mailing Address:  
P. O. Box 22159  
Honolulu, Hawaii 96822

Memo - Mr. Frank L. Johnson  
Page -2-  
October 21, 1982

It appears that the subject Federal EIS has sufficiently addressed most of the concerns that we had since the previous EIS review. However, we feel that the Draft EIS should discuss the displacement of pineapple workers resulting from the removal of the subject lands from pineapple production.

Thank you for the opportunity to comment.

*Suzanne M. Peterson*  
for JACK K. SUWA  
Chairman, Board of Agriculture

MEMORANDUM

To: Mr. Frank L. Johnson  
U.S. Department of Housing and Urban Development  
Honolulu Area Office

Subject: Draft Environmental Impact Statement for the  
Milliani Town, Inc., 476 Acre Development  
IUD-R09-EIS-82-04D - TMK: 9-4-05; 9-5-01; 9-5-03

The Department of Agriculture has reviewed the subject report and offers the following comments.

According to our records and the subject report, the Department of Agriculture was not a consulted party in the preparatory phase of the subject Draft [Federal] Environmental Impact Statement (EIS). Our review and response to Notices of Intent to prepare an EIS is an integral part of our monitoring of the magnitude and location of proposed activities such as the planned 476 acre expansion of Milliani Town. Through the consultation process, we assess the adverse and beneficial impacts of an activity as they affect the plans and programs of our Department, then we suggest appropriate mitigative or enhancing measures.

Regarding the subject EIS, we believe our comments made on the [State] "Environmental Impact Statement for the Proposed Milliani Town Expansion" (prepared for Milliani Town, Inc. by Belt, Collins and Associates, August 1978) remain relevant. In our response to the EIS Preparatory Notice for that statement, we suggested that the EIS address: (1) the displacement of pineapple workers resulting from removal of the land from pineapple production, (2) the irretrievable loss of prime agricultural land, (3) the drawdown effect upon the Pearl Harbor basal lens resulting from the proposed new wells, (4) the adequacy of sewage treatment plant capacity and, (5) the long-range agricultural land and water impacts of the total development.

In our response to the revised State EIS we noted that the document did not address our concern about the loss of jobs as a result of the removal of land from pineapple production, and did not discuss the long-range agricultural land and water impacts of the Milliani Town expansion.

Copies of our comments (dated February 7, 1978 and December 13, 1978, respectively) are attached.

Encl.

cc: OEQC  
DLU-C&C of Honolulu

"Support Hawaiian Agricultural Products"



STATE OF HAWAII  
DEPARTMENT OF AGRICULTURE  
1080 KANEIHEHE STREET  
HONOLULU, HAWAII 96813

MEMBER, AT-LARGE  
STEPHEN L. AU  
MEMBER, AT-LARGE  
SIDNEY COO  
MEMBER, AT-LARGE  
MELUJO RADUTA  
MEMBER, AT-LARGE  
STEPHEN L. AU  
MEMBER, AT-LARGE  
FRANK QUAY  
MEMBER, AT-LARGE

February 7, 1978

Mr. Perry J. White  
Belt, Collins & Associates, Inc.  
514 Hewitt Building  
745 Fort Street  
Honolulu, Hawaii 96813

Dear Mr. White:

Re: EIS Preparation Notice for Milliani Town,  
Sixth Increment (TKX: 9-4-05; por 3 & 2);  
2-5-01; II, por 8, 10 & 16; 9-5-01; I)

Thank you for your letter of January 10, 1978, requesting our input on issues that should be addressed in the subject environmental impact statement. Listed below are some suggestions:

1. In previous verbal and written testimony to the Land Use Commission regarding the subject project, a statement was made that there would be no loss of jobs resulting from removal of the land from pineapple production. The Environmental Assessment/Determination notice, however, states that 12 regular and 6 semi-casual workers will be displaced. This matter should certainly be made clear in the EIS.
2. The project will result in loss of agricultural lands; in particular, lands classified as "Agricultural Lands of Importance to the State of Hawaii." We suggest that the USDA Soil Conservation Service Office in Honolulu be consulted in this regard.
3. The draw down effect upon the Pearl Harbor basal lens resulting from the proposed new wells should be adequately addressed to include consideration of the potential increased chloride content of coastal wells.
4. There seems to be a question as to the sewage treatment capacity and/or approval which should be clarified in the EIS.
5. In previous testimony, it was indicated that the project will not affect pineapple production lands. However, since this project constitutes only one-half of the total proposed development and will lead eventually to the next increment, we suggest that the long-range agricultural land and water impacts of the total development be addressed in the EIS.

These are some of our present concerns. Please call on Bob Miura of our Planning Office if we may be of assistance in the EIS preparation.

*John Farias, Jr.*

JOHN FARIAS, JR.  
Chairman, Board of Agriculture

(Encl. 1)

December 13, 1978

MEMORANDUM

To: Mr. Tyngne Kusao, Director  
Department of Land Utilization, C & C of Honolulu

Subject: Zone Change - Milliani Town

In our review of the EIS for Milliani Town Expansion, the Department of Agriculture finds no discussion of a former suggestion made to clarify whether there would actually be loss of jobs resulting from the removal of land from pineapple production.

For the record, we reiterate the need for addressing long-range agricultural land and water impacts of a total development in an EIS. This concern is already evident with the current ongoing developments and pending development proposals by other land owners in the Central Plains wherein more "fruit" and "unique" agricultural lands are being diverted to non-agricultural uses.

We appreciate the opportunity to comment.

JOHN FARIAS, JR.  
Chairman, Board of Agriculture

(Encl. 2)

RECEIVED  
DEPT. OF HUD  
FOURTH FLOOR OFFICE  
OCT 14 '82

STATE OF HAWAII  
DEPARTMENT OF DEFENSE  
OFFICE OF THE ADJUTANT GENERAL  
240 DUMOND ROAD, HONOLULU, HAWAII 96811



GEORGE B. ANTONIO  
Sergeant

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 3318, P.O. BOX 50007  
HONOLULU, HAWAII 96850

MEUNON IX

IN REPLY REFER TO:  
9-188 (Johnson)  
546-5583

JAL

12 OCT 1982

Mr. Jack K. Suwa, Chairman  
Board of Agriculture  
State of Hawaii  
1428 South King Street  
Honolulu, Hawaii 96814

Department of Housing and Urban Development  
Honolulu Area Office  
P. O. Box 50007  
Honolulu, Hawaii 96850

Dear Mr. Suwa:

SUBJECT: Final Environmental Impact Statement For a 476-Acre Development  
at Milliani Town, Hawaii ----- HUD-R09-EIS-82-04F

Thank you for your review of the subject EIS.

Of the remaining pineapple lands to be developed, approximately 160 acres have been idle since about 1979 and about 40 acres are presently under cultivation (those makai of the Waiahole Ditch). Dole's Plantation Manager has confirmed that loss of this acreage would have no effect on their work force. In fact, if market conditions warrant it, the lost pineapple acreage could be replaced by better sugar cane land.

Draft Environmental Impact Statement  
for the Milliani Town, Inc., 476 Acre  
Development - HUD-R09-EIS-82-04D

Thank you for providing us the opportunity to review the above proposed project, Environmental Impact Statement (Draft).

We have completed our review and have no comments to offer at this time.

Yours truly,

Sincerely,  
*Robert K. Fukuda*  
ROBERT K. FUKUDA  
Area Manager, 9.18

*Jerry M. Matsuda*  
JERRY M. MATSUDA  
Captain, HANG  
Contr & Engr Officer

BKF:dab



GEORGE R. ANTONIO  
GOVERNOR



STATE OF HAWAII  
DEPARTMENT OF EDUCATION

P. O. BOX 2104  
HONOLULU, HAWAII 96804

October 27, 1982

OFFICE OF THE SUPERINTENDENT

DR. DONNIS H. THOMPSON  
SUPERINTENDENT

RECEIVED  
DEPT. OF HUD  
HON AREA OFFICE

NOV 2 1982



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 3318, P.O. BOX 5007  
HONOLULU, HAWAII 96804

RECORDS

IN REPLY REFER TO:  
9.155 (Johnson)  
546-5583

JAN 23 1983

Dr. Donnis H. Thompson  
Superintendent  
Department of Education  
State of Hawaii  
P.O. Box 2360  
Honolulu, Hawaii 96804

Dear Dr. Thompson:

SUBJECT: Final Environmental Impact Statement For a 476-Acre Development  
at Mililani Town, Hawaii — HUD-809-EIS-82-04F

Thank you for your review of the subject EIS. The new enrollment  
information will be incorporated as requested.

Sincerely,  
*Robert K. Fukuda*  
Robert K. Fukuda  
Area Manager, 9.15

RKF:dab

Mr. Frank L. Johnson  
HUD, Honolulu Area Office  
P.O. Box 50007  
Honolulu, HI 96850

Dear Mr. Johnson:

SUBJECT: Draft EIS, 476 Acre Development  
Mililani Town, Oahu, Hawaii

This is to inform you that the projected enrollment data shown on page  
43 of the draft EIS should be revised to reflect the decline in the number of  
students generated by unit 47 of the subject 476-acre development. The  
revised projections should read:

GRADE LEVEL	ENROLLMENT GENERATED
K-6	200-450 Students
7-8	70-100 "
9-12	100-130 "

The Department of Education will continue to monitor the development as  
more units are constructed and occupied. Should there be any questions,  
please contact Mr. Howard Lau at 737-5231.

