

PLANNING DEPARTMENT
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET
HONOLULU, HAWAII 96813

QUALITY
MAY 24 10:10

FRANK F. FASI
MAYOR



ROBIN FOSTER
CHIEF PLANNING OFFICER
ROLAND D. LIBBY, JR.
DEPUTY CHIEF PLANNING OFFICER
LW

May 20, 1994

Honorable Brian J. J. Choy, Director
Office of Environmental Quality Control
State of Hawaii
Central Pacific Plaza
220 South King Street, 4th Floor
Honolulu, Hawaii 96813

Dear Mr. Choy:

Negative Declaration for a Central Oahu
Development Plan Land Use Map Amendment from
Residential and Public Facility to Industrial for
Waikele Industrial Subdivision, TMK: 9-4-2: Por 4

The Planning Department has reviewed the subject application for a Development Plan Land Use Map amendment and Final Environmental Assessment (EA) for the subject project. We have determined that the subject project does not require the preparation of an EIS and are therefore filling this notice of Negative Declaration.

Attached are a summary of the proposal, four copies of the Final Environmental Assessment and the "DOCUMENT FOR PUBLICATION IN THE OEQC." Should you have questions, please call Lin Wong of our staff at 523-4485.

Sincerely,

Handwritten signature of Robin Foster in cursive.

ROBIN FOSTER
Chief Planning Officer

RF:js

Attachments

cc: Bert Hatton, Oahu Sugar Company
John Higham, Amfac/JMB, Inc.
Vincent Shigekuni, PBR Hawaii

63

1994-06-08-0A-FEA-Waikēle Industrial ^{JUN - 8 1994}
Subdivision

WAIKELE INDUSTRIAL SUBDIVISION
WAIPAHU • OAHU • HAWAII

TMK 9-4-02: 04 (por)

APPLICATION FOR
DEVELOPMENT PLAN AMENDMENT
AND
FINAL ENVIRONMENTAL ASSESSMENT

April 1994

WAIKELE INDUSTRIAL SUBDIVISION
W A I P A H U • O A H U • H A W A I I

TMK 9-4-02: 04 (por)

APPLICATION FOR
DEVELOPMENT PLAN AMENDMENT
AND
FINAL ENVIRONMENTAL ASSESSMENT

Prepared for:
Oahu Sugar Company, Limited

Prepared by:
PBR HAWAII

April 1994

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I
BACKGROUND INFORMATION

I. BACKGROUND INFORMATION

The proposed Waikele Industrial Subdivision is located north of the Oahu Sugar Mill in Waipahu (refer to Figure 1, Location Map). The subject site is accessed by Paiwa Street which connects directly onto the H-1 Freeway approximately one mile north of the property.

The area of application is currently designated "Residential" and "Public Facility" on the Central Oahu Development Plan Land Use Map (Figure 2, Central Oahu Development Plan Land Use Map). The area of application will be part of the larger proposed Waikele Industrial Subdivision Project which is adjacent to (north of) the existing Oahu Sugar Mill structure and already designated Industrial on the Central Oahu Development Plan Land Use Map (Figure 2). The area of application is presently vacant.

In order to implement the proposed action, the applicant requests an amendment to the Central Oahu Development Plan Land Use Map designations for the subject property from "Residential" and "Public Facility" to "Industrial" (refer to Figure 7, Proposed Amendment to the Central Oahu DP Land Use Map). As illustrated on Figure 3, the area of application is approximately 5.5 acres in size and is located entirely within TMK 9-4-02: 04 (portion of). The property is owned in fee by Oahu Sugar Company, Limited, which is a subsidiary of Amfac/JMB Hawaii, Inc. Oahu Sugar Company, Limited has authorized Amfac/JMB Hawaii, Inc. to implement a plan for the development of the property.

- 1.1 Project Name** Waikele Industrial Subdivision
- 1.2 Agent** Amfac/JMB Hawaii, Inc.
700 Bishop Street
20th Floor
Honolulu, Hawaii 96813
Attention: Mr. John Higham
(808) 543-8929
(Authorization is attached as Appendix A)
- 1.3 Applicant** Oahu Sugar Company, Ltd.
P.O. Box O
Waipahu, Hawaii 96797
Attention: Mr. Bert Hatton
(808) 543-8941
- 1.4 Landowner** Oahu Sugar Company, Limited
- 1.5 Location** Waipahu, Central Oahu (Figures 1 and 2)
- 1.6 Address** Not available.
- 1.7 TMK** 9-4-02: 04 (por.). Refer to Figure 3.
- 1.8 Area** Approximately \pm 5.5 acres.

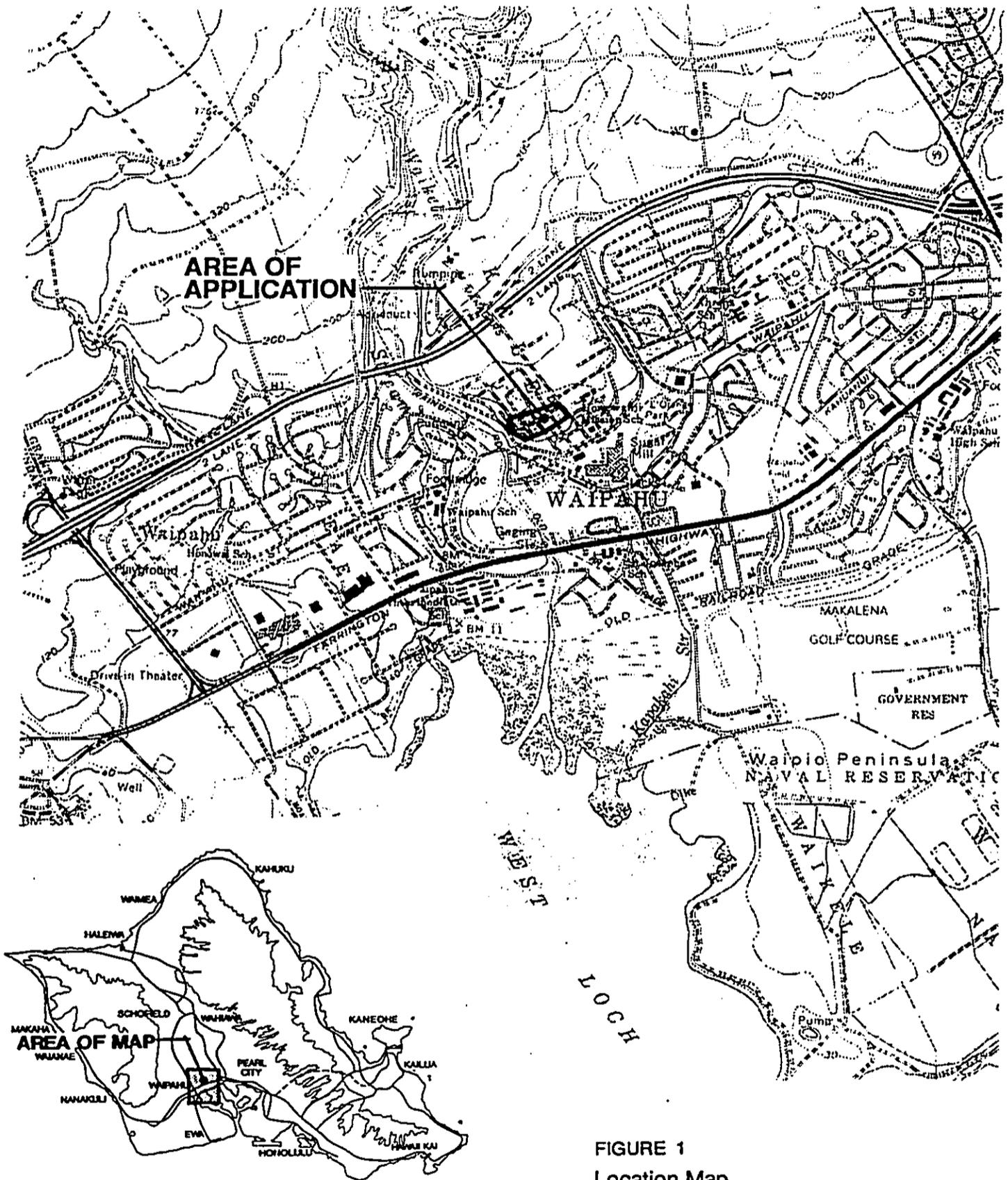
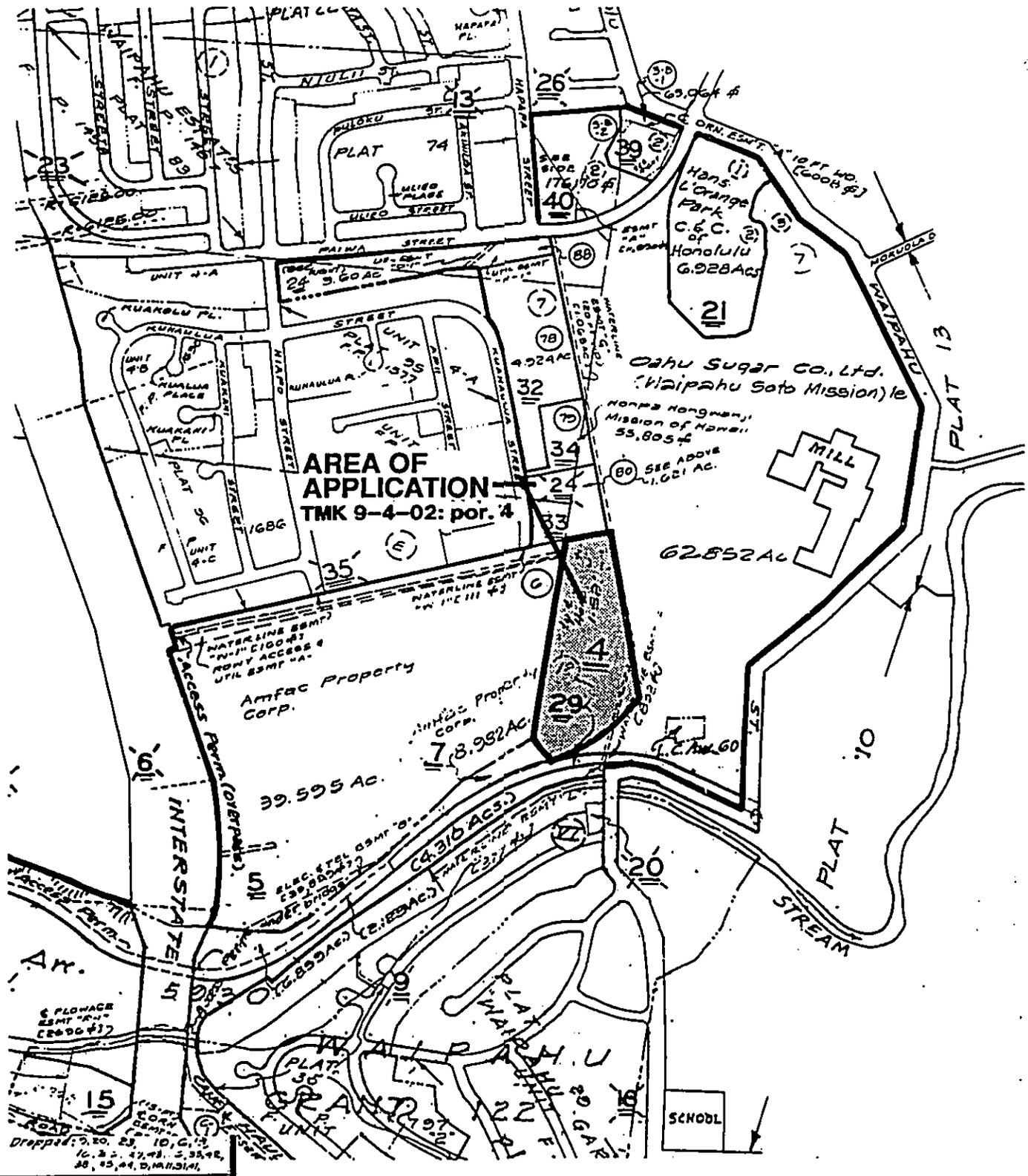


FIGURE 1
 Location Map
WAIKALE INDUSTRIAL SUBDIVISION





TAXATION MAPS BRANCH		
STATE OF HAWAII		
TAX MAP		
FIRST DISTRICT		
ZONE	SEC.	PLAT
9	4	02
CONTAINING PARCELS		
SCALE: 1 in = 600 ft.		
PRINTED APR 28 1992		

FIGURE 3
Tax Map Key
WAIKALE INDUSTRIAL SUBDIVISION



DATE: 01/07/94

II

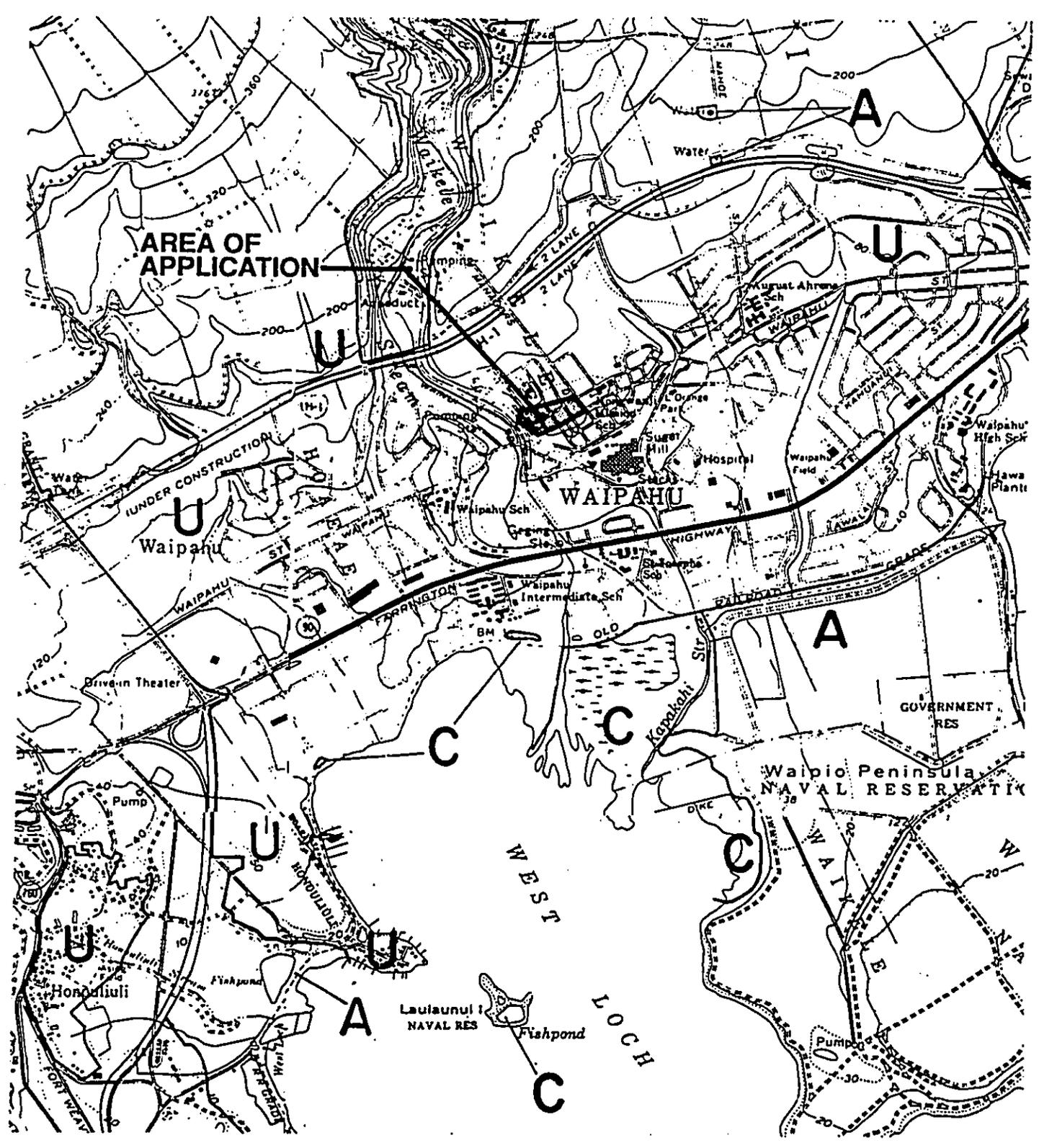
LAND USE INFORMATION

II. LAND USE INFORMATION

- | | | |
|-----|-------------------------------|--|
| 2.1 | State Land Use | Urban
(Figure 4) |
| 2.2 | Development Plan Land Use Map | Residential (± 4 acres)
Public Facility (± 1 acres)
(Figure 2) |
| 2.3 | Public Facilities Map | No Improvements are located on the Area of
Application (Figure 5) |
| 2.4 | Zoning | R-5 Residential (Figure 6) |
| 2.5 | Request | |

In accordance with the Rules for Processing Amendments to the Development Plans of the City and County of Honolulu, the applicant is requesting an amendment to the Central Oahu Development Plan Land Use Map to reclassify approximately ± 5.5 acres from the current "Residential" and "Public Facility" designations to "Industrial". Figure 7, Proposed Amendment to the Central Oahu DP Land Use Map, illustrates this request and shows the relationship to the proposed Waikele Industrial Subdivision which is already designated "Industrial" on the Central Oahu Development Plan Land Use Map.