Sincerely,

*Donnis H. Thompson*  
Donnis H. Thompson  
Superintendent of Education

DHT:HL:j1

cc: Central District  
Mr. James E. Edington

AN EQUAL OPPORTUNITY EMPLOYER

DAVIDSON DAVIS, CHAIRMAN  
BOARD OF LAND & NATURAL RESOURCES



DEPT. OF LAND AND NATURAL RESOURCES  
1111 LL #2  
P. O. BOX 521  
HONOLULU, HAWAII 96809

Yours: 9.155  
(Johnson/546-5583)

GEORGE B. JANTOSH  
DIRECTOR OF HEALTH



STATE OF HAWAII  
DEPARTMENT OF HEALTH  
P. O. BOX 319  
HONOLULU, HAWAII 96809

November 1, 1982

DEPT. OF HUD  
FOR INFO OFFICE  
NOV 4 '82

CHARLES B. CLARK  
DIRECTOR OF HEALTH  
JOHN F. CHAMBERS, M.D.  
DEPUTY DIRECTOR OF HEALTH  
MELVIN K. ROYCE  
DEPUTY DIRECTOR OF HEALTH  
HELMUT H. THOMPSON, M.A.  
DEPUTY DIRECTOR OF HEALTH  
ARLENE AUGUSTO SMITH, M.A., J.D.  
DEPUTY DIRECTOR OF HEALTH

In reply, please refer to  
file # EHS-55

MEMORANDUM

To: Mr. Robert K. Fukuda, Area Manager, Honolulu  
Department of Housing & Urban Development

From: Deputy Director for Environmental Health

Subject: Environmental Impact Statement (EIS) for Milliani Town, Inc.,  
476 Acte Development, HUD-R09-EIS-82-04D

Thank you for allowing us to review and comment on the subject EIS. On the basis that the project will comply with all applicable Public Health Regulations, please be informed that we do not have any 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.

*Melvin K. Royce*  
MELVIN K. ROYCE

cc: DEQC

Mr. Robert K. Fukuda  
Area Manager  
Department of Housing and  
Urban Development  
Honolulu Area Office  
P. O. Box 50007  
Honolulu, Hawaii 96850

Dear Mr. Fukuda:

We appreciate the opportunity to review the Draft Environmental Impact Statement (DEIS) for the 476 acre project at Milliani Town. We have a number of concerns to express.

Historic Sites Concerns

Our records indicate that this project does not occur on historic properties listed on the Hawaii Register or the National Register of Historic Places, or eligible for inclusion on the National Register of Historic Places.

Due to the lack of archaeological surveys in the vicinity, we are not aware that significant resources exist in the project area. This does not confirm the absence of historical, cultural, architectural and/or archaeological resources on the property. If any previously unidentified sites or remains (such as artifacts, shell, bone, or charcoal deposits; human burials; rock or coral alignments, pavings, or walls) are encountered, please inform the applicant to stop work and contact our historic sites office at 548-7460 immediately.

Water Resources Concerns

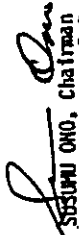
The project is within the Pearl Harbor Ground Water Control Area (PHGWCA) as designated by the Department of Land and Natural Resources (DLNR) under Chapter 177, HRS, and administered through Chapter 166, Title 13, Administrative Rules, Hawaii. As such, permits from DLNR are required if the plans for the

Mr. Robert K. Fukuda, HUD  
Re: Mililani DEIS  
Page Two  
OCT 21 1982

area call for the development of ground water within the PHGMCA. However, it should be emphasized that the total withdrawal of 225 MGD from the Pearl Harbor aquifer is presently at the level of the sustainable yield of 225 MGD as established by the Board of Land and Natural Resources, and therefore it is anticipated that no increase in pumpage would be allowed in the immediate future.

However, other alternatives as stated in the DEIS, such as new water source development outside of PHGMCA to alleviate water exports from the Pearl Harbor aquifer and trading non-potable with potable water sources, may be considered as possible solutions to the water supply problem within the PHGMCA.

Sincerely,

  
SUSUMU ONO, Chairman  
Board of Land and Natural Resources  
and  
State Historic Preservation Officer

G-21



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 3318, P.O. BOX 50007  
HONOLULU, HAWAII 96860

MEMORANDUM

IN REPLY REFER TO:  
9.155 (Johnson)  
546-5583

JRH : 10/21/82

Mr. Susumu Ono, Chairman  
Board of Land and Natural Resources  
State of Hawaii  
P.O. Box 621  
Honolulu, Hawaii 96809


Dear Mr. Ono:

SUBJECT: Final Environmental Impact Statement For a 476-acre Development  
at Mililani Town, Hawaii --- HUD-R09-E18-82-04F

Thank you for your review of the subject EIS.

As stated in the Draft EIS [Page 39], work will be stopped and your department notified if artifacts are encountered during construction.

Thank you for your information on water availability. According to Mililani Town's water demand schedule, full development of the proposed project will require 1,334 mgd and other projects in Mililani Town will require 0.665 mgd. This, plus the 1981 pumpage of 3.03 mgd totals 5.029 mgd. Since the allowed pumpage is currently 3.65 mgd (through 1984), a shortfall of 1.379 mgd is apparent. Unless new or alternative sources are developed, full projected development of Mililani Town can not occur. The Draft EIS briefly mentioned this, but more information has been provided in the Final EIS.

Sincerely,  
  
Robert K. Fukuda  
Area Manager, 9.18

REF:dab



DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT

GEORGE B. ANTONIO  
HAKILO KONO  
FRANK J. JOHNSON

STATE OF HAWAII, DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT, 100 SOUTH KING STREET, HONOLULU, HAWAII 96813

Ref. No. 6773

November 10, 1982

Mr. Frank L. Johnson  
HUD, Honolulu Area Office  
P.O. Box 50007  
300 Ala Moana Boulevard  
Honolulu, Hawaii 96850

Dear Mr. Johnson:

Subject: Draft EIS for a 476 Acre Development at Millilani Town,  
Oahu, Hawaii

We have reviewed the subject draft EIS and find that it has adequately identified the major impacts which can be anticipated to result from the proposed development.

Thank you for the opportunity to comment on this document.

Sincerely,

*Frank Johnson*

For: Hideo Kono

cc: Office of Environmental Quality Control

RECEIVED  
DEPT. OF HUD  
HON. AREA OFFICE

OCT 25 '82

STATE OF HAWAII  
DEPARTMENT OF PLANNING AND ECONOMIC DEVELOPMENT

STEP 8.8670

OCT 21 1982

Mr. Frank L. Johnson  
HUD, Honolulu Area Office  
P.O. Box 50007  
300 Ala Moana Blvd.  
Honolulu, Hawaii 96850

Dear Mr. Johnson:

Draft Environmental Impact Statement  
Millilani Town, Oahu, Hawaii  
HUD-R09-EIS-82-04D

Thank you for the opportunity to review the subject draft EIS.

The traffic study gave a reasonable assessment of the traffic impact due to the proposed development and the full development of Gentry-Waipio.

Please be informed, however, that the new H-2 interchange at Gentry-Waipio and the widening of Kamehameha Highway are not in our current capital improvement program. Presently, we have no implementing schedule for their improvements.

Very truly yours,

*Ryokichi Higashimura*

Ryokichi Higashimura  
Director of Transportation



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 3318, P.O. BOX 50007  
HONOLULU, HAWAII 96850

MECHINIX

JMB : LBJ

Mr. Byokichi Higashionna,  
Director  
Department of Transportation  
State of Hawaii  
869 Punchbowl Street  
Honolulu, Hawaii 96813

Dear Mr. Higashionna:

**SUBJECT:** Final Environmental Impact Statement for a 476-Acre Development  
at Millilant Town, Hawaii --- HUD-809-EIS-82-04P

Thank you for your review of the subject EIS. We trust that your Department will continue to monitor traffic growth in the project area and plan needed facilities accordingly.

Sincerely,  
  
Robert K. Fehuda  
Area Manager, 9.15

RKF:dab

IN REPLY REFER TO:  
9.155 (Johnson)  
546-5583

GEORGE R. ANTOSH  
DIRECTOR



STATE OF HAWAII  
OFFICE OF ENVIRONMENTAL QUALITY CONTROL  
808 MALLAMUKA ST.  
ROOM 301  
HONOLULU, HAWAII 96813

November 3, 1982

Mr. Frank Johnson  
HUD, Honolulu Area Office  
P.O. Box 50007  
300 Ala Moana Boulevard  
Honolulu, HI 96850

Dear Mr. Johnson:

**Subject:** Draft Environmental Impact Statement for  
476 acre development at Millilant Town, Oahu

We have no comments for the draft EIS. We would appreciate a copy of the final EIS when it is completed.

Sincerely,  
  
Jacqueline Parnell  
Director

RECEIVED  
DEPT. OF HUD  
HON. AREA OFFICE

Jacqueline Parnell  
DIRECTOR  
TELEPHONE NO.  
546-5513

NOV 9 '82



**University of Hawaii at Manoa**

Water Resources Research Center  
Holmes Hall 203 - 2540 Dole Street  
Honolulu, Hawaii 96822

RECEIVED  
DEPT. OF HUD  
HON AREA OFFICE

OCT 28 '82

25 October 1982

Mr. Robert K. Fukuda  
Area Manager  
Department of Housing and  
Urban Development  
P.O. Box 50007  
Honolulu, Hawaii 96850

Dear Mr. Fukuda:

**SUBJECT:** 9.1SS Draft Environmental Impact Statement for the Milliani  
Town, Inc. 476 Acre Development, HUD-ED9-EIS-82-04D.  
September 10, 1982

We have reviewed the subject DEIS and have no comment to offer at this  
time. Thank you for the opportunity to comment. This material was  
reviewed by WREC personnel.

Sincerely,

Edwin T. Murabayashi  
EIS Coordinator

ETH/jtn  
cc: Y.S. Fok  
H. Gee

**City & County  
of Honolulu**

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU

635 SOUTH KULUELE AVENUE

HONOLULU, HAWAII 96813

RECEIVED  
DEPT. OF HUD  
HONOLULU OFFICE

OCT 21 '82 October 22, 1982

EILEEN R. ANDERSON, Mayor

YOSHIE H. FUJIIAKA, Chairman  
ROBERTA A. SOUZA, Vice Chairman  
MILTON J. AGAHER  
MICHAEL J. CHUN  
WALTER A. DOOS, JR.  
RYOICHI HIGASHIMURA  
DOMINIA M. HOWARD

KAZU HAYASHIDA  
Manager and Chief Engineer

Mr. Robert K. Fukuda  
Page 2

October 22, 1982

Mr. Robert K. Fukuda, Area Manager  
Honolulu Area Office  
Department of Housing and Urban Development  
P. O. Box 50007  
Honolulu, Hawaii 96850

Dear Mr. Fukuda:

Subject: Your Letter of September 10, 1982,  
on the Draft Environmental Impact  
Statement for a 476-Acre Development  
at Millilani Town, Hawaii,  
HUD-RO9-EIS-82-04D

Thank you for allowing us the opportunity to review the  
draft environmental document. We have the following comments  
for consideration:

- Page 12: The groundwater elevation in the vicinity  
of the existing wells range from 20 to 28  
feet above sea level.
- Page 20: The sentence "The fresh water lens of the  
Pearl Harbor aquifer contacts the dike  
confined by the Schofield high level water  
body" should be rewritten. The dike  
confines the Schofield high level water.
- Page 20: Contamination of the Millilani Wells by  
the chemical dibromochloropropane (DBCP)  
has been confirmed by Federal and State  
Laboratories. An on-going monitoring  
program has been initiated by the  
Department of Agriculture (State),  
Department of Health (State), and the  
Board of Water Supply (City).

- Page 27: The statement "combined source capacity of  
8.0 mgd" should be clarified. Although  
the installed pumps are rated at 8.0 mgd,  
the allowable pumpage determined by the  
Department of Land and Natural Resources  
for the five wells is 3.49 mgd.
- Page 27: The average withdrawal of 3.03 mgd applies  
to the year 1981, not 1980.
- Page 28: A water commitment is determined when  
planned projects are submitted for a  
Building Permit approval or when the  
water system construction plans are  
submitted for our review and approval.
- The document does not mention whether the preserved  
or allowable use will limit urban expansion at  
Millilani.

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

Very truly yours,

KAZU HAYASHIDA  
Manager and Chief Engineer



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 3118, P.O. BOX 50007  
HONOLULU, HAWAII 96850

MEQUIN IX

Jlit : 1 1

Mr. Kezu Hayashida,  
Manager and Chief Engineer  
Board of Water Supply  
City and County of Honolulu  
610 South Beretania Street  
Honolulu, Hawaii 96843

Dear Mr. Hayashida:

SUBJECT: Final Environmental Impact Statement For a 476-Acre Development  
at Milliani Town, Hawaii --- HUD-R09-EIS-82-04F

Thank you for your review of the subject EIS.

Comments 1-6: Your suggested corrections have been incorporated in the  
Final EIS.

Comment 7: According to Milliani Town's water demand schedule, full  
development of the proposed project will require 1,334 mgd and other projects in  
Milliani Town will require 0,665 mgd. This, plus the 1981 pumpage of 3,03 mgd  
totals 5,029 mgd. Since the allowed pumpage is currently 3,65 mgd (through  
1984), a shortfall of 1,379 mgd is apparent. Unless new or alternative sources  
are developed, full projected development of Milliani Town can not occur. The  
Draft EIS briefly mentioned this, but more information has been provided in the  
Final EIS.

Sincerely,  
  
Robert K. Fukuda  
Area Manager, 9.15

RSP:dab

BUILDING DEPARTMENT  
CITY AND COUNTY OF HONOLULU  
HONOLULU MUNICIPAL BUILDING  
484 SOUTH KING STREET  
HONOLULU, HAWAII 96813



DEPT. OF HUD  
HONORARY OFFICE  
OCT 19 '82

GILLEN M. ANDERSON  
MAYOR

ROY H. TANJI  
DIRECTOR AND BUILDING SUPERINTENDENT  
WILLIAM F. REMULAN  
DEPUTY DIRECTOR

PB 82-953

October 14, 1982

Mr. Frank L. Johnson  
Department of Housing and Urban Development  
Honolulu Area Office  
P. O. Box 50007  
300 Ala Moana Boulevard  
Honolulu, Hawaii 96850

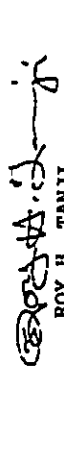
Dear Mr. Johnson:

Subject: Draft Environmental Impact Statement  
for the Milliani Town, Inc.,  
476 Acre Development  
HUD-R09-EIS-82-04D

Thank you for the opportunity to review the subject draft  
EIS.

We have no comments to offer.

Very truly yours,

  
ROY H. TANJI  
Director and Building Superintendent

cc: J. Harada



DEPARTMENT OF GENERAL PLANNING  
**CITY AND COUNTY OF HONOLULU**  
 650 SOUTH KING STREET, 21ST FLOOR  
 HONOLULU, HAWAII 96813  
 DEPT. OF HUD  
 HON. AREA OFFICE



WILLARD T. CHOW  
 CHIEF PLANNING OFFICER  
 RALPH KAWAMOTO  
 SENIOR CHIEF PLANNING OFFICER

DGP10/82-3520

November 17, 1982

Mr. Frank L. Johnson  
 HUD, Honolulu Area Office  
 P. O. Box 50007  
 300 Ala Moana Boulevard  
 Honolulu, Hawaii 96850

Dear Mr. Johnson:

Draft Environmental Impact Statement for the  
 Milliani Town, Inc., 476-Acre Development  
 HUD-R09-EIS-82-04D

According to the EIS, new or expansion of existing public facilities and services will be required to support the 476-acre project, e.g., new schools or changes to existing school boundaries, additional police protection, increase in potable water commitments, expansion to the existing effluent disposal system, perhaps another H-2 connection, a refuse recovery facility or landfill site, etc. In addition, it is essential that provision of those services coincide with the developer's construction schedule.

It might be helpful, therefore, if confirmation of the proposed public actions can be provided by the affected public agencies as to whether they are prepared to provide the required facilities and services as scheduled in the EIS, and whether the proposed actions are among the agency plans as shown on the Development Plan Public Facilities Map, CIP or other documents.

Sincerely,  
*Ralph Kawamoto*  
 RALPH KAWAMOTO  
 Planner

APPROVED:  
*Willard T. Chow*  
 WILLARD T. CHOW



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
 HONOLULU AREA OFFICE  
 300 ALA MOANA BLVD., RM. 3318, P.O. BOX 50007  
 HONOLULU, HAWAII 96860

MEMORANDUM

NOV 19 1982

Mr. Ralph Kawamoto, Planner  
 Department of General Planning  
 City and County of Honolulu  
 650 South King Street  
 Honolulu, Hawaii 96813

Dear Mr. Kawamoto:

SUBJECT: Final Environmental Impact Statement For a 476-Acre Development  
 at Milliani Town, Hawaii ---- HUD-R09-EIS-82-04F

Thank you for your review of the subject EIS.

All affected public agencies mentioned in your letter have reviewed the EIS, so they are aware of the services needed by the project. These agencies' responses to the Draft EIS did not indicate any serious problems.

Sincerely,  
*Ralph Kawamoto*  
 Ralph K. Kawamoto  
 Area Manager, 9.18

RKF:dab

IN REPLY REFER TO:  
 9.1SS (Johnson)  
 546-5583

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT  
**CITY AND COUNTY OF HONOLULU**

650 SOUTH KING STREET  
HONOLULU, HAWAII 96813  
PHONE 528-1111



GILLEN R. ANDERSON  
MAYOR



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 3118, P.O. BOX 50007  
HONOLULU, HAWAII 96850

JOSEPH K. CONANT  
DIRECTOR  
CHARLES H. TORISDE  
DEPUTY DIRECTOR

MEGUMIK

IN REPLY REFER TO:  
9-155 (Johnson)  
546-3583

JRM: 3 11 83

RECEIVED  
ON 5/28/82  
OFFICE OF HUD  
CITY OF HONOLULU

November 1, 1982

Mr. Joseph K. Conant  
Department of Housing and Community Development  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

Mr. Frank Johnson  
Department of Housing and  
Urban Development  
300 Ala Moana Blvd., Room 3318  
P. O. Box 50007  
Honolulu, Hawaii 96850

Dear Mr. Conant:

**SUBJECT: Final Environmental Impact Statement For a 476-Acre Development at Milliani Town, Hawaii --- HUD-R09-EIS-82-04F**

Thank you for your review of the subject EIS. Milliani Town, Inc. has made a commitment that of the 224 low and moderate income units, approximately 5 will be made available for the elderly and handicapped.