The entire subject property proposed for the Development Plan "Industrial" designation, is classified as "Urban" by the State Land Use Commission (refer to Figure 4, State Land Use Classification).



LEGEND

U URBAN

A AGRICULTURE

C CONSERVATION

Source: State Land Use Commission

FIGURE 4
State Land Use Classification
WAIKELE INDUSTRIAL SUBDIVISION

0 500 1000 2000
 FEET

PBR HAWAII

DATE: 01/07/64

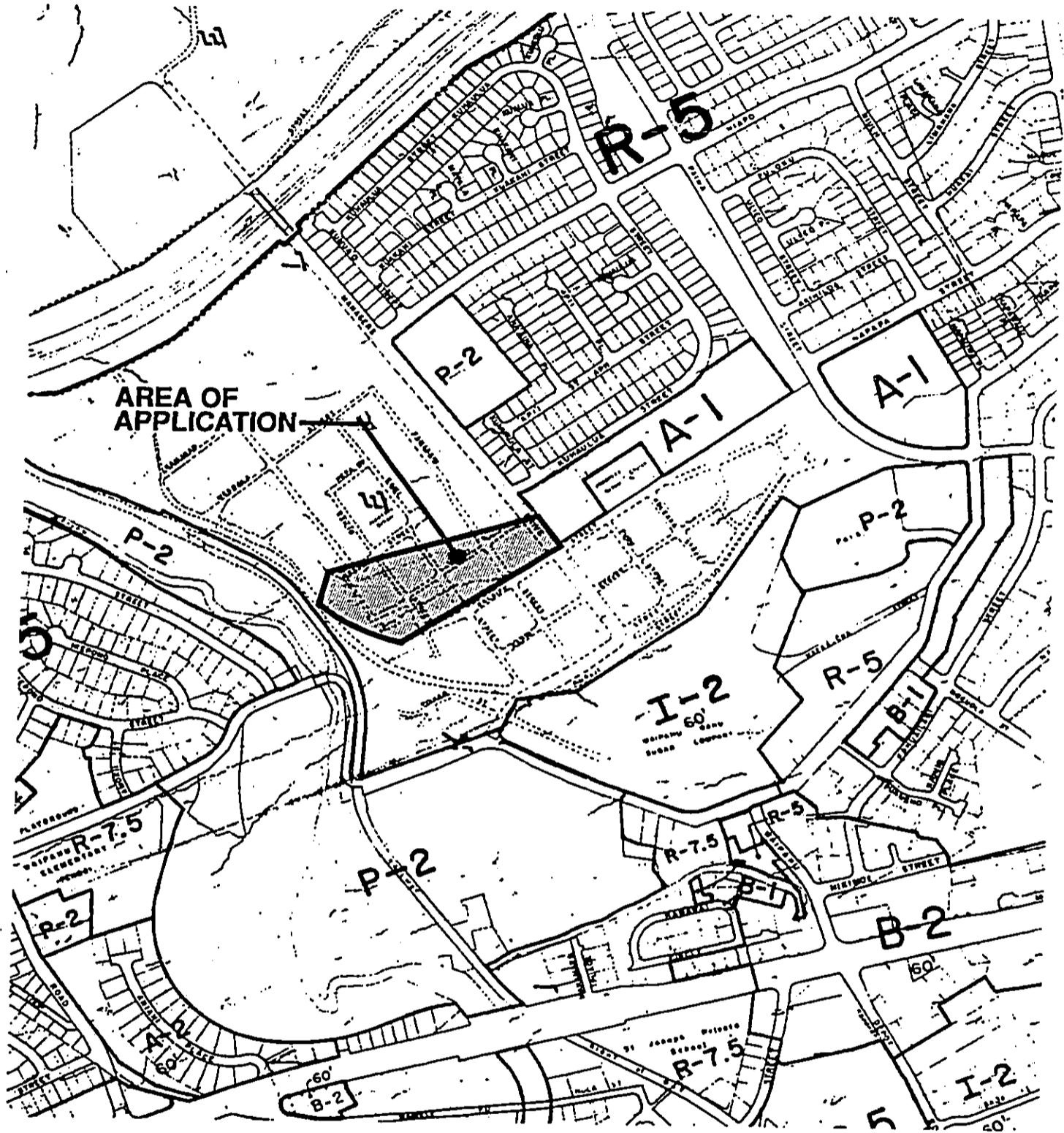
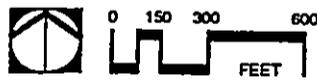


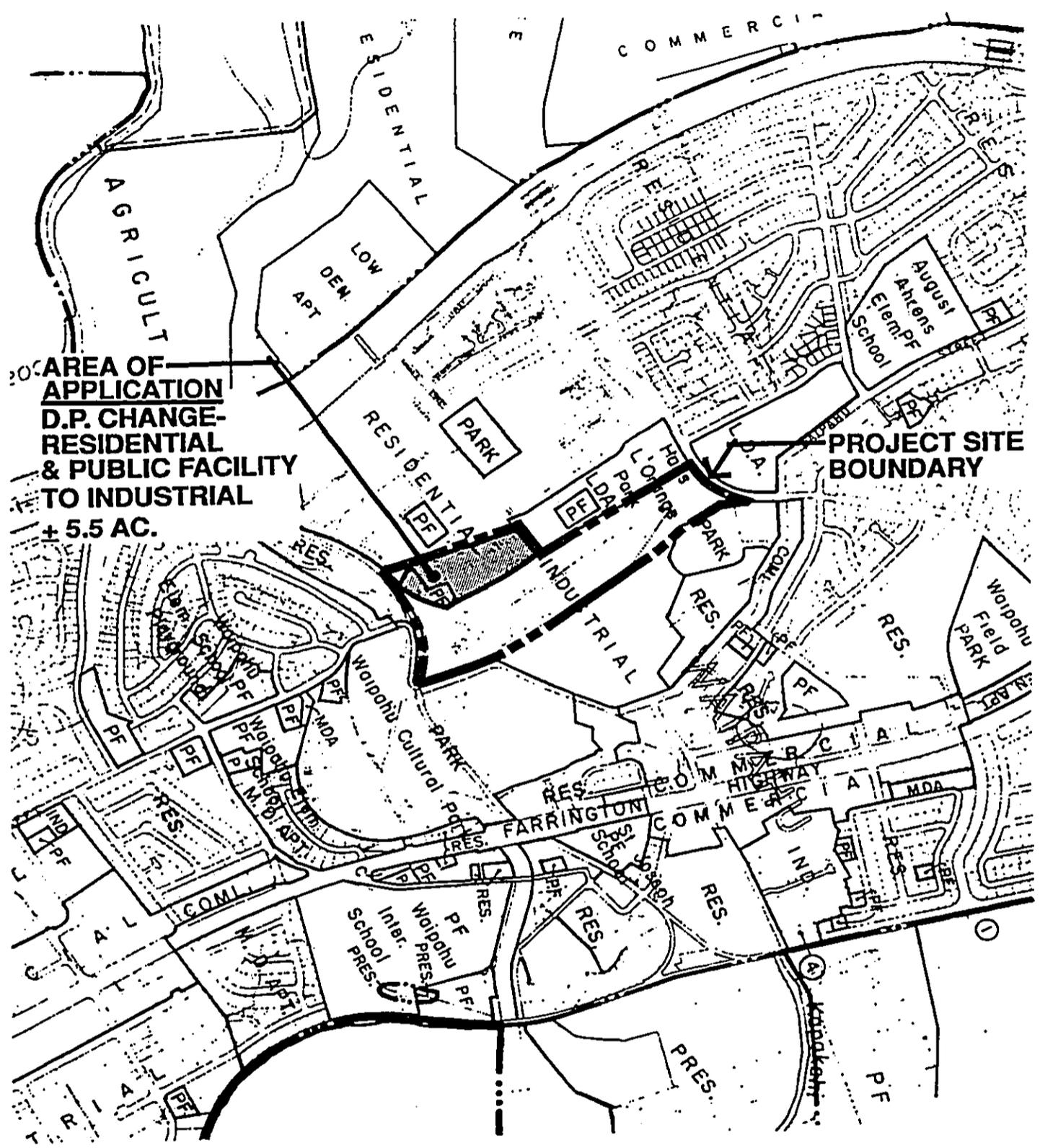
FIGURE 6
Land Use Ordinance Designation
WAIKELE INDUSTRIAL SUBDIVISION

Source: Department of Land Utilization - City & County of Honolulu



DATE: 01/07/84





**AREA OF APPLICATION
D.P. CHANGE-
RESIDENTIAL
& PUBLIC FACILITY
TO INDUSTRIAL
+ 5.5 AC.**

**PROJECT SITE
BOUNDARY**

LEGEND

- | | | | |
|--|--------------------------|--|--|
| | PRESERVATION AGRICULTURE | | COMMERCIAL INDUSTRIAL |
| | RESIDENTIAL APARTMENT | | PARKS AND RECREATION |
| | LOW DENSITY | | MILITARY |
| | MEDIUM DENSITY | | PUBLIC FACILITIES |
| | HIGH DENSITY | | RESIDENTIAL EMPHASIS MIXED USE |
| | RESORT | | COMMERCIAL EMPHASIS MIXED USE |
| | | | COMMERCIAL-INDUSTRIAL EMPHASIS MIXED USE |
| | | | DP BOUNDARY |
| | | | STATE LAND USE BOUNDARY |
| | | | MILITARY BOUNDARY |

Source: Planning Department - City & County of Honolulu

FIGURE 7
Proposed Amendment to the
Central Oahu D.P. Land Use Map
WAIKALE INDUSTRIAL SUBDIVISION



DATE: 01/07/04

III

DESCRIPTION OF PROPERTY

III. DESCRIPTION OF THE PROPERTY

3.1 Existing Use

The area of application is essentially vacant and contains no structures or other improvements.

3.2 Surrounding Uses

The area of application is bordered on the south (makai) by the Oahu Sugar Mill and operations yard. To the west is Waipahu Street. Immediately north is the site of the City's proposed 500-unit Manager's Drive affordable housing project. To the east is the City's Jack Hall Memorial rental housing project.

3.3 Topography

The area of application is roughly trapezoidal in shape. It was once part of a sugar plantation camp that had been razed. It is mostly flat, and being unused, is now covered with overgrown vegetation. The topography of the area of application and the surrounding vicinity is shown on Figure 1.

3.4 Soils

Soils in Hawaii are commonly rated in terms of agricultural suitability using three classification systems: 1) a Detailed Land Classification; 2) Agricultural Lands of Importance to the State of Hawaii (ALISH); and 3) USDA Soil Survey. The USDA Soil Survey provides the best assessment of suitability for building foundations associated with industrial development.

The USDA Soil Survey classifies the site as containing Waipahu silty clay (WzC, WzB) soils which are characterized as generally level soils in areas with rainfall of 25 to 35 inches annually. Runoff is medium, and the erosion hazard moderate. These classifications are depicted on Figure 8.

As shown on Figure 9, all of the subject property is classified as "urban" by the Land Study Bureau (LSB). This rating indicates that the property is already urbanized and is generally not suitable for agricultural cultivation. According to the Agricultural Lands of Importance to the State of Hawaii (ALISH) map, none of the soils on the site are categorized as "Prime", "Unique" or "Other Important" agricultural lands (Figure 10).

3.5 Slope

The ground surface generally slopes in the southerly (makai) direction. The site generally has average slopes of 1 to 7 percent. The slope of the area of application and the surrounding vicinity is shown on Figure 1.

3.6 Boundaries

The area of application is roughly delineated by the Oahu Sugar Mill, Waipahu Street, the City's proposed Manager's Drive affordable housing project, and Jack Hall Memorial Housing.