Dear Mr. Johnson:

**Subject: Draft Environmental Impact Statement (DEIS) Milliani Town (476 Acres)**

The proposed project is consistent with the City's Housing Location Study and existing Housing Assistance Plan (HAP).

We are please to note the provision of 224 housing units for the low- and moderate-income families. We request that these units also be made available to the elderly and handicapped.

In future increments of this project, we request that at least 10% of the units be set aside for low- and moderate-income families, the elderly and the handicapped.

Sincerely,  
  
Robert K. Fubda  
Area Manager, 9.15

Sincerely,  
  
JOSEPH K. CONANT

RKF:dab

DEPARTMENT OF LAND UTILIZATION AREA OFFICE  
CITY AND COUNTY OF HONOLULU  
640 SOUTH KING STREET  
HONOLULU, HAWAII 96813 (808) 523-4133  
OCT 15 1982



EILEEN R. ANDERSON  
MAILER

MICHAEL M. MCELROY  
DIRECTOR

ROBERT B. JONES  
SUPPORT MANAGER

777Z-34(SM)

October 14, 1982

Mr. Frank L. Johnson  
Department of Housing & Urban Development  
Honolulu Area Office  
P.O. Box 50007  
Honolulu, Hawaii 96850

Dear Mr. Johnson:

Environmental Impact Statement (EIS)  
Millient Town, Inc.

G  
1  
2  
3

The Department of Land Utilization (DLU) stated its environmental concerns in a letter, dated June 19, 1978, during the comment and response period of the May, 1978 EIS prepared by Belt, Collins and Associates for the above. A copy of this letter and the response are attached. The DLU response to the subject EIS preparation Notice also outlined the conditions of the rezoning for the above. We have no further comments to offer.

If there are any further questions, please contact Sampson Mar of our staff at 523-4077.

Very truly yours,

MICHAEL M. MCELROY  
Director of Land Utilization

MMH:sj  
attach.

DEPARTMENT OF LAND UTILIZATION  
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET  
HONOLULU, HAWAII 96813



FRANK C. FAN  
DIRECTOR

GEORGE D. MORIYUCHI  
DIRECTOR

77/Z-34(JM)  
(EIS)

June 19, 1978

Bolt, Collins & Associates  
745 Fort Street  
514 Hawaii Building  
Honolulu, Hawaii 96813

ATTENTION: Mr. Perry J. White

Gentlemen:

Environmental Impact Statement  
Hillilani Town Expansion, Oahu

In general, we find that the above document is well written and well organized. The information is succinct and covers all areas of potential concern. However, we do have comments on some of the points raised in the EIS.

1. Reference: Sustainable yield of Pearl Harbor lens, page IV-20.

Comment: In view of the importance of the water supply question and the rather significant discrepancy in estimates of sustainable yield, the most recent estimate which is attributed to Mr. Chester Lao of the Board of Water Supply should be confirmed in writing. Regardless of which estimate is considered most accurate, all of them indicate that water withdrawal has been exceeding the sustainable yield. In this regard, what, if any, actions have been taken by the State Board of Land and Natural Resources with respect to its authority under Chapter 177, HRS ("Ground Water Use")?

2. Reference: Use of secondary sewage effluent for sugar cane irrigation, page IV-22.

Comment: It is our understanding that the present source of irrigation water for the cane in this area is Waiahole Ditch. Therefore, the net withdrawal from the Pearl Harbor lens will not be decreased by the use of Hillilani Sewage Treatment plant effluent for irrigation. Moreover, the re-use of effluent is considered an experimental program which will be closely monitored for possible deleterious effects on public health. It

Bolt, Collins & Associates  
Page 2

should not be assumed that the program will be successful before it has even begun.

3. Reference: Traffic impact, pages IV-40 to IV-43.

Comment: The traffic analysis should include effects on peak-hour volumes in the Pearl City corridor through the Moanalua screen line.

4. Reference: Man-made physical hazards, page IV-37.

Comment: There should be written confirmation from the U.S. Army that all explosive ordinance has been removed from Kipapa Gulch.

5. Reference: Alternative of diversified agricultural use, pages VI-3 and VI-4.

Comment: The potential of diversified agricultural use on this property is compared unfavorably with that of "the existing Kahuku Agricultural Park." However, sources at the State Department of Agriculture indicate that there is no functioning agricultural park at Kahuku. Furthermore, the contention that truck crops are more feasible at Kahuku than at Hillilani is not substantiated by data.

Should you wish any elaboration or clarification of these comments, please contact Mr. John Whalen of our staff at 523-4077.

Very truly yours,

WILLIAM E. HANKET  
Acting Director

WEH:oy

(Attach 1)

(Attach. 2)

**Belt, Collins & Associates**

A Division of Lyon Associates, Inc.

Engineers • Planners • Landscape Architects • Architects

514 Hawaii Building • 745 Fort Street • Honolulu, Hawaii 96813 • Telephone (808) 531-5361

July 19, 1978

Mr. William E. Mankett, Acting Director  
Department of Land Utilization  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

Dear Mr. Mankett:

Environmental Impact Statement  
Proposed Hiliiani Town Expansion

Thank you for your letter of June 19, 1978, regarding the Environmental Impact Statement for the proposed Hiliiani Town Expansion project. We are, of course, pleased that you found that the document covered all areas of potential concern. Your comments regarding several of the points made in the EIS are well taken, and I would like to respond briefly to them.

1. Sustainable yield of the Pearl Harbor basal lens.

Subsequent to circulation of the EIS for review and comment, we have met with the staff of the Honolulu Board of Water Supply on two occasions to discuss the groundwater situation in the Pearl Harbor basin. As a result of those meetings and of written comments from the Board dated July 3, 1978, it has become clear that the EIS mis-reported the Board of Water Supply's position with respect to the present rate of groundwater withdrawals from the Pearl Harbor basin. Because of this, pages IV-20 through IV-24 have been revised. I have attached copies of the revised material and the Board of Water Supply's comments to the back of this letter.

Following receipt of your letter I have spoken to a representative of the State Department of Land and Natural Resources and to Mr. Larry Whang of the Honolulu Board of Water Supply. Both indicated that no official actions have been taken relative to the Pearl Harbor basin by the B.L.H.R. under the authority granted it in Chapter 177, HRS. The State is presently conducting a series of public hearings regarding proposed changes to the B.L.H.R.'s regulations covering groundwater use, however. Depending upon the results of these hearings, some changes in the existing regulatory structure could occur.

Respectfully,  
William D. DeLoach, Director, Federal Bureau of Investigation

Mr. William E. Mankett

- 2 -

July 19, 1978

2. Use of secondarily-treated effluent from the Hiliiani Sewage Treatment Plant for sugar cane irrigation.

You are correct that the water now being used to irrigate sugarcane in the immediate vicinity of the proposed project originates in Windward Oahu and is brought to the Schofield plateau by the Waiahole Ditch. As a result, use of treated sewage effluent from the Hiliiani Sewage Treatment Plant for irrigation of some of the fields now supplied by the Ditch would not automatically result in a decrease in amount of water withdrawn from the Pearl Harbor basal lens. In discussing the re-use of treated sewage effluent, we used the heading "Possible (emphasis added) Mitigation of Adverse Effects" (p. IV-22). The intent was to indicate ways that effluent recycling could be used to reduce the consumptive use of water:

"...the use of effluent from the Hiliiani STP for the irrigation means that potable water previously drawn from the aquifer for that purpose need not be used [emphasis added]." (paragraph 4, line 11, page IV-22).

We did not mean to say that it is certain that the water gained by recycling the effluent would be used to partially offset current and proposed withdrawals, merely that it could be. There are admittedly a number of obstacles that will make it difficult to effect such a reduction, including:

- o the fact that the water in the Waiahole Ditch is not owned by Castle and Cooke or its subsidiaries, but rather by a subsidiary of the Oahu Sugar Company;
- o the fact that there is a fairly direct relationship between the per acre yields of sugar and the amount of irrigation water applied, and, therefore, a strong tendency to increase agricultural water use when additional supplies become available; and
- o the fact that, in order to reduce pumpage from the basal lens, Waiahole Ditch water or water from the treatment plant would have to be used on fields now irrigated with water from the basal lens and a corresponding reduction made in withdrawals from that source.

I could continue to add to this list, but the basic point is already clear: if the potential reduction in withdrawals for agricultural use referred to in the EIS is to be effected, it will only be because some party exercises a major effort towards that end. In retrospect, it appears that that point should have been more clearly made. Nevertheless, despite the formidable obstacles that admittedly exist, it is still our opinion that the savings are technically, economically, and politically feasible if the appropriate governmental agencies exert their considerable influence towards that end.