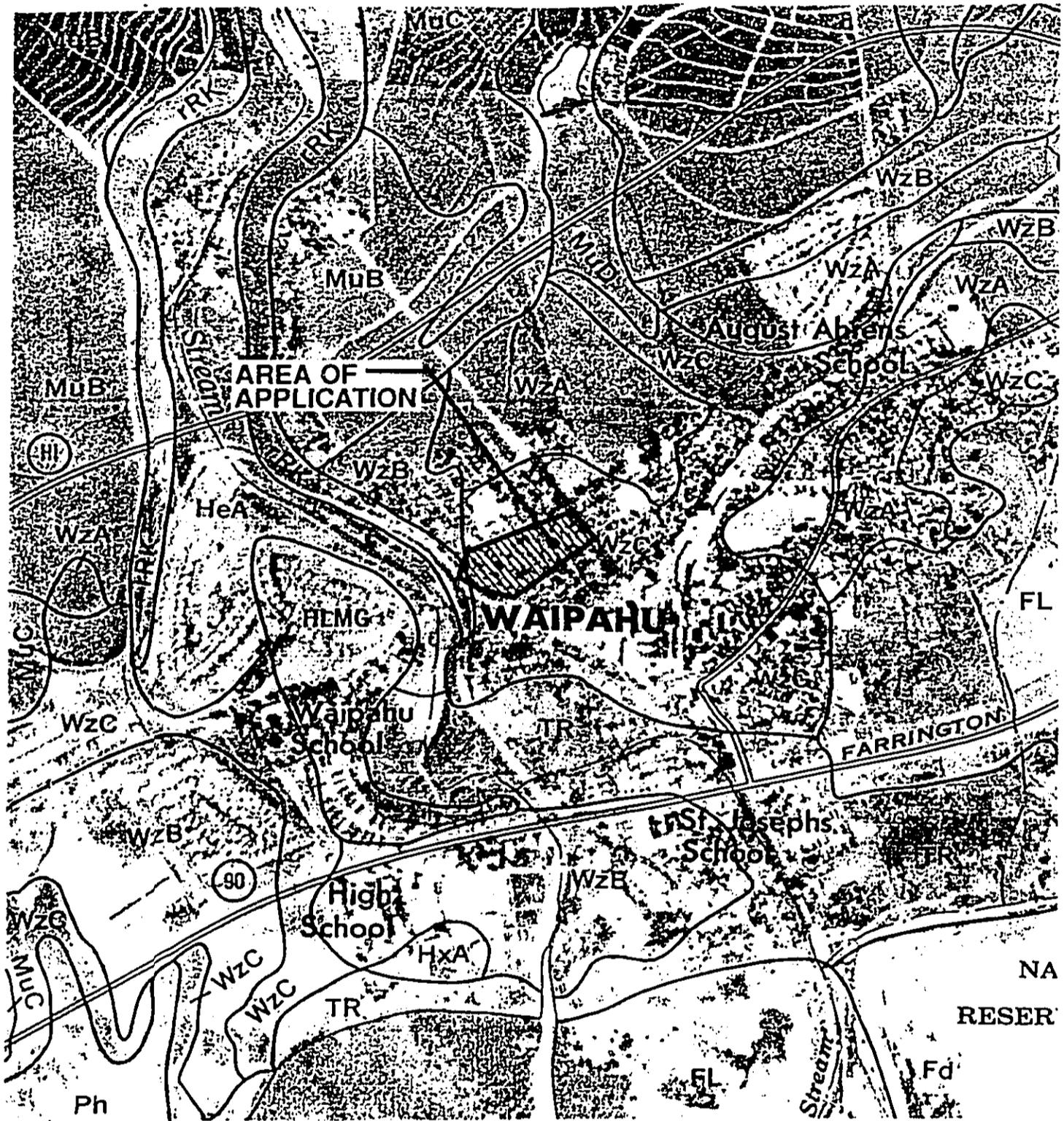
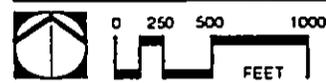


FIGURE 8
Soil Survey Classification
WAIKELE INDUSTRIAL SUBDIVISION



Source: U.S. Dept. of Agriculture, Soil Conservation Service
& Univ. of Hawaii, Aug. 1972

IV

DEVELOPMENT PROPOSAL

IV. DEVELOPMENT PROPOSAL

4.1 Proposed Use

The project objectives are as follows:

- ▶ To optimize the use of the Waipahu industrial area as an important employment center in close proximity to existing and proposed affordable residential development; and
- ▶ To provide for site improvements and facilities, as necessary, to incorporate the area of application into the existing industrial area associated with the Oahu Sugar Mill site.

Inasmuch as the area of application is a part of a larger parcel which is mostly designated as Industrial on the Central Oahu Development Plan, the requested Development Plan Amendment meets all applicable General Plan Objectives and Policies, and conforms with the intent of the Central Oahu Development Plan.

Final lot sizes are unknown, but at this time, it is tentatively planned that lots will range in size from 0.5 acre to 5 acres each. Actual lot sizes will be determined upon market demand prior to actual subdivision. The proposed industrial subdivision will be accessed by a central collector roadway, which will connect to Paiwa Street. Improvements will consist of underground utilities, landscaping, paved roadways, and coordinated signage. Water will be transported to the site via an existing 12-inch waterline on Paiwa Street. Wastewater will be collected by an 8-inch sewerline by means of gravity flow to an existing 15-inch sewer line on Waipahu Street. Public facilities and services are presently adequate to service the project.

The proposed project amenities will consist of a project entry feature with signage and landscape buffers. Implementation of design guidelines will ensure consistent application of building materials, colors, signage, etc., by future property owners.

4.2 Timetable

Construction of the project improvements would begin within one year after rezoning is completed and subdivision and grading permits are issued. Based on the timing involved for the proposed Development Plan Amendment, rezoning, subdivision, and grading permit processing, construction is anticipated to begin in late 1995. Site work construction should require 6 to 12 months with completion of major infrastructure improvements anticipated by 1996.

4.3 Project Cost

Infrastructure cost is estimated at approximately \$957,000.

4.4 Project Need

As recently announced, continued financial losses has forced the closure of the Oahu Sugar Company, Limited. Shutdown is anticipated in late 1994 or early 1995. This closure represents the loss of jobs and the shutdown of the Oahu Sugar Mill sugar refining operations in Waipahu.

Consequently, it is vital that opportunities for new employment be created as soon as possible to mitigate the economic and social impact of the closing of Oahu Sugar Mill.

There is anticipated to be a strong demand for industrial land in the vicinity of the project. In general, there is a short supply of industrial lands and space on Oahu, which worsens as industrial areas, such as Kakaako, are being redeveloped for residential and commercial uses. With residential (and accompanying commercial) growth directed towards Ewa and Central Oahu, the area of application is uniquely sited to satisfy potential growth in industrial demand in both areas. A study of industrial supply and demand is attached to this report as Appendix E.

V

**CONFORMANCE TO FEDERAL, STATE
AND CITY PLANS AND PROGRAMS**

V. CONFORMANCE TO FEDERAL, STATE AND CITY PLANS AND PROGRAMS

5.1 Approvals Needed

The following is an approximate list of major approvals and permits required for the implementation of the proposed project.

<u>Permit or Approval</u>	<u>Authority</u>
Development Plan Amendment	City Council
Rezoning	City Council
Subdivision Approval	Department of Land Utilization
Grading Permit	Department of Public Works and
NPDES Permit	Department of Health

5.2 Federal

Not applicable.

5.3 State

5.3.1 The Hawaii State Plan

The Hawaii State Plan serves as a guide for future long term development of the State, including identification of goals, objectives, policies and priorities for the State; a basis for determining priorities and allocating limited resources; and coordination of State and County Plans. In addition to the State Plan, various functional plans have been developed that set forth the policies, statewide guidelines and priorities within specific fields of activities.

The Hawaii State Plan (Chapter 226, Hawaii Revised Statutes), establishes a set of goals, objectives and policies that are to serve as long-range guidelines for the growth and development of the state. The Plan is divided into three parts. Part I (Overall Theme, Goals, Objectives and Policies); Part II (Planning, Coordination and Implementation); and Part III (Priority Guidelines).

The following sections of the Hawaii State Plan are directly applicable to the proposed project:

226-12 Objectives and Policies for the Physical Environment - Scenic, Natural Beauty and Historic Resources.

Objectives:

(a) Planning for the State's physical environment shall be directed towards achievement of the objective of enhancement of Hawaii's scenic assets, natural beauty, and multi-cultural/historical resources.

Policies:

(b)(3) Promote the preservation of views and vistas to enhance the visual and aesthetic enjoyment of mountains, ocean, scenic landscapes, and other natural features.

(b)(5) Encourage the design of developments and activities that complement the natural beauty of the islands.

Response: Presently, the area of application contains no significant natural features, and is essentially vacant and overgrown with scrub vegetation. Visually, the site does not contain features requiring protection or special treatment. As such, the proposed project will be planned and designed to maintain and/or enhance those features that do exist or can be improved upon. The proposed character of the project will be designed to complement the surrounding residential community with landscaping, fencing, and other barriers or buffers separating industrial and residential land uses. Design guidelines will be established by the applicant to further regulate the use of building materials, size of structures, colors, landscaping, etc. These amenities are proposed to mitigate visual and aural impacts on surrounding residential areas.

No significant historic resources or archaeological sites are known to exist on the area of application, however, should any historical/cultural or archaeological sites be uncovered during the site preparation phase of project development, the Historic Sites Division of the Department of Land and Natural Resources will be notified, and the site will be treated in accordance with applicable requirements and an accepted archaeological mitigation plan.

226-13 Objectives and Policies for the Physical Environment - Land, Air and Water Quality.

Objectives:

(a) Planning for the State's physical environment with regard to land, air and water quality shall be directed towards achievement of the following objectives:

(a)(1) Maintenance and pursuit of improved quality in Hawaii's land, air and water resources.

(a)(2) Greater awareness and appreciation of Hawaii's environmental resources.

Policies:

(b)(2) Promote the proper management of Hawaii's land and water resources.

(b)(3) Promote effective measures to achieve desired quality in Hawaii's surface, ground and coastal waters.

(b)(5) Reduce the threat to life and property from erosion, flooding, tsunamis, hurricanes, earthquakes, volcanic eruptions, and other natural or man-induced hazards and disasters.

(b)(6) Encourage design and construction practices that enhance the physical qualities of Hawaii's Communities.

Response: The proposed project will be planned and designed in an environmentally compatible and beneficial manner that would foster the recognition, importance, and value of the area's land, air and water resources. Located within a highly urbanized area, the proposed project will not negatively impact the adjoining heavy industrial land uses and will be visually buffered from adjoining residential areas with landscaping.

The site is not subject to unusual hazards associated with erosion, flooding, tsunami, hurricanes, earthquakes, volcanic eruptions, and other natural or man-induced hazards and disasters. No impacts on ground water are anticipated. All surface water runoff and wastewater will be collected and treated in accordance with Federal, State, and City ordinances and regulations. Design and construction of project improvements will take advantage of the site's existing aesthetic potential by enhancing the physical attributes of the area compared to the property's current condition.

226-16 Objectives and Policies for Facility Systems - Water

Objectives:

(a) Planning for the State's facility systems with regard to water, shall be directed toward achievement of the objective of the provision of water to adequately accommodate domestic, agricultural, commercial, industrial, recreational and other needs within resource capacities.

Policies:

(b)(1) Coordinate development of land use activities with existing and potential water supply.

(b)(3) Reclaim and encourage the productive use of runoff water and waste water discharges.

(b)(4) Assist in improving the quality, efficiency, service and storage capabilities of water systems for domestic and agricultural use.

Response: All water for the project will be drawn from the existing Board of Water Supply distribution system. All Department of Health standards for surface drainage, erosion control, water transmission, and the collection, treatment and disposal of wastewater, will be implemented as applicable.

5.3.2 State Land Use Law, Chapter 205

The entire subject property is classified by the State Land Use Commission as "Urban". As such, development of the proposed industrial subdivision would conform to Chapter 205, HRS, and the State of Hawaii Land Use Commission Rules (Hawaii Revised Statutes, 205; Hawaii Administrative Rules, Title 15, Subtitle 3, Chapter 15). As provided for in the Land Use Commission rules, Section 15-15-24, "Permissible uses within the "U" urban district, any and all uses permitted by the counties, either by ordinances or rules shall be allowed within this district, subject to any conditions imposed by the commission pursuant to Section 205-4, HRS." Therefore, the proposed industrial development would be in conformance with all applicable provisions of Chapter 205, HRS.

5.3.3 Coastal Zone Management Act

The objectives of the Hawaii Coastal Zone Management (CZM) Act as set forth in Chapter 205A, Hawaii Revised Statutes, applies to the protection and maintenance of valuable coastal resources and the establishment of Special Management Areas (SMA), however, the area of application is located outside of the SMA.

The proposed project conforms to the applicable CZM objectives as follows:

- A) Erosion control measures will be undertaken during project construction to mitigate the potential impact of soil erosion during intense storm events. Design of project drainage systems will follow all design standards of the City and County of Honolulu to ensure the safe conveyance and discharge of storm water runoff.
- B) No development or construction will occur within the 100-year flood hazard zone as identified in the Flood Insurance Rate Maps.

It is anticipated that none of the proposed improvements are in conflict with any plans, programs, or other activities of the State Coastal Zone Management Program.

5.4 City and County of Honolulu

5.4.1 General Plan

The General Plan for the City and County of Honolulu has designated the subject property as part of the "Central Oahu Development Plan Area".

Development of the proposed property for industrial uses would directly fulfill some of the objectives and policies of the City's General Plan. The project's relationship to these General Plan Policies and Objectives are described as follows.

Population, Objective B - To Plan for Future Population Growth.

Comment: Presently, existing and planned large-scale housing development projects within the Central Oahu Development Plan area are contributing to a population growth rate which may exceed the General Plan's population guidelines for this area. The proposed project will not in itself generate population growth but provide potential employment opportunities to replace those that will be lost in the closing of Oahu Sugar Company, Limited's sugar cultivation and processing activities.

Population, Objective B, Policy 1: Allocate efficiently the money and resources of the City and County in order to meet the needs of Oahu's anticipated future population.

Comment: The applicant or designee will pay for all improvements on-site related to the delivery of water, collection of wastewater and collection of storm runoff for the project. City and County funds will not be diverted from the existing capital improvements program in order to accommodate this specific project. In addition, higher property values and expansion of employment opportunities will generate new sources of direct and indirect revenue for the City and County of Honolulu. Once these new revenues become available, they will be placed into the City's General Fund and allocated by the City for capital improvements as appropriate to "meet the needs of Oahu's anticipated future population" on an island-wide basis.

Population, Objective C - To establish a pattern of population distribution that will allow the people of Oahu to live and work in harmony.

Comment: The proposed project would provide significant employment opportunities in close proximity to established residential neighborhoods. The potential population growth lost from redesignation of the area of application from "Residential" to "Industrial", can be reallocated to other areas within the Central Oahu Development Plan area.

Consequently, approval of the requested amendment to the Central Oahu Development Plan Land Use Map will allow many future employees to work in a quality environment close to their families and neighborhoods in Waipahu and other master planned communities in Central Oahu and Ewa. This harmonious relationship between home and work will significantly improve the quality of life for many residents, while reducing the need to commute many miles between work and home.

Population, Objective C, Policy 2: Encourage development within the secondary urban center at Kapolei and the Ewa and Central Oahu urban-fringe areas to relieve developmental pressures in the remaining urban-fringe and rural areas, and to meet housing needs not readily provided in the primary urban center.

Comment: The proposed project will help fulfill the preceding policy by providing employment opportunities for existing residents of the Waipahu community and encouraging residential development within Oahu's "secondary urban center". It is important that existing and new employment centers, such as those proposed proximate to residential areas, also be allowed to complement and support future development and

employment as it occurs in the future. The area of application is located near an established employment center, Oahu Sugar Mill, and represents an example of "retooling" or diversifying the established industrial-type economic activity, which is outdated or in a shrinking market, with other forms of industrial activities, for which there is unmet demand.

Population, Objective C, Policy 3: Manage physical growth and development in the urban-fringe and rural areas so that:

- a. An undesirable spreading of development is prevented; and***
- b. Their population densities are consistent with the character of development and environmental qualities desirable for such areas.***

Comment: The proposed project complies with the above policy by not directly contributing to residential growth in the Central Oahu Development Plan area. Rather, the proposed Development Plan Amendment would permit development that could be considered as an "in-fill" of an existing urban area in a manner consistent with the City's General Plan, and adjacent land uses. As such, undesirable spreading of development would not occur, contiguous industrially-designated land would be more efficiently utilized, and potential population densities in the area would be reduced or remain essentially unchanged.

The environmental quality of the area of application would be consistent with environmental impacts typically associated with light industrial uses. While the proposed land use would be light industrial, the use would be similar, but less environmentally intrusive (noise, odors) than past industrial uses that occurred on the subject property (processing sugar cane at Oahu Sugar Mill).

Population, Objective C, Policy 4: Seek a year 2010 distribution of Oahu's residential population which would be in accord with the following:

Central Oahu - 14.9 to 16.5 percent of Year 2010 island wide population.

Comment: As previously described, the proposed project will not directly contribute to population growth in the Central Oahu Development Plan area. However, if the 5.5 acre property were developed to the maximum densities permitted by the existing R-5 Residential zoning (approximately 38 single-family units or 51 duplex lots, average 44 units), the site could be populated by 140 to 180 residents.

By removing the population potential of the existing residential designation for the area of application (5.5 acres), a potential population of 140 to 180 persons from the Central Oahu Development Plan area would also be removed.

Economic Activity, Objective A - To promote employment opportunities that will enable all the people of Oahu to attain a decent standard of living.

Comment: The proposed project will provide both temporary and long-term employment opportunities generated by the construction of the project and permanent job creation from industries that locate within the area of application.

According to 1992 Census data for the Waipahu CDP), many residents are employed in the retail trade, health/education/professional and personal/entertainment/recreation industries. The proposed light industrial subdivision will create employment in manufacturing, wholesale and services, with average wages estimated at \$28,314 per employee in 1993 dollars.

Economic Activity, Objective G, Policy 2: Permit the moderate growth of business centers in the urban-fringe areas.

Comment: The proposed project will allow both new and established industrial enterprises to relocate or expand within a master planned light industrial area. The project's location proximate to existing residential land uses outside of Oahu's central urban area, will also mitigate island-wide traffic related impacts and promote greater efficiency in the use of existing infrastructure. Employees could live in Waipahu proximate to their jobs, existing shopping, schools, recreational facilities and other public services and facilities.

Natural Environment, Objective A - To protect and preserve the natural environment of Oahu.

Natural Environment, Objective A, Policy 1: Protect Oahu's natural environment, especially the shoreline, valleys and ridges, from incompatible development.

Comment: The requested amendment to the Central Oahu Development Plan Land Use Map is compatible with the above objectives and policy by proposing an intensification of land use within an urban infill area, and an expansion of industrial use on a parcel that has historically been used for heavy industrial-type activities (Oahu Sugar Mill). The area of application has already been disturbed and does not contain shoreline, valleys or ridges. By allowing "in-fill" projects on sites previously used for urban purposes, development pressures on presently undeveloped land will be subsequently reduced.

Natural Environment, Objective B - To preserve and enhance the natural monuments and scenic views of Oahu for the benefit of both residents and visitors.

Natural Environment, Objective B, Policy 2: Protect Oahu's scenic views, especially those seen from highly developed and heavily travelled areas.

Comment: The proposed project will not affect the scenic views of the ocean or any ridgelines from the H-1 Freeway or other heavily travelled roadways in the area. The visual character of the area of application will change from one that is currently vacant

to a light industrial subdivision, but its appearance will be largely mitigated by landscaping and implementation of design guidelines.

Physical Development and Urban Design, Objective A - To coordinate changes in the physical environment of Oahu to ensure that all new developments are timely, well designed and appropriate for the areas in which they will be located.

Comment: The proposed project will be designed to be compatible with surrounding land uses with the installation of infrastructure improvements, the inclusion of landscape buffers, and the establishment of design guidelines.

Physical Development and Urban Design, Objective A, Policy 2: Coordinate the location and timing of new development with the availability of adequate water supply, sewage treatment, drainage, transportation and public safety facilities.

Comment: It is anticipated that there will be adequate water supply, sewage treatment, drainage, transportation and public safety facilities to service the project.

Physical Development and Urban Design, Objective A, Policy 4: Require new developments to provide or pay the cost of all essential community services, including roads, utilities, schools, parks and emergency facilities that are intended to directly serve the development.

Comment: The applicant or its designee will pay for all costs involved in connecting to the City's water, wastewater and drainage systems. Businesses within the proposed light industrial subdivision will pay for all usual and customary water and sewer user fees. All other community services will be paid for by County real property taxes and State excise taxes generated by the project.

5.4.2 Central Oahu Development Plan

There are essentially four elements to each of Oahu's Development Plans (DP): 1) Common Provisions that apply to all Development Plan areas, 2) Special Provisions which are unique to each Development Plan Area, 3) Land Use Map(s) which define each Development Plan area and distribute the various DP land uses consistent with General Plan objectives and policies; and 4) Public Facilities Maps that identify planned public and private facilities and associated infrastructure. Figures 2 and 6 show the Central Oahu Development Plan Land Use and Public Facilities Maps respectively as they relate to the area of application.

5.4.2.1 Development Plan Common Provisions

The Development Plan Common Provisions define the following administrative and functional categories for all Development Plans: 1) definitions of terms, 2) procedures for implementation of the Land Use and Public Facilities Maps, 3) establishes fifteen different land use categories, 4) establishes General Urban Design Principles and Controls, 5) General Principles and Controls for Parks, Recreation and Preservation

Areas, 6) Identification of Areas, Sites and Structures of Historical Significance, 7) Identification of Public Thoroughfares, Highways, and Streets, 8) Identification of Public Buildings, Public or Private Facilities for Utilities, Terminals, and Drainage, 9) provisions for Sequencing Public Facilities, 10) criteria for identifying the Social Impact of Development, 11) Social Impact Management System, 12) Certificate of Compliance with the Social Impact Factors, 13) Amendment Procedures (of the Development Plans), 14) provisions for the Development Plan Status Review, and 15) additional application requirements for Golf Course Development.

The proposed Development Plan Amendment from Residential and Public Facility to Industrial is consistent with the Development Plan Common Provisions as follows:

Section 24-1.4 General Urban Design Principles and Controls

1. ***Public Views*** - Public views include views along streets and highways, mauka-makai view corridors, panoramic, and significant landmark views from public places, views of natural features, heritage resources, and other landmarks, and view corridors between significant landmarks.

Comment: The proposed project will not affect any significant public views, mauka-makai view corridors, views of significant landmarks or natural resources, or ridgeline views from outside or within the project boundaries. Similarly, views of the ocean and mountain ranges are generally not available from the area of application or surrounding residential areas. The transitional and standard height requirements set-forth by the LUO will preserve public views of the distant Waianae Mountains. This will ensure that the above noted view planes are maintained as applicable.

2. ***Open Space*** - Open space areas consist of, but are not limited to, the ocean, beaches, parks, plazas, institutional properties with park-like grounds, streams, inland bodies of water, significant land forms, golf courses, cemeteries and agricultural and preservation lands.

Comment: The requested amendment to the Central Oahu Development Plan Land Use Map will not affect the enjoyment or use of any open space areas described above.

3. ***Vehicular and Pedestrian Routes*** - *Landscaping shall be provided along major vehicular arterials and collector streets as a means to increase the general attractiveness of the community and the enjoyment of vehicular travel for visitors and residents. Landscaping controls shall be established for ground level parking areas in order to provide pleasing environments and to help minimize the visual dominance of paved surfaces.*

Comment: The proposed project will be landscaped along the project boundaries to buffer and soften views to the project from surrounding areas and to minimize the visual dominance of paved surfaces.

4. *General Height Controls*

Comment: All structures within the project area will conform to maximum allowable heights as defined in the Special Provisions, the LUO and the zoning map.

5. *Energy Efficiency in Developments*

Comment: The project is ideally located to promote energy efficiency in at least two ways: 1) delivery of goods and services produced in the project to Central Oahu and Ewa would be closer than a similar project located in Kakaako or the Honolulu waterfront area, representing reduced travel and gas savings; and 2) similarly, reduced travel will be experienced by employees residing in the area, compared to if they were to commute to Kakaako, the Honolulu waterfront or Campbell Industrial Park.

Section 24-1.5 General Principles and Controls for Parks, Recreation and Preservation Areas

1. *Parks and Recreation Areas*

Comment: The proposed project will have no impact on Hans L'Orange Park or Waipahu Cultural Gardens.

2. *Preservation Areas*

Comment: There are no Preservation areas designated within the area of application.

Section 24-1.9 Sequencing of Public Facilities

The primary function of the Development Plan Public Facilities Map is to plan for the sequencing of future public facilities and infrastructure. As previously described, roadway, utilities, and drainage improvements are planned for Waipahu on the Central Oahu Development Plan Public Facilities Map. All improvements intended to directly serve only the development will be provided by the applicant or its designee. All improvements will be constructed in accordance with all applicable subdivision and infrastructure design standards.

Section 24-1.10 Social Impact of Development

1. *Social Impact Factors*

Comment: The potential social impacts that could result from the proposed project are expected to be generally positive. The compatibility of industrial development adjacent to existing industrial and residential land uses, and creation of jobs, will enhance the overall socio/economic condition of the community. As such, the viability of existing residential neighborhoods and commercial areas will be enhanced. This is especially critical considering the announced closing of the Oahu Sugar Mill operations.

The following "social impact factors" identified by Section 24-1.10 are applicable as follows:

- a) **Demographic** - Development of the project will not directly increase residential or visitor populations. New employment opportunities will be created by providing a more diverse economic base. Opportunities to live and work within the same community will be enhanced. This will strengthen the community's cultural foundation and stability. The character of the neighborhood (industrial, commercial and commercial), which is centered around the industrial activities of the Oahu Sugar Mill, will not be significantly altered.
- b) **Economic** - The area of application is presently vacant and provides revenue only in the form of real property taxes. Development of the area of application for the proposed industrial use will increase public revenues through income taxes collected from jobs created during construction and operation, excise taxes for construction materials and for goods and services generated by the project, and increased real property taxes as a reflection of increased property value.
- c) **Housing** - Employment opportunities and income generation potential afforded by the project will make home ownership more attainable to those employed in the construction and operation of the project.
- d) **Public Services** - Infrastructure improvements, such as for water, sewer and drainage will be paid for by the applicant or its designee. Usual and customary water and sewer fees will be paid for by various users within the project. There will be an occasional and unavoidable demand for public services such as police and fire protection, but it is anticipated that the increased public revenues that would be generated from the project will adequately reimburse these public sector expenditures.
- e) **Physical/Environmental** - The requested amendment to the Central Oahu Development Plan Land Use Map represents an infill use of urban lands, minimizing physical and environmental impacts on undeveloped areas.

5.4.2.2 Central Oahu DP Special Provisions

Section 24-5.1 Area Description

The Special Provisions of the Central Oahu Development Plan state that physical growth and development in the urban-fringe area of Oahu (including Central Oahu) should be managed such that:

- a. An undesirable spreading of development is prevented, and;
- b. The proportion of the island-wide resident population remains unchanged.

Further, the Special Provisions note that in Waipahu, "most new residential development

will occur in areas mauka of the H-1 Freeway while the area makai of the freeway can be characterized as a basically stable community with residential development occurring mauka of the Waipahu Sugar Mill".

Comment: The requested amendment to the Central Oahu Development Plan Land Use Map is consistent with the latter description of Waipahu, by helping to stabilize the community by providing job opportunities. By proposing industrial development of land adjacent to an existing industrial district, an undesirable spreading of development is prevented, reducing the demand for more industrial land in undeveloped rural or agricultural areas.

The proposed Development Plan Amendment will not have any effect on the proportion of the island-wide resident population.

Section 24-5.2 Urban Design Principles and Controls for Central Oahu

a. Specific Urban Design Considerations

1. Open Space

Comment: The proposed project will not impact the open space values of the Koolau and Waianae mountain ranges, Kipapa Gulch, Waipio Peninsula, or the Wahiawa Reservoir. The visibility, preservation, enhancement and accessibility of open space areas, as defined in Section 24-1.4 of the Common Provisions, will not be negatively impacted by the proposed project.

2. Public Views

Comment: Important public views that could be applicable to the proposed project as defined by the Special Provisions for Central Oahu are: Pearl Harbor from Farrington Highway across Waipahu High School, Waianae Mountains and the sea from Kunia Road, Waipahu Sugar Mill from Waipahu Depot Road, and view of the Waianae Mountains from the Waipahu Cultural Park. As noted previously, view planes of the Waianae Range and adjacent ridgelines from both outside and within the project boundaries will be retained.

Views of the Waipahu Sugar Mill from Waipahu Depot Road will not be altered. Looking in a mauka direction from Waipahu Depot Road, the Oahu Sugar Mill lies between the area of application and Waipahu Depot Road. Therefore, views of the area of application from Waipahu Depot Road do not exist.

3. Height Controls

Comment: The height limits applicable to all proposed structures within the project area will be in compliance with the Special and Common Provisions of the Development Plan, and applicable provisions of the Land Use Ordinance once the industrial zoning is in place. Except as specified in Section 24-5.2(2), the general height limits of buildings

shall be 40 feet in the Central Oahu Development Plan's Industrial district. This is significantly lower than the height of the existing Oahu Sugar Mill.

4. Density Controls

Comment: The Central Oahu Development Plan has no density controls for industrial development. However, the Land Use Ordinance stipulates the maximum density within each industrial district.

Section 24-5.3 Development Priorities

Comment: Planning for the proposed project has been undertaken in consonance of the policies set forth in Section 24-1.9 of the Development Plan Common Provisions. The Special Provisions of the Central Oahu Development Plan "provide for projects in the priority shown" below.

- "1. Public facilities improvements, i.e., wastewater management, transportation, and potable water.
2. Provision of affordable housing which conforms to the General Plan Distribution of Residential Population Table for Central Oahu.
3. Improvement of infrastructure to encourage redevelopment of Waipahu and Wahiawa."

While the above stated policies prioritize public sector development, the proposed project will have a direct and positive impact of encouraging redevelopment of Waipahu given the potential closure of Oahu Sugar Company, Limited.

Section 24-5.4 Land Use and Public Facilities Map

5.4.2.3 Central Oahu DP Land Use Map

Comment: The area of application is designated by the State Land Use Commission as "Urban" (Figure 4). The area of application is adjacent to the existing industrially designated land of the Oahu Sugar Mill property in Waipahu, Oahu (Figures 1 and 5). Approximately 1 acre of the area of application is currently designated by the Central Oahu Development Plan Land Use Map as "Public Facility" and 4 acres as "Residential". Both designations are proposed to be reclassified as "Industrial". The remainder of the TMK parcel in which the area of application is located is designated "Industrial" and planned for future industrial development. It is requested that the Central Oahu Development Plan Land Use Map designation for the area of application be amended to allow its use for Industrial purposes. Consequently, this amendment would make the industrial use of the area of application consistent with the Industrial designation for the rest of the property. As such, the requested Development Plan Land Use Map amendment is consistent with the State land use regulatory system and is contiguous to an existing industrial area.

The availability of other residential lands in Central Oahu (and Ewa), indicate that the use of the property for residential purposes is not critical and that the proposed industrial designation is consistent and would be contiguous with the "Industrial" designation over the rest of the subject parcel. This type of industrial development will support the existing and proposed residential development in Central Oahu and Ewa.

Initial investigation and review with various City agencies have not been able to determine any reason why a portion of the area of application is designated Public Facility, and as such, no adverse impacts to the delivery of public services are expected from the requested amendment to the Central Oahu Development Plan Land Use Map.

5.4.2.4 Central Oahu DP Public Facilities Map

Comment: The Central Oahu Development Plan Public Facilities Map identifies roadway improvements to occur adjacent to the area of application within the next six years (Figure 6). However, it is our understanding that this reflects a project no longer under consideration (Waipahu Street Bypass). This latter project is now being replaced by County plans to widen Waipahu Street, in the vicinity of Paiwa Street to four lanes, two in each direction, with left turn storage lanes on the Waipahu Street approaches.

No significant public facility improvements, funded by the City or State, are required to implement the project.