July 19, 1978

The second point made under this item, i.e., that the effluent re-use program is an experimental one that will be closely monitored for possible deleterious effects on public health, is quite valid, and should have been stated in the EIS. It should be noted, however, that the idea has been under study for a number of years, that the re-use has been authorized only after extensive studies by the Hawaii Water Resources Research Center indicated that it would have no significant adverse effects on the water supply, and that the City and County Department of Public Works has concluded that there is sufficient chance of success to warrant the expenditure of public funds to implement the system.

There is, as you point out, no guarantee that the system will prove safe; only years of monitoring will do that. But the evidence suggests that it will, and the intensive monitoring program that is planned is designed to detect unexpected effects well before they would constitute a serious health hazard.

### 3. Traffic impact.

In responding to our request for comments regarding the proposed project, the State Department of Transportation (DOT) stated:

"Thus, this rezoning action will have no adverse impact upon our existing or planned transportation facilities." (p. 8-40 in Appendix B of the EIS).

Despite the fact that the major transportation facilities likely to be affected by the proposed project are under the control of the DOT, we devoted considerable time to an analysis of the project's probable impacts upon traffic flow on the H-2 Freeway and Kamehameha Highway. We did not, however, extend this analysis to the Hoanaluwa screenline. I believe there are a number of reasons why any attempt to do so would be unproductive, and would like to outline them briefly below.

The primary intent of an EIS is to indicate ways in which conditions "with" a proposed project or action would differ from those that could be expected to occur without it. Residential and commercial development at Hilliani would undoubtedly increase traffic volumes on Kamehameha Highway and the H-2 Freeway over the level that would be experienced without it because there is no other potential development along the Central Oahu corridor where an equivalent amount of residential construction could occur. The same cannot be said of traffic through the Hoanaluwa screenline.

The Oahu General Plan accepts the notion that significant population growth will occur on Oahu in the years ahead and that a large portion of this growth is to be accommodated in West Honolulu and in Ewa. Given this, and the fact that these areas contain the vast majority of the

July 19, 1978

readily developable land in proximity to the urban core, it is our belief that if the residential expansion currently being proposed for Hilliani is not approved, there is likely to be a corresponding increase in the amount of residential construction in other areas lying to the west of the Hoanaluwa screenline. From this it follows that the proposed project at Hilliani would not increase traffic at the screenline over what would occur without it. In short, traffic volumes at the screenline would increase by about the same amount regardless of where in the West Honolulu-Ewa-Central Oahu area the residential growth necessary to meet the General Plan population and housing objectives occurs; an increase at that point does not, therefore, appear to be a legitimate impact of this particular project.

Even if one does not accept the preceding argument, there are a number of technical considerations that lead us to question the value of a detailed analysis of the proposed project's impact on traffic flow through the Hoanaluwa screenline. First, the screenline's distance from Hilliani means that it is difficult to accurately assess the volume of Hilliani-generated vehicles that would pass through it or the exact time at which they would do so. This problem is made particularly acute by our finding that traffic from the Gentry-Maipio project would raise the vehicle/capacity (v/c) ratio on Kamehameha Highway below Hilliani to well over 1.0, and that Hilliani residents' attempts to adjust to the congestion that this would produce might well cause problems at the Hilliani H-2 interchange as well. While existing traffic models are reasonably accurate at v/c ratios of 1.0 and below, at significantly higher v/c ratios they are not. Hence, it is impossible to accurately predict the rate at which vehicles would emerge from the congestion and enter the flow of traffic headed for the Hoanaluwa screenline.

Second, the highway network is in such a state of flux at the present time that any analysis based on existing conditions would be totally invalid in only a short while. Completion of I-1 between the Aloha Stadium and Middle Street will open up a major new highway corridor, and it is impossible to predict exactly how drivers will respond to this in terms of their choice of routes. Without such information, any useful kind of discussion is impossible. Moreover, while roadway constraints on the through lanes of the Hoanaluwa and H-1 Freeways are now the primary cause of congestion in this area, this may not be the case following completion of highway improvements now underway. If this proves the case, congestion will not disappear, but rather will be transferred to the off-ramps and city streets feeding into the employment centers.

Mr. William E. Mankett

- 6 -

July 19, 1978

Mr. William E. Mankett

- 5 -

July 19, 1978

Other changes are being proposed closer to Hilliani, where another on-ramp to the H-2 Freeway is being suggested to serve the Gentry-Halpio development and the proposed industrial area at Hilliani. In addition, some changes are almost certain to be made in Kamehameha Highway in the vicinity of the Gentry project. Given the immensity of the problem, the number of unknowns that are involved, and the resources that we or anyone else other than the State Department of Transportation could bring to bear, further investigation does not appear to us to be fruitful at this time.

4. Amunition Storage.

A copy of a letter from the U.S. Army to Hilliani Town, Inc., officially confirming the deactivation of the amunition storage area which formerly affected the site of the proposed project arrived in our office today. I have attached it to the back of this letter.

5. Alternative of diversified agricultural use.

I believe that the apparent disagreement as to whether or not there is or is not a functioning agricultural park at Kahuku is solely a problem of semantics. We have talked on several occasions with Mr. Selko Shirona, the man identified by the Board of Agriculture's chairman, Mr. John Farias, Jr., as being "... our Kahuku Agricultural Park coordinator." (Letter dated January 19, 1978, from Mr. John Farias, Jr. to Mr. Perry White regarding the EIS for the proposed expansion of the Kailima Resort.) Because of this reference, and the fact that Mr. Shirona has been working at Kahuku for some time, it was our understanding that the Kahuku Agricultural Park was already in operation.

Subsequent to receiving your letter, I have talked again with Mr. Shirona and discovered that the final lease agreement between the State and Campbell Estate has not yet been signed. Hence, your source at the Department of Agriculture is technically correct in saying that there is no functioning agricultural park at Kahuku. However, Mr. Shirona indicated that the original deadline for the closing of the lease agreement was June 1, that there have already been three or four rounds of negotiations, and that the lease arrangements will almost certainly be concluded within the next few weeks. When they are, the Kahuku Agricultural Park will become a legal reality. Because about 1,500 of the approximately 3,000 acres which it will encompass are already under cultivation by farmers having lease agreements with Campbell Estate, and

because the terms of the lease will allow present agricultural users to continue their operations following the land's lease to the State, we believe that, in a practical sense, there already is a "... functioning agricultural park at Kahuku."

It was not our intention to unfavorably compare the quality of the land at Hilliani with that available at Kahuku. In fact, it is my belief that our discussion was quite honest in its evaluation; certainly, it clearly indicated that the soils at Hilliani are quite well-suited for a number of agricultural uses. It was our evaluation of water and institutional considerations that led us to conclude that "... it appears(s) that many of the crops which could conceivably be cultivated at Hilliani could be grown more profitably at Kahuku."

The primary physical advantage of the Kahuku site is the ready availability of cheap water. Without it, almost any diversified agriculture is impossible, and, as previously indicated, water at Hilliani is not readily available at any price, much less cheaply. The water supply problem is one of the main reasons why pineapple, which needs very little irrigation, has remained atop the plateau while sugar is found at lower elevations and in areas that can be supplied with water from the Matahole Ditch. In short, the water consideration alone gives Kahuku an important advantage over Hilliani.

Kahuku's institutional advantages are less permanent than its better access to water, but are significant nonetheless. The land on which the proposed Hilliani Town development would occur is owned by an organization that wants to convert it to urban use. If this proves impossible, it would almost certainly be left in pineapple production. In short, it is unlikely that a denial of the present rezoning request would result in any move to establish diversified agriculture on the land. In contrast, Campbell's Kahuku lands really have no such alternative use, and the Estate is actively working toward the creation of an agricultural park there.

Given that Castle and Cooke is unlikely to establish diversified agriculture on the Hilliani land of its own accord, such a change in land use would have to be completely handled by the State. This would involve the establishment of an organizational structure similar to that which already exists at Kahuku, acquisition of the land, and construction of the necessary infrastructure. Given the costs which these things would entail -- especially the acquisition of the land and the development of a water source -- it seems probable that either lease rents for land in an agricultural park at Hilliani would have to be considerably higher than those for similar land at Kahuku or that the

DEPARTMENT OF THE ARMY  
HEADQUARTERS UNITED STATES ARMY SUPPORT COMMAND, HAWAII  
FORT SHAFTER, HAWAII 96808



AF2V-FB-ER

JUL 16 1978

Mr. William E. Hankett

- 7 -

July 19, 1978

State would have to provide a significant on-going subsidy. In summary, while the soils at both sites are of equivalent quality, other factors tend to favor Kahuku as the site of an agricultural park.

I hope that the above provides the answers you were seeking. If any questions remain, please call me at 521-5361.

Sincerely,

*Perry J. White*  
Perry J. White

PJM:tko

attachment

cc: Hilliani Town, Inc.  
Dept. of Land Utilization  
Environmental Quality Commission

Q-34

Dear Mr. Yim:

This headquarters has been advised by the Pacific Ocean Division, Corps of Engineers, of your inquiry regarding the status of ammunition storage at the Army's Upper Kipapa Military Reservation and its resultant effect on the adjacent Hilliani Town development.