5.4.3 Land Use Ordinance

The Land Use Ordinance (LUO) of the City and County of Honolulu is intended to regulate the use of land in a manner that will encourage orderly development in accordance with adopted land use policies. The corresponding LUO Zoning Map Z-8 currently designates the area of application as R-5 Residential (Figure 6). Because industrial land uses are not permitted within the existing Residential zone, the project area must be rezoned to reflect the proposed land uses. The I-1, Limited Industrial District would provide land uses consistent with those proposed by the applicant, and complement and buffer the existing I-2 Intensive Industrial District over the adjoining Oahu Sugar Mill site. This rezoning would form one contiguous industrial district, reflecting its historical use, with less intense industrial uses adjacent to existing and proposed residential areas.

According to the LUO Development Standards for I-1 Limited Industrial Districts, the minimum size of a lot shall be 7,500 square feet, with a minimum lot width and depth of 60 feet. For those lots adjacent to residentially zoned areas, the setbacks of the residential zones also extend into the I-1 district to provide an added buffer/transition. In addition, the LUO requires that a six foot high wall be installed along the boundary of the I-1 and R-5 districts. Building heights are determined by the DP Special Provisions for Central Oahu and the maximum heights shown on the Zoning Maps.

VI

SOCIO-ECONOMIC IMPACTS

VI. SOCIO-ECONOMIC IMPACTS

This section draws on work in progress by Community Resources, Inc. (CRI) on socio-economic impacts of the entire Waikele Industrial Subdivision. The CRI report will be submitted with zoning applications for the proposed subdivision.

6.1 Demographic Impacts

6.1.1 Residential Population

The project will not have any on-site population and will not attract any residents to Oahu.

The residential alternative permitted by current zoning could involve as many as 44 units in the area of application. If these were occupied by households of a size typical of the region, the site could be populated by 140 to 180 residents. (The lower figure comes from an estimate of eventual future household size [3.16 persons/household] in the entire Development Plan area. The higher figure is based on the current average household size in Waipahu CDP [4.13 persons/household].

6.1.2 Visitor Population

The project will not attract any visitors. Equally, the residential alternative would not affect the visitor population.

6.1.3 Character of Neighborhood

The area of application adjoins the Jack Hall housing area and acreage, currently undeveloped, on which the City and County has considered building housing (proposed Manager's Drive project). The area of application does not intrude on residents' views of the Oahu Sugar Mill. The area of application is fenced off from residential areas, vacant and unused. By occupying an area that is now unused, the project will bring commercial or industrial activity closer to homes and retirement housing. An area which is currently overgrown, fenced, and used occasionally for illegal dumping will be occupied by warehouses, equipment and landscaping. Traffic from the project will add to existing traffic on Paiwa Street, which has recently seen increased use with the opening of H-1 and the development of Waikele.

6.1.4 Displacement of Residents

Presently, there are no lessees, sub-lessees or residents on the area of application. No displacement will occur.

6.1.5 Other Social Impacts

Waipahu community leaders have repeatedly expressed concern that the community continue to grow, without letting older areas decline. By bringing new businesses into

the urban core, the proposed Industrial Subdivision will help to maintain the vitality of Waipahu Town.

6.2 Economic Impacts

6.2.1 Economic Growth

The Waikele Industrial Subdivision will bring new businesses to Waipahu and the Central Oahu Development Plan area. It will provide a new home for industrial, service and commercial activities between the traditional urban center and the new "Second City" in Ewa.

By locating a new workforce population in Waipahu, the Waikele Industrial Subdivision will provide some new customers to retail outlets in the surrounding area, helping to maintain the economic well-being of Waipahu as a whole.

6.2.2 Employment

The proposed Waikele Industrial Subdivision will bring hundreds of permanent jobs to Waipahu. Enterprises located in the Industrial Subdivision will already be staffed, so few, if any, of these jobs are new to Oahu or the State. The development will also create short-term construction jobs.

Construction. Construction of infrastructure and buildings in the area of application could cost \$5 million (1993 dollars) or more. Such construction would support approximately 40 person-years of construction workers' time. Statewide, another 75 person-years of indirect and induced employment would be supported. Hence the total short-term employment associated with project construction amounts to some 115 person-years of work. (Such work would likely be spread out over a construction period of several years. The employment impact of construction would hence be divided up over several years.)

Operations. CRI estimates that the average enterprise in the Industrial Subdivision will employ about 15 workers (as shown on Table 1). Statewide, another 11 workers would be supported by spending by the average enterprise in the Subdivision or by its workers. Hence the long-term employment associated with light industrial use of the area of application would amount to some 75 to 85 direct jobs at the site, and some 55 to 60 indirect and induced jobs statewide.

Enterprises moving to the proposed Industrial Subdivision may already have employees. On-site jobs will not automatically be available to nearby residents. Over time, however, new jobs will become available through growth, attrition, and turnover, benefitting local residents who prefer work in the Waipahu area.

6.2.3 Government Revenues

The City and County of Honolulu would gain additional revenues from development of the area of application due to both increased land value and the high tax rate on Industrial land and improvements. CRI estimates that Real Property Tax revenues for the area of application could reach \$100,000 annually (1993 dollars, based on comparable values in the Waipahu, Waiawa, and Shafter Flats industrial areas. In the short term, the State could gain about \$0.5 to \$0.6 million from taxes -- conveyance taxes -- from industrial development of the area of application. Project development is expected to generate no new costs for either the City and County or the State.

6.3 Housing Impacts

The proposed project does not call for the development of new housing. Although new employment can generate increased demand for housing, the jobs created by the project will largely employ persons residing in the region. Many potential employees are currently employed by Oahu Sugar Company, Limited, which will eventually shut down its operations.

6.4 Public Facilities

All required on-site water, wastewater and drainage improvements necessary to accommodate the needs of the proposed project will be funded and constructed by the Applicant or its designee. Water and sewer fees will be paid for by users of the project. Other public services, such as police and fire protection will be paid for through real property taxes generated by the improved property.

6.4.1 Transportation

Access to the project site is expected to be from Paiwa Street, mauka of the intersection with Waipahu Street. A new road is proposed to intersect Paiwa Street, on the Ewa (southwest) side of the existing intersection with Paiwa Place. On Paiwa Street traffic can travel mauka to the Paiwa Interchange or makai to Waipahu Street.

However, many residential units and commercial establishments are occupied and open for business. Construction activity continues in the area. Makai of the project site, Paiwa Street continues to Farrington Highway. Portions of the roadway makai of Waipahu Street do not meet City and County standards.

Paiwa Street, between Waipahu Street and the Paiwa Interchange, intersects with Paiwa Place, Hapapa Street, Poluku Street, Hiapo Street and Hina Street. These streets are local streets providing access to the residential subdivisions in the general area.

Paiwa Street is a two-lane, two-way collector roadway oriented in the mauka-makai direction. Paiwa Street has a pavement width of 44 feet near the intersection with Paiwa Place. Mauka of the proposed project, Paiwa Street continues to the Interstate H-1 Freeway through the Paiwa Interchange. Beyond the Freeway, Paiwa Street continues

TABLE 1

**OPERATIONS EMPLOYMENT AT AVERAGE ESTABLISHMENT
WAIKELE INDUSTRIAL SUBDIVISION**

Assumed Mix of Activities:	Share of Park	Employees per Establishment (1)	Average Wage/Employee		Wages per Establishment
			1992 (2)	1993 (3)	
Manufacturing	25%	21.4	\$28,248	\$29,095	\$623,984
Wholesale	25%	11.8	\$30,117	\$31,021	\$366,788
Services (all except Hotel)	50%	14.4	\$25,796	\$26,570	\$382,370
Average Operation	100%	15.5	\$27,489	\$28,314	\$438,878

NOTES: (1) Based on 1987 data for City and County of Honolulu in Economic Censuses of Wholesale Trade, Service Industries, and Manufacturers (U.S. Census, 1989a, 1989b, 1990).
 (2) From State Department of Labor and Industrial Relations, 1993
 (3) Assuming 3% increase in pay over 1992, in line with cost of living increases.

mauka to the Waikele Center commercial development and the newly-developed Waikele residential area. The commercial and residential areas are partially completed.

Waipahu Street, a city street located between Kamehameha Highway and Kunia Road, is a major east/west collector/distributor road through Waipahu Town. Many of the smaller commercial establishments in Waipahu are located on Waipahu Street. Waipahu Street has segments of narrow roadway widths and curving alignments that restrict the vehicular capacity of the roadway and reduce safety for the motoring public. Near Paiwa Street, Waipahu Street is signalized at Mokuola Street, which is approximately 1,000 feet Ewa of Paiwa Street. Waipahu Street is also signalized at Paiwa Street with a protected/permissive left-turn signal operation on the Koko Head-bound approach of Waipahu Street to mauka bound Paiwa Street.

The City and County of Honolulu has plans to widen Waipahu Street, in the vicinity of Paiwa Street, to provide four lanes (two in each direction), with left-turn storage lanes on the Waipahu Street approaches. Based on the projected historical traffic volumes and trips generated by the Waikele Center development, Waipahu Street would require the widening to four lanes, or possible three lanes, even without the development of the Waikele Industrial Subdivision Project. To accommodate the projected increase in through traffic volumes, Waipahu Street is hereinafter assumed to be a four-lane roadway in the project vicinity.

Waikele Commercial Center has plans to install traffic signals at the intersection of Paiwa Street with Paiwa Place and the access road serving the Waikele Center employees' parking lot. The City and County of Honolulu will be installing traffic signals at the intersection of Paiwa Street and Hiapo Street. These intersections were analyzed under signalized conditions.

According to the consulting traffic engineers (Austin, Tsutsumi & Associates, Inc.), light industrial activities on the area of application is expected to add approximately 30 vehicle trips or about 5 percent to the peak hour traffic in 1995.

The traffic generated by the area of application should not have a significant impact on traffic operations in the vicinity. Vehicular traffic on Paiwa Street would increase significantly from expected trips generated by Waikele Center.

The widening of Waipahu Street, in the project vicinity, should improve traffic operations at the intersection with Paiwa Street. Left-turn storage lanes on the Waipahu Street approaches should reduce traffic delays and vehicle queue lengths.

6.4.2 Water

Waterlines maintained by the Board of Water Supply are located around the subject property in sizes suitable for delivering the required quantity of water for domestic use and fire protection. The area of application will be serviced by a proposed 12-inch waterline which would connect to an existing 12-inch waterline in Paiwa Street. The

waterline within the proposed project will be used for domestic and fire flows, therefore, only one pipeline will be required.

Based on a domestic water consumption rate for industrial users of 4,000 gallons per acre per day, average daily consumption on the area of application is estimated to be 22,000 gallons per day. Peak usage is estimated to be 66,000 gallons per day or 46 gallons per minute.

6.4.3 Wastewater

It is estimated the area of application will generate approximately 600 gallons of wastewater per day, with a peak flow of 12,625 gallons per day. Wastewater will be collected via an 8-inch line which will connect to the City's 15-inch sewer line on Waipahu Street.

Other liquid wastes are likely to be generated by some of the industrial based enterprises operating within the project. Facilities for the treatment and disposal of these wastes will be reviewed by the Department of Land Utilization and State Department of Health during the building and occupancy permit process as applicable. Any hazardous wastes generated will be required to be collected by a hazardous waste management company.

6.4.4 Drainage

Due to the relatively slight slopes characteristic of the property, no significant drainage improvements are required except for standard drains, culverts, and appropriate grading. On-site runoff will flow towards the project internal road and will be intercepted by catch basins. The runoff will then be conveyed through pipes that will be oriented parallel to the roadway then under Waipahu Street through a culvert and outlets into Waikele Stream.

6.4.5 Solid Waste

At present, solid waste generated in neighboring residential areas is collected and disposed of by the City and County Department of Public Works Refuse Division. No solid waste is presently generated from the property. Solid waste generated by the project would be collected by a private collection service and disposed of in the City and County of Honolulu disposal incinerator or landfills.

During the construction phase, solid wastes would be collected and disposed of by the building contractor(s). After construction, the solid waste generated by the industrial businesses would be of similar composition to that generated in other Oahu light industrial developments. Any hazardous wastes generated will be required to be collected by a hazardous waste management company.

6.4.6 Schools

Inasmuch as no residential dwellings are proposed, no significant impact on the schools in the region is anticipated.

6.4.7 Parks

There are several parks in the general vicinity of the sugar mill site. Waipahu Field and Gym is a district park. It has recreational facilities for classes and other organized activities. Hans L'Orange, Pupu'ole, and Waipahu Uka are neighborhood parks. Waipahu Cultural Garden Park is a cultural center with historic exhibits of plantation life and open space. Waipahu Cultural Garden Park and Hans L'Orange Park are the two parks nearest the Sugar Mill property.

Existing public recreational facilities in Waipahu proximate to the subject property include the Waipahu Cultural Garden Park (48.2 acres Regional Park), Waipahu Field and Gym (13.8 acre District Park), Hans L'Orange Park (6.9 acre Neighborhood Park), and Honowai Park (6.3 acre Neighborhood Park). The combined recreational facilities provided by these parks is as follows.

- Basketball (5)
- Volleyball (4)
- Softball (5)
- Tennis (4)
- Baseball (2)
- Swimming Pool (1)
- Educational Building (1)
- Multipurpose Building (1)
- Gymnasium (1)
- Picnicking (1)
- Comfort Stations (4)

Park usage depends on convenience of access (by car or foot) and type of facility. Recently, the district park has been used mainly by senior citizens, plantation retirees, and other adults who take classes (Personal Communication, Ronald Wong, City and County Parks & Recreation District Manager, January 1994). Young children usually play at neighborhood parks.

Park personnel anticipate no negative impacts on park facilities from development of the Waikele Industrial Subdivision. They noted that landscaping and open space near the Sugar Mill may be desirable.

6.4.8 Police

The City and County Police Department maintains a Waipahu Substation. Waipahu belongs to the Police Department's District 3, which encompasses approximately 204

square miles from Kaena Point to Red Hill. There are about 200 field officers assigned to the district. The Administrative Lieutenant considers this beat district to be short-staffed. Response time for the entire district fluctuates between five and seven minutes (Personal Communication, Lieutenant Yap, City and County Policy Department, Pearl City Station Administrative Lieutenant, January 1994).

The Waipahu Substation is basically a storefront operation. A single officer staffs the substation per shift. The substation is open 24 hours a day. The public can go to the substation to file reports.

The most frequent types of crime in the high-density residential areas of Waipahu are domestic violence, thefts, and robberies. Alarms are a common occurrence at Campbell Industrial Park in Ewa. The number of shootings and stabbings are higher in Waipahu than nearby Pearl City.

Responding to silent alarms poses a problem for the police, because it distracts the field officers from attending to more urgent calls, especially at night when two officers must respond to alarms. However, in the opinion of the police, use of the project site for light industrial use would involve less serious demand for police services than residential use. In addition, the area of application is vacant and overgrown, and probably presents some concerns about security to surrounding residents. Development of the property will make it more difficult for loitering, illegal dumping and the potential of other illegal and criminal activities to occur.

6.4.9 Fire

Waipahu Fire Station is located on Leonui Street. It is approximately four to six minutes away from the sugar mill site. Annually, the fire company answers on average about 50 calls. The occurrence and frequency of alarms depends on the time of year. In 1993, there were fewer alarms in the whole summer than during the New Year's holiday, when some 19 alarms occurred over a three-day period. The most common alarms are for brush and rubbish fires. In its vacant and overgrown state, the area of application presents a potential for brush fire to adjacent existing residents.