As you are aware, the Army notified the State of Hawaii Land Use Commission on March 1, 1977 that because of ammunition storage at Upper Kipapa, this headquarters opposed the proposal to incorporate approximately 591 acres from Agricultural District into Urban District at Hilliani Town. Planning, however, was initiated at that time to develop alternatives for the storage of ammunition located at Upper Kipapa. Further, it would require as a minimum, a period extending to September 30, 1978 to implement an acceptable alternative.

As a result of the foregoing, the Army was able to obtain suitable alternate facilities for the ammunition stored at Upper Kipapa. Consequently, all of the ammunition formerly stored at this installation has been relocated and it is currently maintained in an inactive status.

This headquarters realizes the difficulties posed by this situation and appreciates the assistance of all concerned in deferring implementation of the decision on usage of the real estate adjacent to Hilliani Town until the relocation of the Army's ammunition at Upper Kipapa was satisfactorily resolved.

Sincerely yours,

*Carl P. Rodolph*  
CARL P. RODOLPH  
Colonel, CE  
Director of Facilities Engineering

(Attach. 3)



DEPARTMENT OF PARKS AND RECREATION  
**CITY AND COUNTY OF HONOLULU**  
650 SOUTH KING STREET  
HONOLULU, HAWAII 96813



**EHIKO I. KUDO**  
SAM L. CARL  
DEPUTY DIRECTOR  
OSCAR M. ABANHA  
EXECUTIVE ASSISTANT

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 3318, P.O. BOX 50007  
HONOLULU, HAWAII 96850



IN REPLY REFER TO:  
9.155 (Johnson)  
346-5583

REGION IX

DATE: PM3

RECEIVED  
DEPT. OF HUD  
HONOLULU OFFICE  
OCT 17 1982

October 19, 1982

Mr. Robert K. Fukuda, Area Manager  
Department of Housing and Urban  
Development  
Honolulu Area Office  
P. O. Box 50007  
Honolulu, Hawaii 96850

Dear Mr. Fukuda:

**SUBJECT: DRAFT ENVIRONMENTAL IMPACT STATEMENT (EIS)  
MILLIANI TOWN, INC., 476-ACRE DEVELOPMENT  
TRK: 9-5-01  
PROJ. REF. NO. HUD-R09-EIS-82-04D**

We have reviewed the draft EIS for the Milliani Town, Inc., 476-acre development and make the following comments and recommendation.  
The recreational assessment for the Milliani Town, Inc., 476-acre development is acceptable. However, there has been a land use change to a portion of P-3, a proposed park site adjacent to the Town Center. The Department of Accounting and General Services has established the Milliani Community Library on the P-3 park site.

The Library should be reflected in the EIS as it is an important public facility to be used by the Milliani community.

Thank you for allowing our Department to comment on the draft EIS for the Milliani Town, Inc. 476-acre development.

Should you have any questions, please contact Mr. Jason Yuen at 523-4695.

Sincerely yours,

(Mrs.) EHIKO I. KUDO, Director

EIK:vc

Mrs. EMIKO I. Kudo  
Director  
Department of Parks and Recreation  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

Dear Mrs. Kudo:

**SUBJECT: Final Environmental Impact Statement for a 476-Acre Development  
at Milliani Town, Hawaii --- HUD-R09-EIS-82-04F**

Thank you for your review of the subject EIS. As requested, the EIS will be revised to include the Milliani Community Library.

Sincerely,

Robert K. Fukuda  
Area Manager, 9.15

RKF:dab

DEPARTMENT OF PUBLIC WORKS  
**CITY AND COUNTY OF HONOLULU**  
850 SOUTH KING STREET  
HONOLULU, HAWAII 96813



KILEEN R. ANDERSON  
Mayor

DEPARTMENT OF PUBLIC WORKS  
DIVISION OF HONOLULU  
HONOLULU AREA OFFICE

Oct 24 '82

MICHAEL J. CHUN, Ph.D.  
DIRECTOR AND CHIEF ENGINEER  
WILLIAM A. ROCKETT  
DEPUTY DIRECTOR

ENV 82-387

October 26, 1982

Mr. Frank L. Johnson  
HUD, Honolulu Area Office  
P. O. Box 50007  
300 Ala Moana Boulevard  
Honolulu, Hawaii 96850

Dear Mr. Johnson:

Re: Draft EIS for a 476-Acre Development at  
Millilani Town, Oahu, Hawaii  
HUD-R09-EIS-82-04D

cc

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

1. Wastewater. This is an update of the Millilani sewer system. The diversion line from the Millilani STP to the Waipahu SPS is under construction (pages 12 and 31). The notice to proceed with the project was given to the contractors in September 1982. Construction is scheduled to be completed by September 1983 (page 3). The bid price for the project is \$5,875,400 (page 32).  
The City and County has approved the Phase IV expansion of the Millilani STP; however, the plant expansion has not been initiated by Millilani Town. The data for the ultimate phase for the treatment plant should not be shown in Table 5 (page 30), since this information is not compatible with the development plan.
2. Solid Waste. An HPOWER facility next to the Waipahu Sugar Mill will not be implemented (page 15). Using similar concepts of HPOWER, a resource recovery facility is under consideration at this time. The potential sites are located on Sand Island and the Campbell Industrial Park. The two-step bidding procedures will be used in the selection of the contractor and the

Mr. Frank L. Johnson - 2 - October 26, 1982

construction of the facility. The estimated completion date for the facility is 1987.

The site for the proposed leeward sanitary landfill has not been finalized as of this date (pages 15 and 34).

Me ke aloha pumehana,

MICHAEL J. CHUN  
Director and Chief Engineer

cc: Div. of Wastewater Management  
Div. of Refuse



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 318, P.O. BOX 50007  
HONOLULU, HAWAII 96850

MEGJUN IX

IN REPLY REFER TO:  
9.188 (Johnson)  
546-5383

10/11 1:11

Mr. Michael J. Chun  
Director and Chief Engineer  
Department of Public Works  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

Dear Mr. Chun:

SUBJECT: Final Environmental Impact Statement For a 476-Acre Development  
at Milliani Town, Hawaii --- HUD-R09-EIS-82-04f

Thank you for your review of the subject EIS.

Your corrections and revised information regarding wastewater and solid waste have been incorporated in the Final EIS.

Sincerely,

*Robert K. Fukuda*  
Robert K. Fukuda  
Area Manager, 9.18

RKF:dab

DEPARTMENT OF TRANSPORTATION SERVICES  
**CITY AND COUNTY OF HONOLULU**  
HONOLULU MUNICIPAL BUILDING  
650 SOUTH KING STREET  
HONOLULU, HAWAII 96813



RECEIVED  
FOR AREA OFFICE  
NOV 12 1982

EILEEN M. ANDERSON  
MAILER

ROY A. PARKER  
DIRECTOR  
DAILY OFFICE  
OFFICE BUILDING

TE 10/82-505

October 29, 1982

Mr. Robert K. Fukuda  
Area Manager  
Department of Housing and  
Urban Development  
300 Ala Moana Boulevard  
Room 3318  
P. O. Box 50007  
Honolulu, Hawaii 96850

Dear Mr. Fukuda:

Subject: Draft Environmental Impact Statement for  
the Milliani Town, Inc. 476-Acre Development  
HUD-R09-EIS-82-04f

We have reviewed the Draft EIS and find that the transportation issues have been satisfactorily addressed.

Thank you for providing us the opportunity to review and comment on the project.

Very truly yours,

*Roy A. Parker*  
ROY A. PARKER  
Director

**CITY AND COUNTY OF HONOLULU**

FIRE DEPARTMENT  
1455 S. BERTANIA STREET, ROOM 305  
HONOLULU, HAWAII 96814



SILEEN R. ANDERSON  
JAN 27 1982

DEPT. OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
JAN 27 1982



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 3118, P.O. BOX 50007  
HONOLULU, HAWAII 96860

REGION IX

IN REPLY REFER TO:  
9.158 (Johnson)  
546-5583

JAN 27 1982

Mr. Melvin M. Monaka, Chief  
Fire Department  
City and County of Honolulu  
1455 South Beretania Street  
Honolulu, Hawaii 96814

Dear Mr. Monaka:

**SUBJECT: Final Environmental Impact Statement For a 476-Acre Development  
at Milliani Town, Hawaii ---- HUD-R09-RIS-82-04F**

Thank you for your review of the subject EIS. As requested, mention will  
be made of the Maiau Fire Station.

Sincerely,  
*Robert K. Fukuda*  
Robert K. Fukuda  
Area Manager, 9.15

RKF:dab

October 27, 1982

Mr. Robert K. Fukuda, Area Manager  
Department of Housing and Urban Development  
300 Ala Moana Boulevard, #3318  
P. O. Box 50007  
Honolulu, Hawaii 96850

Dear Mr. Fukuda:

We have reviewed the EIS draft for Milliani Town Inc. and the following  
comment is directed to page F-26:

"In addition to Mahiawa, Pearl City and Waipahu, the Maiau Station should  
be added to the supportive fire protection services for this area. This  
station was completed and in commission on March 16, 1982 and houses an  
engine company, a ladder company and a battalion chief and his aide."