The Fire Department does not anticipate a significant impact on demand for fire safety services nor increased fire hazard with the proposed development (Personal Communication, Captain Lopes, City and County Waipahu Fire Department, January 1994). Newer industrial complexes are usually equipped with fire mitigation fixtures like smoke alarms, sprinkler systems, and extinguishers.

The Fire Station receives relatively few calls from the existing light industrial developments in Waipahu. The calls are usually because of sounding alarm systems. It should be noted that the City plans to build a new fire station in Waikele. However, the Waikele Industrial Subdivision site will continue to be under the jurisdiction of the Waipahu Fire Station.

6.4.10 Medical Facilities and Services

St. Francis Medical Center-West is the nearest hospital facility to the project site. It is approximately five minutes or less from the site. Ambulance service is coordinated with the City and County, and the hospital has a helipad. The medical center offers general hospital services including emergency care, out-patient care, lab and imaging services, and medical offices.

The hospital has 79 licensed beds available. According to its Chief Operating Officer, bed capacity will soon be expanded to 84 beds (Personal Communication, Phil Baltch, is operating at about 80% occupancy. (Space for a total of 136 beds is available in the hospital.)

Adjacent emergency medical and surgical services can also be provided by Pali Momi Medical Center (116 beds) in Aiea and Wahiawa General Hospital (162 beds of which 93 are for long-term care). Non-emergency medical services are offered at Kaiser Permanente's Punawai Clinic in Waipahu. In addition, medical services can be obtained at major hospital facilities in urban Honolulu, about a 20-minute drive away.

St. Francis-West does not anticipate much impact on its medical facility and services from development of the project site for either industrial or residential use.

6.4.11 Utilities

6.4.11.1 Electrical Service

Electric service is currently supplied to the subject property from lines located within the Oahu Sugar Mill property. Future electrical needs will require expansion of all electrical utility lines into and within the project site. Therefore, the existing HECO distribution system will be upgraded to provide adequate electrical service into the project area. Total electrical service demand required for the proposed project will depend on the ultimate density and individual needs of industrial businesses established within the project area.

In order to keep operations costs to a minimum, it is likely that the various businesses will practice various forms of energy conservation.

6.4.11.2 Telephone Service

Telephone lines presently exist in the area and have the capacity to accommodate the proposed project with minor modifications. Hawaiian Telephone Company lines are adequate to serve the proposed project and would also be extended as needed to service the industrial businesses.

VII

ENVIRONMENTAL IMPACTS

VII. ENVIRONMENTAL IMPACTS

Once the project achieves buildout, long-term impacts on adjoining residential land uses are expected to be minimal. Dust from the property would be less than currently experienced due to installation of landscaping and street paving. A wall between residential and industrial areas providing a visual and noise buffer will be constructed in accordance with applicable LUO regulations.

No significant natural features are visually associated with the project site. However, the vacant property is occasionally used for illegal dumping, which creates a generally negative visual image of exposed soil, weedy and overgrown vegetation and rubbish.

7.1 Noise

Presently, noise quality of the area is dominated by Oahu Sugar Mill operations, distant traffic on H-1 Freeway, birds and aircraft. Potential impacts on the noise quality of the site are primarily limited to those generated by the increased volume of traffic, construction activity noise, and noise associated with industrial developments. Overall noise levels should not exceed those currently generated by existing industrial operations and would not be above acceptable levels for the proposed industrial subdivision or adjacent residential land uses (see Appendix B).

Short-term impacts will result during the initial construction phase which will require on-site grading and movement of vehicles within the area of application. As compared to the industrial activities at the mill and surrounding environs, these activities will not generate significant increases in localized noise and dust during construction periods. Construction activities would be limited to daytime hours and comply with all applicable noise control regulations of the City and County of Honolulu and State of Hawaii.

The use of noise suppression equipment on construction vehicles and construction curfew periods are required under the State Department of Health noise regulations. Construction equipment will utilize required mufflers and be shut off when not operated.

As noted in Appendix B, the large structures on industrial lots at Gentry Waipio, which are located along the common boundaries to adjoining residential lots, are examples of how buffer distances may be reduced using large, continuous buildings and walls as sound attenuation barriers. In order to test the effectiveness of barrier structures in meeting the State DOH noise limits at the proposed Manager's Drive Housing Project, calculations of expected noise levels from louder industrial activities were performed. The various conditions of 25- and 35-foot high sound barriers and sound source locations which were tested are shown in Figure 5 of Appendix B. Calculations of expected sound levels at 10-foot setback distance from the common boundaries between the industrial and multi-family lots for 5- and 15-foot high receptors were performed for the various sound barrier and source location conditions.

The results of these sound barrier calculations are shown in Table 2 of Appendix B. The results indicate that 85 dBA (at 50-foot distance) noise sources can be reduced to the nighttime noise limit of 50 dBA for Barrier Condition A'. Barrier Condition A' requires a minimum 35-foot high by 50-foot deep, continuous building structure between the noise sources and the residential

property line. The use of a minimum 50-foot wide building as the sound barrier structure provides the following advantages over a thin 35-foot high wall:

- a. The building can also be used to contain noise levels from the workplace activities.
- b. The building depth provides a positive distance buffer between the outdoor noise sources and the residential property boundary.
- c. A building structure of 50-foot depth will generally provide more sound attenuation than a thin wall of the same height.
- d. Tall thin walls are difficult to construct, and require excessive bracing.

It should be noted that the desired zoning I-1 allows for a 40-foot height limit, which may further attenuate sounds from light industrial activities.

7.2 Air Quality

In general, air quality in Hawaii is excellent due to the predominant northeast trade winds. Some localized conditions, such as heavy traffic at intersections, can negatively impact air quality.

The projected traffic levels at Paiwa Street are not expected to alter air quality in the area from current conditions.

It is possible that during construction, air quality in the area may be impacted by exhausts generated from construction equipment and fugitive dust. Mitigation measures are available to significantly reduce the potential impact on air quality during the construction period. Soil erosion control measures will mitigate the impact of both water and air borne emissions of silt, dust, and vehicular emissions. As such, air quality can be maintained or improved relative to the existing exposed soils condition on the area of application. Inasmuch as intersection improvements at the Paiwa Street entry are planned to improve the efficiency of traffic movements, no additional mitigation measures are proposed to mitigate vehicle emissions.

7.3 Visual

The City and County of Honolulu, has conducted a comprehensive viewshed assessment documented in "Coastal View Study, City and County of Honolulu Department of Land Utilization, 1987". In this study, the existing visual resources of the entire Oahu coastline are inventoried, prioritized, and documented.

According to the Coastal View Study, the Waipahu viewshed is residential, commercial, and industrial. Farrington Highway is designated as a "Coastal Roadway", however, no significant coastal visual resources in the vicinity of the project are identified in the Study.

Views onto the area of application are only available from the City's proposed Manager's Drive Affordable Housing Project and from the adjoining Jack Hall Memorial Housing Project. No

significant natural resources or other significant landforms are present on the area of application. The proposed industrial land use is compatible with the adjacent industrial land uses associated with operations of Oahu Sugar Mill. The appearance of the light industrial project will be mitigated by design controls regarding the construction and operation of the project, landscaping and coordinated signage.

7.4 Historic and Archaeological

An archaeological reconnaissance survey was conducted of the area of application in January 1994. The findings of this study are documented in Appendix C. The basic purpose of the survey was to identify and evaluate all sites of possible archaeological significance present within the project area. Because the area of application has been extensively modified by plantation housing (no longer existing), the archaeological survey centered on identifying potential cultural deposits associated with plantation agriculture. The findings of the survey and historical research identified no significant sites on the subject property.

To ensure that no important cultural features will be destroyed during project construction, a qualified archaeologist will selectively monitor initial grubbing activity and/or vegetation clearing within the project area.

During any development activity involving the extensive modification of the land surface, there is always the possibility, however remote, that previously unknown or unexpected subsurface cultural features, deposits or burials might be encountered. In such a situation, immediate archaeological consultation will be sought with the Department of Land and Natural Resources.

7.5 Natural Features

The physical environment of the area of application reflects its former use as plantation housing (graded) and the eventual abandonment of this use (overgrown vegetation).

7.5.1 Water Resources

For temporary erosion control, appropriately sized ponding basins will be constructed on-site for desilting storm runoff prior to discharge into existing drainageways. All applicable Federal, State, and City requirements regarding drainage and surface runoff will be integrated and implemented in accordance with an accepted erosion control plan.

7.5.2 Flood Plains Management

As indicated on the Flood Insurance Rate Map (Figure 11), none of the area of application is located within the 100 year flood zone.

7.5.3 Wetlands Protection

According to "Wetlands and Wetland Vegetation of Hawaii", a study prepared by Elliot and Hall for the United States Army Corps of Engineers, no areas defined as a "wetlands" are located within the area of application. This determination is also

confirmed by the United States Department of the Interior National Wetlands Inventory Map.

7.5.4 Coastal Zone Management

The objectives of the Hawaii Coastal Zone Management (CZM) Program, as set forth in Chapter 205A, Hawaii Revised Statutes, applies to the protection and maintenance of valuable coastal resources. In Hawaii, essentially no land areas are excluded from the CZM program. The proposed Development Plan Amendment request conforms to applicable CZM objectives as follows:

Objective for Historic Resources - Protect, preserve, and where desirable, restore those natural and man made historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.

Response - As previously noted, no significant archaeological or historical sites were identified in the archaeological survey conducted for the proposed development. Should any archaeologically significant artifacts, bones, or other indicators of previous on-site activity be uncovered during the construction phases of development, their treatment will be conducted in strict compliance with the requirements of the Department of Land and Natural Resources.

Objective for Scenic and Open Space Resources - Protect, preserve, and where desirable, restore or improve the quality of coastal scenic and open space resources.

Response - The area of application in its present overgrown and inaccessible condition is not considered a significant open space resource. The project represents a proposal of infill development on a vacant area within an urban setting. Development in this setting reduces the pressure to develop in significant open space areas.

Objective of Coastal Ecosystems - Protect the valuable coastal ecosystem from disruption and minimize adverse impacts on all coastal ecosystems.

Response - The project site is located well inland from shoreline areas. Any possible impact to nearshore ecosystems resulting from surface runoff, will be mitigated by the implementation of an approved erosion control plan during the construction phases of development. Protection of groundwater resources will be enhanced by the installation of a sewage collection system.

Objective for Coastal Hazards - Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, and subsidence.

Response - The area of application is not subject to coastal-related flooding, stream flooding, erosion or subsidence. Development of project drainage systems will follow City design standards to ensure the safe conveyance and discharge of storm runoff.

In addition, the project site is located outside of the County's Special Management Area (SMA). A SMA Use Permit will therefore not be required for project development.

7.5.5 Unique Natural Features

There are no unique natural features located on the area of application.

7.5.6 Flora and Fauna

The area of application was graded in order to provide plantation housing. Subsequently, the housing was razed and the existing vegetation is representative of introduced weedy species. No endangered plant or animal species are known to exist in the subject property. In addition, no wetlands, streams, estuaries or other habitats that could accommodate endangered plant or animal species are present on the subject property. The flora consists of exotic weedy species due to previous disturbance (clearing) and residential use of the land. Birds and animals common to urban areas were sighted or are presumed to exist on the area of application.

7.5.7 Open Space

Presently, the area of application provides open space although essentially unusable, ill-maintained and used for illegal dumping by trespassers. The proposed project will alter this character to one of a modern, well-landscaped and -maintained light industrial subdivision.

7.6 Hazards

There are no known topographic features on the project site that could result in natural hazards such as geologic faults, or volcanic activity. None of the land uses proposed for the Property are susceptible to flooding as described by the Flood Insurance Rate Maps (FIRM).

7.6.1 Tsunami

The area of application is not located within a tsunami inundation zone.

7.6.2 Nuisances and Site Safety

Volcanic hazards in the area are considered minimal due to the extinct status of former volcanoes. Seismic hazards in the area are no greater than other locations on Oahu and are accounted for in the City building codes.

Due to the location of the site, the proposed project is not expected to either effect or be effected by flood hazards. Similarly, the proposed project is not expected to either effect or be effected by tsunamis or seismic hazards.

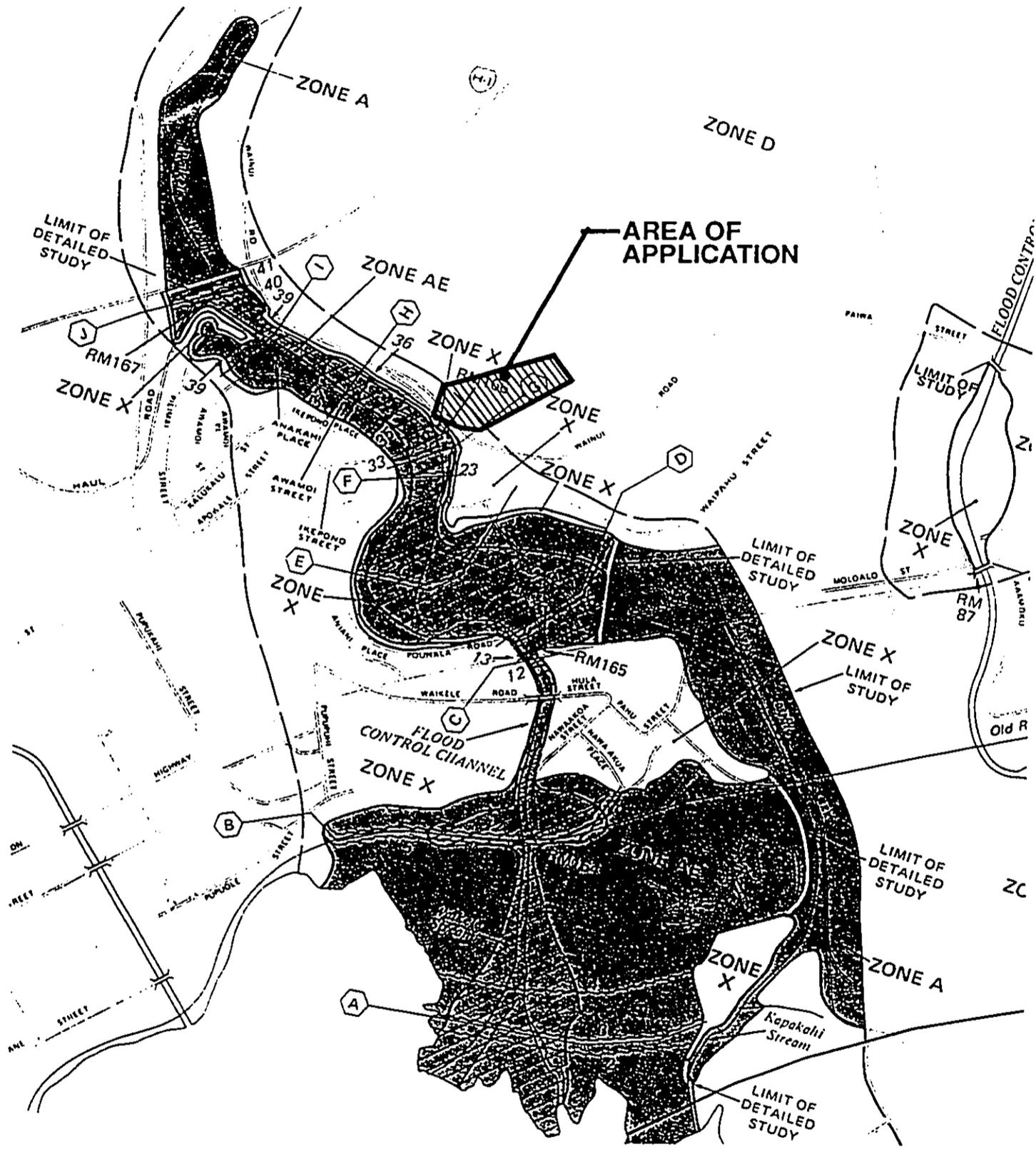
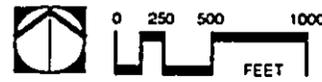


FIGURE 11
 Flood Insurance Rate Map
 WAIKĒLE INDUSTRIAL SUBDIVISION



DATE: 01/07/94 **PBR HAWAII**

Source: National Flood Insurance Program, FEMA, Sept. 1990

7.6.3 Toxic Waste

There is no known toxic waste storage on the area of application. The area was most recently used to provide single-family housing for Oahu Sugar Company, Limited. employees.

7.6.4 Airport Clear Zone

The proposed project is located outside all airport clear zones.

7.6.5 Other Hazards

There are no other known hazards on the property.

VIII

ALTERNATIVES CONSIDERED

VIII. ALTERNATIVES CONSIDERED

The applicant has undertaken an extensive review of possible alternatives for the area of application. All alternatives have concentrated on identifying the best use of the parcel given the pending closure of Oahu Sugar Company, Limited's operations and the associated loss of jobs and income.

In compliance with the provisions of Title 11, Department of Health, Chapter 200, Environmental Impact Statement Rules, Section 11-200-17(f), the "known feasible" alternatives to the proposed project are limited to those that would allow the objectives of the project to be met, while minimizing potential adverse environmental impacts. An exploration of the environmental impact of all reasonable alternative actions, have been included in this evaluation. The intent, however, is to not prematurely foreclose options which might enhance environmental quality or have less detrimental effects.

In conformance with applicable regulations, possible design alternatives have been investigated and rejected for the reasons discussed in this chapter. In addition to the uses set forth by the preferred alternative, the "no-action" and alternative land use options were also evaluated. However, each were found to be; a) inconsistent with the objectives of the proposed project; or b) the type of improvements would be inconsistent with the preferred level of use identified for the area of application.

As such, the use of the area of application for industrial purposes is the preferred alternative. Other alternatives considered by the applicant focused on accommodating various levels of industrial use.

Alternative Design Concepts

These involved the evaluation of the potential use of the property based on intensity of industrial land uses. As the sugar mill is currently zoned I-2, Heavy Industrial, one consideration was to seek the eventual rezoning of the area of application for heavy industrial use. Given the surrounding existing and proposed residential uses, this alternative was disregarded.

Alternative Land Uses

The Central Oahu Development Plan Land Use Map designation of both the area of application and the adjoining mauka TMK parcel, is Residential. Due to the projected demands generated by residential use on existing infrastructure and public services, and the relatively low number of long-term jobs created by residential development, this alternative was rejected.

Preferred Alternative

The preferred alternative is consistent with the existing industrial land use designation over most of TMK 9-4-02: 04, and expands associated infrastructure improvements into the area of application. The preferred alternative would also optimize the use of the Waipahu industrial area as an employment center close to existing and proposed residential development.

IX

PROPOSED MITIGATION MEASURES

IX. PROPOSED MITIGATION MEASURES

As with all new construction, development of the subject property would result in irretrievable resource commitments of water, land, energy, capital and construction materials. Implementation of the project would also generate increased income for the State and County, but most importantly the project would provide additional employment opportunities for Waipahu area residents. These positive aspects should be weighed against the commitment of resources required to realize the development.

As previously described, few negative impacts are expected to result from the proposed project. Mitigation measures to minimize those adverse environmental impacts of the proposed project that may exist from project development include the following:

Short term:

- ▶ Frequent watering during construction activities to maintain dust control.
- ▶ Establishment of ground covers as soon as practicable once grading has been completed.
- ▶ Construction of retention areas to provide for siltation of particulates in storm water.
- ▶ Construction activities only during daylight hours (to mitigate construction noise impacts).

Long term:

- ▶ Use of appropriate engineering, design and construction measures to ensure adequate drainage of the site.
- ▶ Establishment of screens using plant materials, wood, or masonry materials as appropriate to limit fugitive dust, visual impacts, and noise in accordance with LUO requirements.
- ▶ Use of appropriate landscaping to improve the visual attractiveness of the area.

X

LIST OF AGENCIES CONSULTED

X. LIST OF AGENCIES CONSULTED

Board of Water Supply
Fire Department
Department of Land Utilization
Department of Parks and Recreation
Planning Department
Police Department
Department of Public Works
Department of Transportation Services

XI

SUMMARY SHEET

XI. SUMMARY SHEET

DGP REF. NO:
MAP REF. NO:
NB. AREA: 22
AREA: 5.5 acres
TMK: 9-4-02: 04 (POR.)

**CENTRAL OAHU
DEVELOPMENT PLAN LAND USE AMENDMENTS
BEING CONSIDERED**

Amendment/Project Information

Amendment Request: Residential and Public Facility to Industrial

Location: Waipahu, Oahu

Address of Subject Area: Not applicable

Owner/Developer: Oahu Sugar Company, Limited **Requested by:** Amfac/JMB Hawaii, Inc.
(Agent)

Basis for Request: Permit development of light industrial subdivision

Type of Project: Light industrial

Impact on Provision of Housing: Provides employment opportunities near existing and proposed City affordable housing projects

Existing Conditions

Land Use: Vacant

Structures:

Number: None

Type: Not applicable

Height: Not applicable

ALISH: Unclassified: 5.5 acres

Soil Features: Silty Clay soils

Possible Constraints: None

Please forward any comments to:

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

Present Plan/Zoning Conditions

State Land Use: Urban

DP Public Facilities Map: Not applicable

DP Special Provisions: Not applicable

Zoning: R-5 Residential

XII

NOTIFICATION REQUIREMENTS

XII. NOTIFICATION REQUIREMENTS

- A. The following parties were furnished a copy of the Summary Sheet and a map of the area of application:

Property Owners: SEE ATTACHED LIST

"Occupant"(s) of the Jack Hall Memorial Housing Project

Waipahu Neighborhood Board

Community Association(s)

- B. Recipients were notified to forward any questions or comments to the:

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

- C. "Ordinance 84-111 states: No application for Development Plan Land Use Map amendment shall be accepted for processing unless the applicant notifies, by mail, all owners, lessees, sub-lessees and residents of the affected property and of each abutting parcel.

I hereby certify that I have complied with the notification requirements of Ordinance 84-111."



(Signature of Applicant)

9-4-02:04
Oahu Sugar Company, Limited
P.O. Box O
Waipahu, HI 96797

Hugh Morita or Occupant
94-909 Makaaloha
Waipahu, HI 96797

George Miyashiro or Occupant
94-917 Makaaloha
Waipahu, HI 96797

Steve Castro or Occupant
94-923 Makaaloha
Waipahu, HI 96797

Sally Robinson or Occupant
94-929 Makaaloha
Waipahu, HI 96797

Marcelino Bartolome or Occupant
94-930 Makaaloha
Waipahu, HI 96797

Benjamin Fernandez or Occupant
94-939 Makaaloha
Waipahu, HI 96797

Mamoru Sato or Occupant
94-940 Makaaloha
Waipahu, HI 96797

Kenneth Bega or Occupant
94-960 Makaaloha
Waipahu, HI 96797

H. Reinhardt or Occupant
94-968 Makaaloha
Waipahu, HI 96797

Clara Nakahara or Occupant
94-928B Waipahu Street
Waipahu, HI 96797

Violet Ferreira or Occupant
94-928A Waipahu Street
Waipahu, HI 96797

Harry Gayagas or Occupant
94-938 Waipahu Street
Waipahu, HI 96797

M. Nobriga or Occupant
94-948 Waipahu Street
Waipahu, HI 96797

Janice Frias or Occupant
94-972 Waipahu Street
Waipahu, HI 96797

F. Takiguchi or Occupant
94-992 Waipahu Street
Waipahu, HI 96797

Kiewit Pacific Co.
3049 Ualena Street, Suite 1100
Honolulu, HI 96819

Mokulua Consultants
91-121 Leokane Street
Waipahu, HI 96797

Robert's Hawaii School Bus
680 Iwilei Road, Suite 700
Honolulu, HI 96817

9-4-02:05
City and County of Honolulu
Department of Housing and Community Development
650 South King Street
Honolulu, HI 96813

9-4-02:07
Amfac Property Corp.
P.O. Box 3140
Honolulu, HI 96802

9-4-02:21
Hans L'Orange Park
Department of Parks and Recreation
City and County of Honolulu
94-1024 Waipahu Street
Waipahu, HI 96797

9-4-02:24
Amfac Incorporated/et al
P.O. Box 3140
Honolulu, HI 96802

9-4-02:29
City and County of Honolulu
Department of Transportation Services
650 South King Street
Honolulu, HI 96813

9-4-02:32
City and County of Honolulu
Department of Housing and Community Development
650 South King Street
Honolulu, HI 96813

Jack Hall Memorial Housing
P.O. Box 212
Honolulu, HI 96810

9-4-02:33
City and County of Honolulu
Department of Housing and Community Development
650 South King Street
Honolulu, HI 96813

Jack Hall Memorial Housing
451 Atkinson Drive
Honolulu, HI 96814

9-4-02:34
Honpa Hongwanji Mission Hawaii
94-821 Kahaulua Street
Waipahu, HI 96797

Occupants of Jack Hall Memorial Housing

Occupant
94-817 Kahaulua Street, Apt 101
Waipahu, HI 96797

Occupant
94-817 Kahaulua Street, Apt 102
Waipahu, HI 96797

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94-817 Kahaulua Street, Apt 103
Waipahu, HI 96797

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Waipahu, HI 96797

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94-817 Kahaulua Street, Apt 219
Waipahu, HI 96797

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94-817 Kahaulua Street, Apt 220
Waipahu, HI 96797

Occupant
94-853 Kahaulua Street, Apt 121
Waipahu, HI 96797

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94-853 Kahaulua Street, Apt 122
Waipahu, HI 96797

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94-853 Kahaulua Street, Apt 140
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Occupant
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Waipahu Neighborhood Board No. 22
P.O. Box 576
Waipahu, Hawaii 96797

Head Start Program
94-827 Kahaulua Street
Waipahu, HI 96797

APPENDIX A

OAHU SUGAR
P.O. Box "O"
Waipahu, Hawaii 96797
(808) 677-3577



August 30, 1993

Amfac/JMB Hawaii, Inc.
700 Bishop Street, 21st Floor
Honolulu, Hawaii 96813

Gentlemen:

Re: Oahu Sugar Mill Site
TMK: (1)9-4-02:4

Oahu Sugar Company, Limited ("OSCo") is the owner of real property bearing Tax Map Key No. 9-4-02:4, situate at Waikele, Oahu, Hawaii, the property shown as the cross-hatched area on Exhibit "A" attached hereto and incorporated herein by reference (the "Property"). OSCo hereby requests and authorizes its parent, Amfac/JMB Hawaii, Inc. ("AJHI"), to take all necessary actions to prepare and implement a master plan for development of the Property.

OSCo and AJHI agree to execute any documents reasonably necessary to complete the matters contemplated herein.

Very truly yours,

OAHU SUGAR COMPANY, LIMITED

Approved as to Form:

By TEJ-ks

By

H. H. [Signature]
ITS VICE PRESIDENT

ACCEPTED AND AGREED,
this day of SEP 3 1993
1993.

AMFAC/JMB HAWAII, INC.

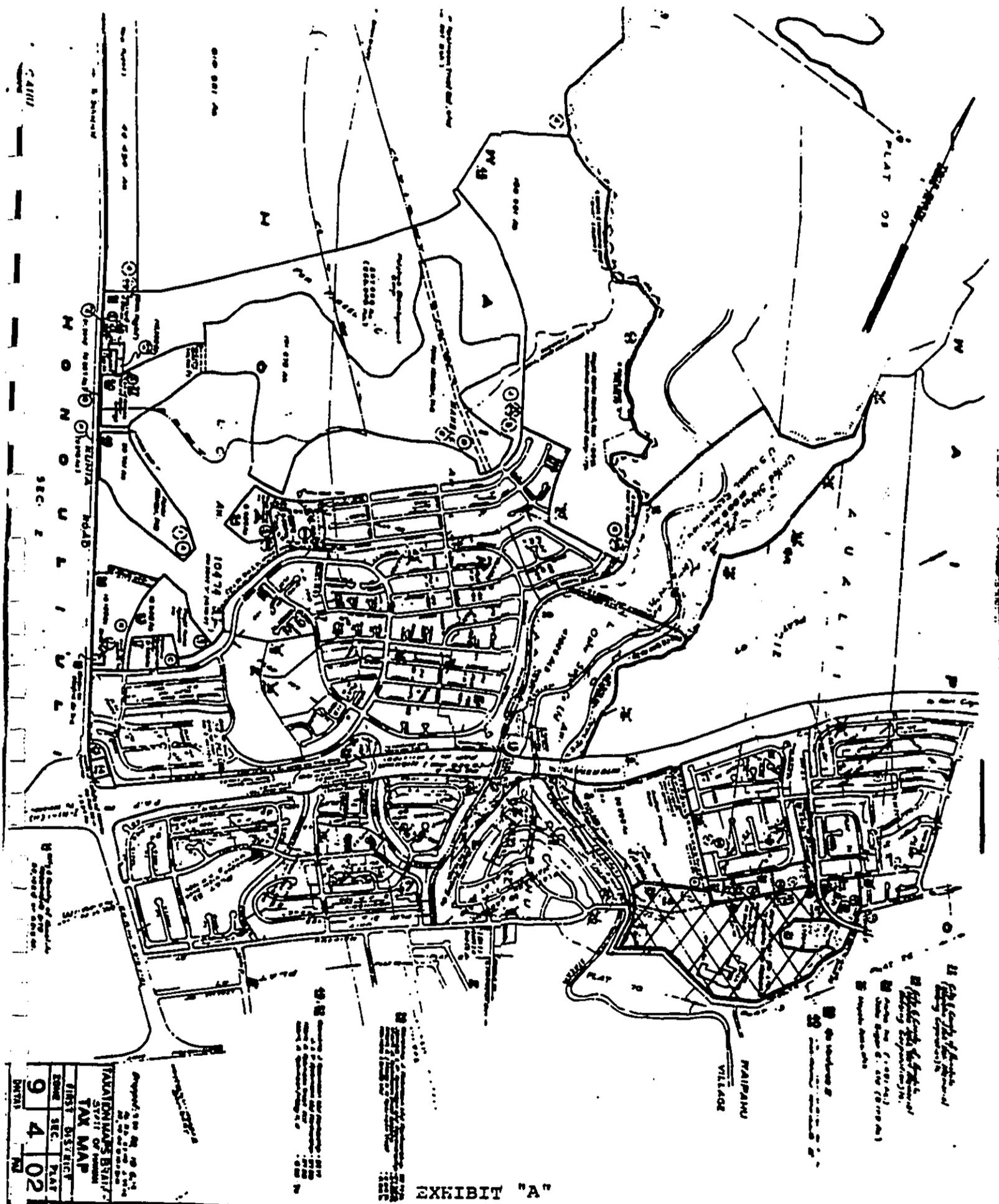
By

Chris [Signature]
ITS SENIOR VICE PRESIDENT

Approved as to Form.