Very truly yours,

*Melvin M. Monaka*

Melvin M. Monaka,  
Fire Chief

NN:ict

POLICE DEPARTMENT  
**CITY AND COUNTY OF HONOLULU**  
 DEPT. OF HUD  
 HON. AREA OFFICE

1415 SOUTH BERETANIA STREET  
 HONOLULU, HAWAII 96813-3111 HON. AREA OFFICE  
 CHIEF

Oct 12 '82



October 8, 1982

SILKEN R. ANDERSON  
 MAYOR

OUR REFERENCE EC-ES

Mr. Frank L. Johnson

-2-

October 8, 1982

Mr. Frank L. Johnson  
 Department of Housing & Urban Development  
 Honolulu Area Office  
 300 Ala Moana Boulevard, Room 3318  
 P. O. Box 50007  
 Honolulu, Hawaii 96850

Dear Mr. Johnson:

Subject: Draft Environmental Impact Statement for the  
 Milliani Town, Inc., 476 Acre Development  
 HUD-R09-E15-82-04D

Ref. 9.155 (Johnson/546-5583)

1. Prior to commenting on this Draft Environmental Impact Statement, we would like to bring attention to errors that are present in the draft.

Chapter III. DESCRIPTION OF THE AFFECTED ENVIRONMENT

- C. Social Environment
  - 4. Social Services
    - a. Police/Fire Protection (Page 25)

The text reads: "At present three police officers are assigned to the project on 8-hour shifts."

Correction: No police are assigned to this project. Apparently a mis-interpretation was developed from our letter of December 8, 1980 (your Ref. 32), which stated, "There are presently three officers assigned per 8-hour shift to beats near this area (beats 220-222), so response time would vary."

Chapter IV. ENVIRONMENTAL CONSEQUENCES OF THE PROPOSED ACTION

- C. Urban and Community Impacts
  - 1. Police Protection (Page 42)

The text reads: "The City and County Police Department will provide additional service to the project area."

Correction: Delete the word "additional." Should read, "... will provide service to the project area."

The text reads:

"Existing police service will expand to provide adequate protection for the projected population. Police services will be increased to add approximately 18 new police employees (based on 2.5 police officer per 1,000 population) (your Ref. 32). The annual cost in salaries would be approximately \$250,380. Tax revenue generated by the project will help pay for increases in police salaries."

Correction:

There are no plans for existing police services to be expanded or for an increase of 18 new police employees. The normal level of service would have to be provided through the reallocation of available resources. A project of this extent primarily involves the relocation of current population, not necessarily an increase in overall population. Police planning allows for reallocation of resources in these cases.

It appears that information in our letter of December 8, 1980 (your Ref. 32), which referred to increases in demand and increases in workload, in equivalents of personnel required, has been converted to numbers of personnel. While this is permissible for placing the cost of service in perspective, it should not be represented as actual increases in number of personnel. Even in this sense, our 1980 estimate of \$443,000 in salaries for 22-24 personnel (average of \$19,261) has somehow been incorrectly adjusted to \$250,380 for 18 personnel (average of \$13,910).

The last sentence of the first paragraph reads, "Tax revenue generated by the project will help pay for increases in police salaries." This is incorrect. It is believed that this should read, "... will help pay for additional police services."

Comment is being withheld regarding paragraph two of this section as it is difficult to understand its purpose.

2. The following comments are being submitted in response to the Draft Environmental Impact Statement.

a. Impact on Traffic Safety

The prime concern of the Honolulu Police Department relates to the traffic situation that is being permitted to develop. Even with the reduction in size of this project, there is an expectation of some 4,000 vehicles being added to the road congestion. While these additional vehicles may be drawn from other areas as population relocates to Milliani Town, the total impact will be felt on the immediate road network within and adjacent to Milliani and, eventually, on the H-1, Honolulu bound. The expected volume of vehicles is detrimental to traffic safety and can seriously hinder the movement of emergency vehicles. The Honolulu Police Department believes that adequate means for moving increased numbers of vehicles should be available before the vehicles are introduced to the road system.

Mr. Frank L. Johnson

-3-

October 8, 1982

b. Impact on Police Services

While one measure of police services is the number of police officers (or police employees) per 1,000 population, it is not a good measure for estimating police needs on a project by project basis. Delivery of police services involves a combination of personnel, vehicles, other equipment, and communications. Police, to a great degree, are dispatched to where they are needed. This is especially true since the introduction of the Honolulu Police Department central dispatch system.

A project of this magnitude will certainly involve an increase in police workload; increased patrol, investigation, prevention, etc., which will be serviced partly by an increase in personnel and partly by reallocation of resources from other areas.

Using the police-to-population formula, the estimated increase of 7,515 people resulting from this project can be translated into 15.6 additional police officers (currently 2.08 per 1,000) at an average salary of \$20,214, a total of \$315,338 dollars. But, as the department cannot realistically plan on a project by project basis, this figure cannot be used for costing out a single project. Similarly, a new police station facility is not the result of a given project but is planned for a regional area based on the cumulative effect of many projects.

The police department operates on the assumption that resources necessary to maintain an adequate level of police services for the City and County of Honolulu will be provided. While projects of this magnitude definitely impact on the delivery of police services, it can be expected that those services will be provided at an adequate level.

Sincerely,

FRANCIS KEALA  
Chief of Police

By:   
HAROLD FALK  
Deputy Chief of Police



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 3118, P.O. BOX 60007  
HONOLULU, HAWAII 96860

REGION IX

IN REPLY REFER TO:  
9.158 (Johnson)  
546-5583

April 25, 1983

Mr. Harold Falk  
Deputy Chief of Police  
City and County of Honolulu  
1455 South Beretania Street  
Honolulu, Hawaii 96814

Dear Mr. Falk:


SUBJECT: Final Environmental Impact Statement For a 476-Acre Development  
at Milliani Town, Hawaii --- HUD-K09-EIS-82-049

Thank you for your review of the subject EIS.

Your clarification of demand for police services is most helpful. The EIS test has been revised accordingly.

We understand and concur with your concern regarding traffic. As with other community services, transportation planning should be coordinated with zoning. However, the City Council has permitted this project to proceed. The EIS identifies the project's impact on traffic and points out some possible solutions to congestion.

Sincerely,

  
Robert K. Fukuda  
Area Manager, 9.18

BLP:dab

RECEIVED  
DEPT. OF HUD  
HON. AREA OFFICE

Oct. 1982

OCT 15 1982

FRANK JOHNSON  
HUD HON. AREA OFFICE  
300 HALE MOANA BLVD BX 500  
HONOLULU, HAWAII 96850

GAIL DRAKE  
MILILANI ENVIRONMENTAL ASSOC.  
Box 852 EWA BEACH, HI. 96706

DEAR MR. JOHNSON:

Enclosed is a central Sun-Press article 10-6-82  
"Mililani DBCP Level called 'not dangerous'; investigation  
continues."

Others

It is on the basis of these new findings which show  
detectable and increasing amounts of deadly  
pesticide contamination that I am asking for  
a moratorium on FHA mortgage insurance on  
construction which is built on sugar cane and  
pineapple land and which draws from water  
supply/bank and adjacent to these lands.  
The purpose of the three-year postponement of  
both HUD and FHA financial backing would be  
to conduct a study on the adequacy of safe drinking  
water supplies in the area.

Adequate safe water cannot be guaranteed at  
this time. The 1978 environmental impact study  
cannot be used as a basis for the granting of  
any permits a sin Federally Assisted housing as it  
does not contain the pertinent facts about the

drinking water supplies.

I am requesting a three-year study be conducted on water supplies in this area before federal money be used for construction.

The Board of Water Supply admits it cannot predict future water contamination, but it is now known that DBCP and other toxic chemicals used on sugar and pineapple fields are not biodegradable and is increasing in concentration; most contaminated are the new wells that were to serve new construction.

Q One of the conditions of FHA mortgage insurance is that there be a guarantee of safe adequate drinking water. Since the Board of Water Supply, by its own admission, cannot give this guarantee, I am asking that HUD withhold approval for FHA insurance on Unit 51 in Mililani, that no further approvals be granted upon receipt of this letter pending the completion of a new environmental statement that will assess the adequacy and safety of water supplies.

Again I remind you that HUD is required to conduct the environmental study before approval is granted.

Gail Drake, pres. Mililani Environmental Assoc.  
Box 852 EWA Beach, Hawaii 96706

# Mililani DBCP level called 'not dangerous,' investigation continues

By ALAN YONAN JR.  
News Editor

MILILANI — Board of Water Supply officials are continuing to investigate how traces of the pesticide DBCP got into groundwater drawn by a Mililani well.

Hayashida said. He said if the well water would probably be used for drinking water, he said, but added a companion could be drawn from California, which set a tolerance level of one part per billion.

Mililani, one of five that serves the Board of Water Supply after tests disclosed its water contained 0.09 parts per billion (ppb) of DBCP, or dibromochlorophane.

Don Horio, spokesman for the state Department of Health (DOH) said, the water samples that indicated the 0.09 ppb level were taken in a routine sampling by the department on Sept. 11.

DBCPC used in pineapple fields up until five years ago to control the root worm nematode, has reportedly caused cancer in laboratory animals.

Hayashida said the well will continue to be monitored until the agencies involved are satisfied with the DBCP level.

The five wells that provide water for Mililani are located within a mile of each other in pineapple fields north of Mililani.

Hayashida said that well No. 5 is probably a remnant of the days when Dole Co. sprayed it on the fields.

One of the things investigators will be looking at is why the relatively high level of DBCP showed up in Well No. 5 and not the other four wells, he said.

Well No. 5 is situated by itself about one mile north of the cluster of wells 1-4. Hayashida said the "concentration" of DBCP near water supply, but that is now questionable.

Well No. 5 was opened several months ago, Hayashida said. There are three other wells in Mililani drilled by the Board of Water Supply but which will remain capped until there is a need for them, Hayashida said.

One of them — well No. 6 — is next to well No. 5, he said. He said there is a good chance that if it were opened now, it would contain the same DBCP level found in well No. 5.





DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANUA BLVD., RM. 3318, P.O. BOX 50007  
HONOLULU, HAWAII 96850

REGMNHX

JAN 11 1983

Ms. Gail Drake  
Hilliani Environmental Association  
P.O. Box 852  
Ewa Beach, Hawaii 96706

Dear Ms. Drake:

SUBJECT: Final Environmental Impact Statement For a 476-Acre Development  
at Hilliani Town, Hawaii --- HUD-R09-EIS-82-04F

Thank you for your review of the subject EIS.

We appreciate and share your concern for safe drinking water. However, we must take exception with several points raised in your letter:

1. "... increasing ... pesticide contamination...". Under direction of the U.S. Environmental Protection Agency (EPA), the State Department of Agriculture (DOA), with the cooperation of the State Department of Health (DOH) and the Board of Water Supply (BWS), has been testing water wells on Oahu, Maui, Molokai, and Lanai for DBCP and EDB since 1979. Some wells are monitored on a regular basis while others are spot checked. According to Dr. Lyle Wong (DOA Pesticides Branch), this data does not indicate that the concentrations of these pesticides are increasing in any well field. It is clear that these pesticides are often present where pineapple has been cultivated, but in most cases the level has been at or below the detection limit (0.05 to 0.02 parts per billion for DBCP). The concentration that led to the informal closure of Hilliani's Well #5 (0.09 pbb) has not been recorded again, even though the well has been carefully monitored since the closure. The level of DBCP in all of the Hilliani wells has been consistently at or below the detection limit, with no apparent trend, especially an upward one.

Ms. Gail Drake

Page 2

2. "... three-year study...". The DBCP and EDB monitoring program has already been pursued by the State for four years, resulting in the closure of two suspect wells (at Kuni and Hilliani) and more intensive monitoring of adjacent wells. We have no reason to believe that this on-going program is not an adequate safeguard. This is not to say that further knowledge of the fate of pesticides in the island's ground water is not essential. But not having expertise in this field, we will follow the lead of the EPA and the appropriate local agencies. Should they identify a health hazard from Hilliani's water supply, then the U.S. Department of Housing and Urban Development would not certify the project until safe water was available.

3. "... guarantee of safe adequate drinking water...". The DOH is presently investigating the question of just what a "safe" level of DBCP in drinking water might be. As you are undoubtedly aware, this is an extremely complex issue facing all agencies responsible for public health. Mr. Tom Arizumi (DOH Drinking Water Program) has indicated that the precautionary closure of Hilliani Well #5 will be maintained until more information on the health implications of DBCP is available.

Sincerely,

Robert K. Fukuda  
Area Manager, 9-18

RKF:dab

**OMPO**

January 17, 1983

Oahu  
Metropolitan  
Planning  
Organization



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., FLR. 3318, P.O. BOX 50007  
HONOLULU, HAWAII 96850

Room 1609  
1184 Bishop Street  
Honolulu, HI 96813  
(808) 548-2318  
(808) 548-2318

Mr. Frank Johnson  
Environmental Clearance Officer  
Department of Housing & Urban Development  
Honolulu Area Office  
300 Ala Moana Blvd., Room 3318  
P. O. Box 50007  
Honolulu, HI. 96850

Dear Mr. Johnson:

The OMPO staff has reviewed the draft EIS for Millilani Town. We regret not submitting comments earlier.

The traffic model used, as described in Appendix B, accounts only for the regional travel generated by the housing units and does not reflect regional travel that would be attracted to the 45 acre shopping center, the school or the park. Should further work be necessary in the final EIS, OMPO would be happy to assist the EIS preparer with Oahu-based factors for these land use types.

OMPO has recently updated its regional trip generation model using 1981 survey data for Oahu and this can be used to update the model's assumptions regarding number of workers per unit, autos per unit, and percent of travel during peak hour. Some preliminary figures for traffic generated from the proposed development indicate a higher number of autos during the peak period compared to those presented in the EIS.

The regional travel figures are important not only for the traffic impact but because they are used as input to the air quality and noise models.

The two negative conclusions of the EIS, namely congestion at the intersection of Meheula Parkway and Lanikuhana Avenue and access to H-2, suggest that mitigating measures are in order, particularly because DOT does not plan to build an H-2 interchange at Gentry-Waipio - or to widen Kamehameha Highway. Such measures would most likely include greater use of transit in the proposed project.

With regard to EPA's comment, we do not feel that there is any cumulative impact of the Millilani project and the Kakaako project. Cumulative impacts with Gentry-Waipio have been cited.

Sincerely,

*Cheryl D. Soon*  
Cheryl D. Soon  
Executive Director

CDS/lb

REGION 1A

JAN 21 1983

Ms. Cheryl D. Soon  
Executive Director  
Oahu Metropolitan Planning Organization  
1184 Bishop Street, Suite 1509  
Honolulu, Hawaii 96813

Dear Ms. Soon:

SUBJECT: Final Environmental Impact Statement For a 476-Acre Development at Millilani Town, Hawaii ---- HUD-RO9-EIS-82-04P

Thank you for your review of the subject EIS.

You are correct in stating that the traffic study did not include traffic from the park and school. However, the Town Center, which is a more significant source, was evaluated. The trip generation factor used was developed as part of the National Cooperative Highway Research Program and is recommended by the EPA [Reference 53 in the EIS]. This factor was 31.5 trips per day per 1,000 square feet gross floor area times a peak hour factor of 9.7%. While local generation factors might be more accurate, their use would not overcome the inaccuracy of the estimated floor area of the Town Center. Thus, the analysis in the Draft EIS [Appendix B] concluded that a further study was justified, pending a more definitive plan for the Town Center.

The residential trip generation factors were derived from a specific study of Millilani resident's driving habits, so they should be reliable. But granting that OMPO's factors are more accurate, it is unlikely that their use would alter the conclusion of this and previous traffic studies. Namely, if all residential zoned lands in the area are developed without additional roadway and on-ramp capacity, then congestion will reach unacceptable levels.

With regard to mitigating measures for traffic impacts, we encourage the expansion of transit services and ridership. However, at this point it appears that additional capacity would still be necessary. We therefore encourage the responsible State and County agencies to provide transportation facilities commensurate with their zoning.

Sincerely,

*Robert K. Fukuda*  
Robert K. Fukuda  
Area Manager, 9.15

RKF:dab

**HAWAIIAN ELECTRIC COMPANY**  
DIVISION OF HAWAIIAN ELECTRIC COMPANY

Box 2750 Honolulu, Hawaii 96840

October 28, 1982

ENV 2-1  
NV/G

RICHARD L. O'CONNELL, P.E.  
MANAGER, ENVIRONMENTAL DEPARTMENT  
LUNA 346 4400



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
HONOLULU AREA OFFICE  
300 ALA MOANA BLVD., RM. 3318, P.O. BOX 6007  
HONOLULU, HAWAII 96860

REG:HVX

IN REPLY REFER TO:  
9.1SS (Johnson)  
546-5583

10/28/82

Mr. Robert K. Fukuda  
Area Manager  
Department of Housing and  
Urban Development  
300 Ala Moana Boulevard, Room 3318  
P. O. Box 50007  
Honolulu, Hawaii 96850

Mr. Richard O'Connell, Manager  
Environmental Department  
Hawaiian Electric Company  
P.O. Box 2750  
Honolulu, Hawaii 96840

Dear Mr. O'Connell:

Subject: Draft Environmental Impact Statement for the Millilani  
Town, Inc., 476 Acre Development - HUD-R09-EIS-82-040

SUBJECT: Final Environmental Impact Statement For a 476-Acre Development  
at Millilani Town, Hawaii --- HOD-R09-EIS-82-04P

We have reviewed the above Environmental Impact Statement and  
offer the following comments:

Thank you for your review of the subject EIS. The information on  
relocating the power lines is appreciated.

1. It appears that the proposed project will not affect  
existing 138 kv circuits or the proposed Kahe 3rd 138 kv  
right-of-way.
2. There will be a need to relocate portions of Wai'alea-Millilani  
46 kv line and a 12 kv circuit. Castle and Cooke (the  
landowners) will have to provide HECO with a new alignment  
and easement coverage. At our last contact with Castle and  
Cooke, their desires were to place these circuits on one  
alignment as close to and paralleling the H-2 Freeway on the  
eastern side as practicable. This could have a negative  
visual impact for motorists driving the H-2.
3. The electric power consumed is not necessarily generated at  
Maiau.

Thank you for the opportunity to comment on this Environmental  
Impact Statement.

Sincerely,  
  
Richard L. O'Connell  
Manager, Environmental Department

JHP,Jr.:ca1

Sincerely,

Robert K. Fukuda  
Area Manager, 9.1S

RRF:dab