By TEJ

LSA/JDmm:mhb-26-93



TAKIENNA'S BAY			
SOUTH DISTRICT			
TAX MAP			
FIRST DISTRICT			
9	4	02	
SECTION	SECTION	PLAT	

APPENDIX B

DOCUMENT CAPTURED AS RECEIVED

Y. Ebisu & Associates

Acoustical and Electronic Engineers

1126 12th Avenue
Room 305
Honolulu, Hawaii 96816
(808) 735-1634

YEA Job #31-046
January 7, 1994

PBR Hawaii
1042 Fort Street Mall, Suite 300
Honolulu, Hawaii 96813

Attention: Mr. Mike Terry

Subject: Acoustical Study for the Proposed Waikele Industrial
Subdivision at Oahu Sugar Mill Site; Waipahu, Oahu

Dear Mr. Terry:

The following letter report provides the results of my evaluations of the potential noise impacts and recommended mitigation measures for the proposed Limited Industrial (I-1) Subdivision at the Oahu Sugar Mill site. Our acoustical study focused on the potential noise impacts along the common property boundary with the future Manager's Drive Housing Project.

Existing Background Ambient Noise Levels. Existing background ambient noise levels were measured during the daytime and early morning periods in December 1993 near the west end of Kuhaulua Street at the southeast corner of the planned Manager's Drive Housing Project site. A histogram of the daytime measurement results is shown in FIGURE 1. Measured background ambient noise levels ranged between 40 and 55 dBA (A-Weighted decibels) during the daytime period, and were controlled by distant traffic on H-1 Freeway, birds, and aircraft. During the early morning (5:00 AM) period of the next day (December 30, 1993), measured background ambient noise levels were relatively steady at 49 to 50 dBA, and were controlled by distant traffic on H-1 Freeway. Sound propagation conditions were favorable during the early morning hours of December 30 due to the relatively cool temperature conditions.

Almost identical early morning sound propagation conditions were also measured on that same morning at the Gentry Waipio residential area at the west end of Pokeo Street near The Villages project. FIGURE 2 is a histogram of the measured early morning noise levels at Gentry Waipio, which were controlled by distant traffic on H-2 Freeway.

Typical Noise Levels of Light Industrial Activities. By State Department of Health (DOH) Administrative Rules, noise levels from stationary machinery are normally limited to 70 dBA during the daytime (7:00 AM to 10:00 PM) and nighttime (10:00 PM

Mr. Mike Terry

January 7, 1994
Page 2

to 7:00 AM) hours along common boundary lines between industrially zoned lots. Where industrial lots adjoin single-family residential districts, noise levels from stationary machinery are normally limited to 55 dBA during the daytime (7:00 AM to 10:00 PM) and to 45 dBA during the nighttime (10:00 PM to 7:00 AM) along the common boundary between the industrial and residential lots. Where industrial lots adjoin apartment districts, noise levels from stationary machinery are normally limited to 60 dBA during the daytime (7:00 AM to 10:00 PM) and to 50 dBA during the nighttime (10:00 PM to 7:00 AM) along the common boundary between the industrial and apartment lots.

Stationary machinery noise levels tend to originate from outdoor refrigeration and air handling equipment. Typical noise levels recorded from these equipment were as follows:

Outdoor Refrigeration Equipment @ 15 feet:	65 dBA
Refrigeration Equipment in Covered Loading Area:	80 dBA
Refrigeration Container Van @ 15 feet:	78 dBA
Centrifugal Fans @ 20 feet:	69 dBA
Office Window Air Conditioner @ 15 feet:	60 dBA

Work-place noise levels from business and light industrial activities tend to vary with time and type of activities. Examples of typical workplace noise levels are shown in FIGURES 3 and 4 and in TABLE 1. The louder outdoor noise sources tend to be the heavy vehicles used in trucking operations and their support vehicles such as forklifts. Typical noise levels measured from these vehicles were as follows:

Heavy truck idling @ 15 feet:	71 dBA
Back-up alarm @ 50 feet:	78 dBA
Air brake discharge @ 50 feet:	87 dBA
Heavy truck or 15 ton forklift @ 50 FT:	84 dBA

It is not unusual to also experience relatively low background ambient noise levels in Limited Industrial Districts. Within the Gentry Waipio Industrial Park, measured background ambient noise levels were typically less than 60 dBA. Heavy truck traffic and motor vehicles were the primary noise sources which exceeded 60 dBA. The highest steady background noise levels of 67 dBA were recorded around the perimeter of the truck yard of a food storage facility.

Potential Noise Levels at Manager's Drive Housing Project.

Potential noise levels from the business activities at the proposed Limited Industrial Subdivision can range from 65 to 85 dBA at 50 foot setback distance from the individual noise sources. A 280 foot buffer distance is required to reduce a 65 dBA noise

Mr. Mike Terry

January 7, 1994
Page 3

source to 50 dBA (State DOH nighttime limit for multifamily lots) under open field (or unobstructed line-of-sight) conditions. For 85 dBA noise sources, the buffer distances required to meet the 50 dBA nighttime limit increase to 2,800 feet. These buffer distances are extremely large and are not practical for use at this project site.

The light industrial lots within the Gentry Waipio Industrial Park along Ukee Street abut single and multifamily residences which are located to the east. The large structures on these industrial lots at Gentry Waipio, which are located along the common boundaries to the adjoining residential lots, are examples of how the required buffer distances may be reduced using large, continuous, buildings and walls as sound attenuation barriers. In order to test the effectiveness of barrier structures in meeting the State DOH noise limits at the Manager's Drive Housing Project, calculations of expected noise levels from the louder industrial activities were performed. The various conditions of 25 and 35 foot high sound barriers and sound source locations which were tested are shown in FIGURE 5. Calculations of expected sound levels at 10 foot setback distance from the common boundaries between the industrial and multifamily lots for 5 and 15 foot high receptors were performed for the various sound barrier and source location conditions.

The results of these sound barrier calculations are shown in TABLE 2. The results indicate that 85 dBA (at 50 foot distance) noise sources can be reduced to the nighttime noise limit of 50 dBA for Barrier Condition A'. Barrier Condition A' requires a minimum 35 foot high x 50 foot deep, continuous building structure between the noise sources and the residential property line. The use of a minimum 50 foot wide building as the sound barrier structure provides the following advantages over a thin 35 foot high wall:

- a. The building can also be used to contain noise levels from the workplace activities.
- b. The building depth provides a positive distance buffer between the outdoor noise sources and the residential property boundary.
- c. A building structure of 50 foot depth will generally provide more sound attenuation than a thin wall of the same height.
- d. Tall thin walls are difficult to construct, and require excessive bracing.

Mr. Mike Terry

January 7, 1994
Page 4

General Recommendations. The following are the recommended noise mitigation measures for the proposed Waikele Industrial Sub-division:

1. Include the requirement to comply with the State Department of Health noise regulations for motor vehicles and stationary sources within the property lease or sales agreements. Also include the requirement to not exceed the applicable State Department Health noise limits at the adjoining residences during all yard activities, excluding those normally permitted during construction.
2. Lay out the industrial lots and access roads to allow for construction of building structures similar to Condition A' along the common boundaries with the residential lots. The lot grades at the south (makai) end of the industrial subdivision should be at or below those along the common boundaries with the residential lots.

Let me know if you need additional information or clarifications regarding this report.

Sincerely,



Yoichi Ebisu, P.E.

encl.

FIGURE 1

DAYTIME BACKGROUND AMBIENT NOISE LEVELS
AT SOUTHEAST CORNER OF MANAGER'S DRIVE
HOUSING PROJECT SITE

DATE: DECEMBER 29, 1993
TIME: 1545-1554 HOURS

METER RESPONSE: FAST

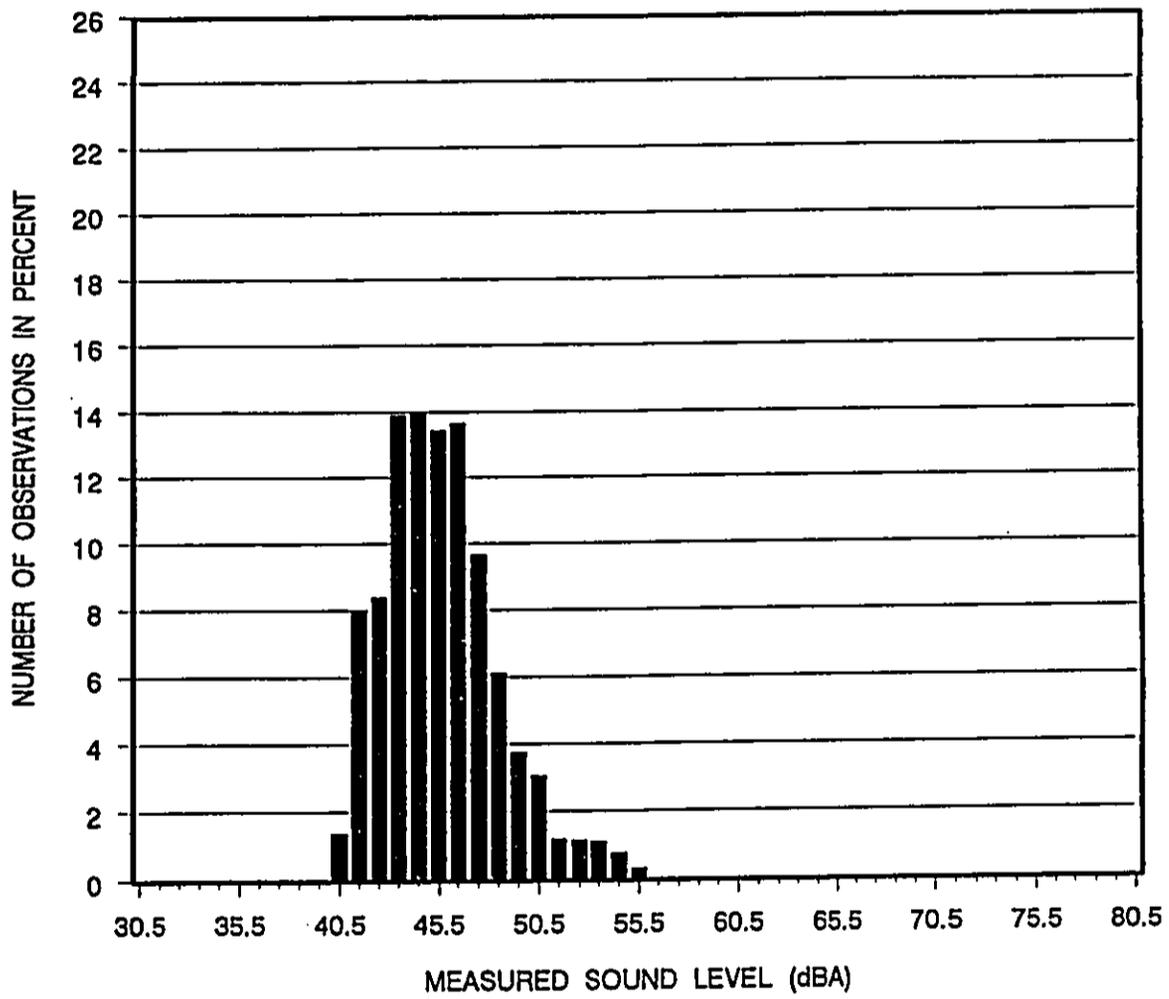
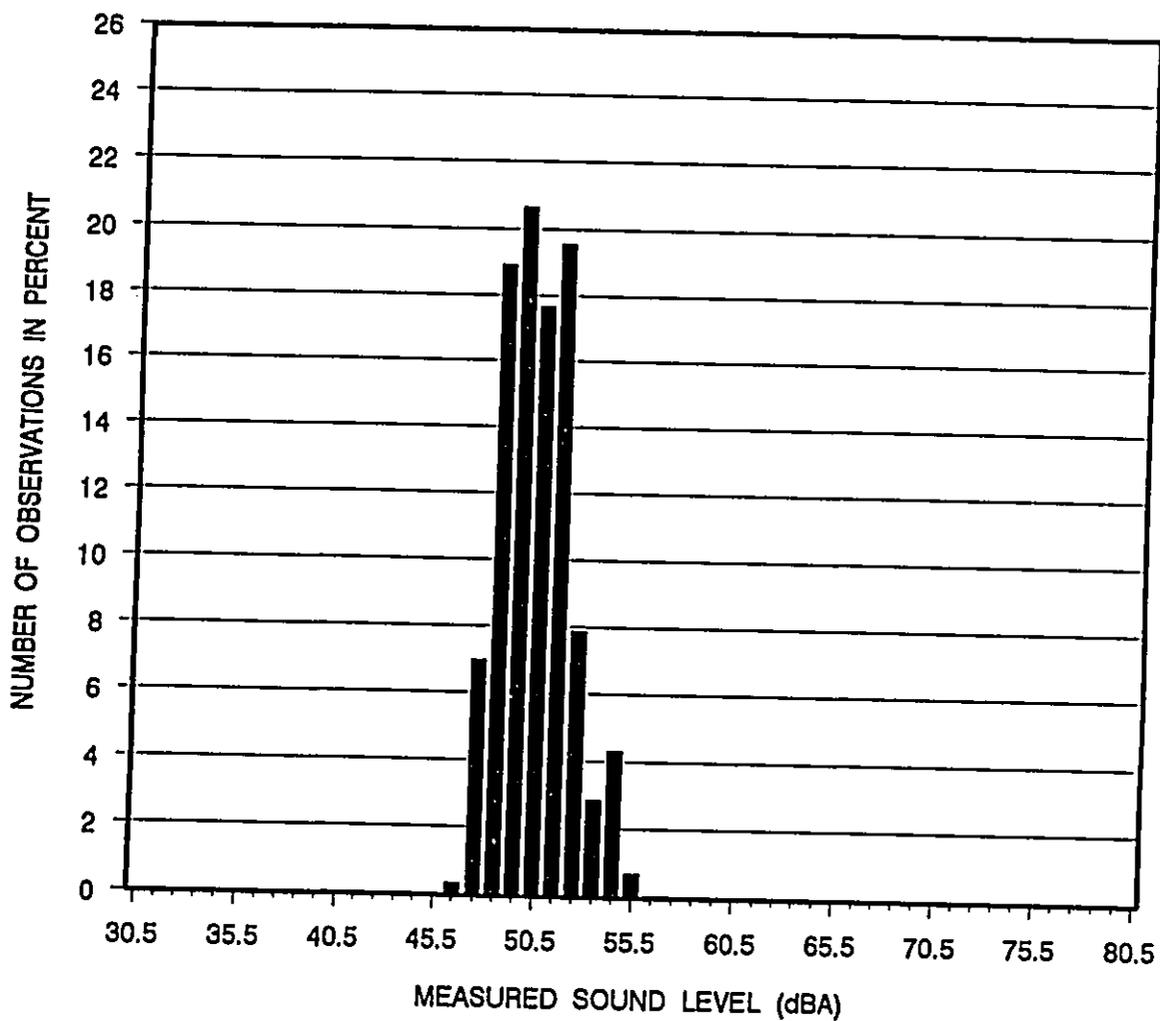


FIGURE 2

EARLY MORNING BACKGROUND AMBIENT NOISE
LEVELS AT THE VILLAGES PROJECT IN
WAIPIO GENTRY

DATE: DECEMBER 30, 1993
TIME: 0520-0530 HOURS

METER RESPONSE: FAST



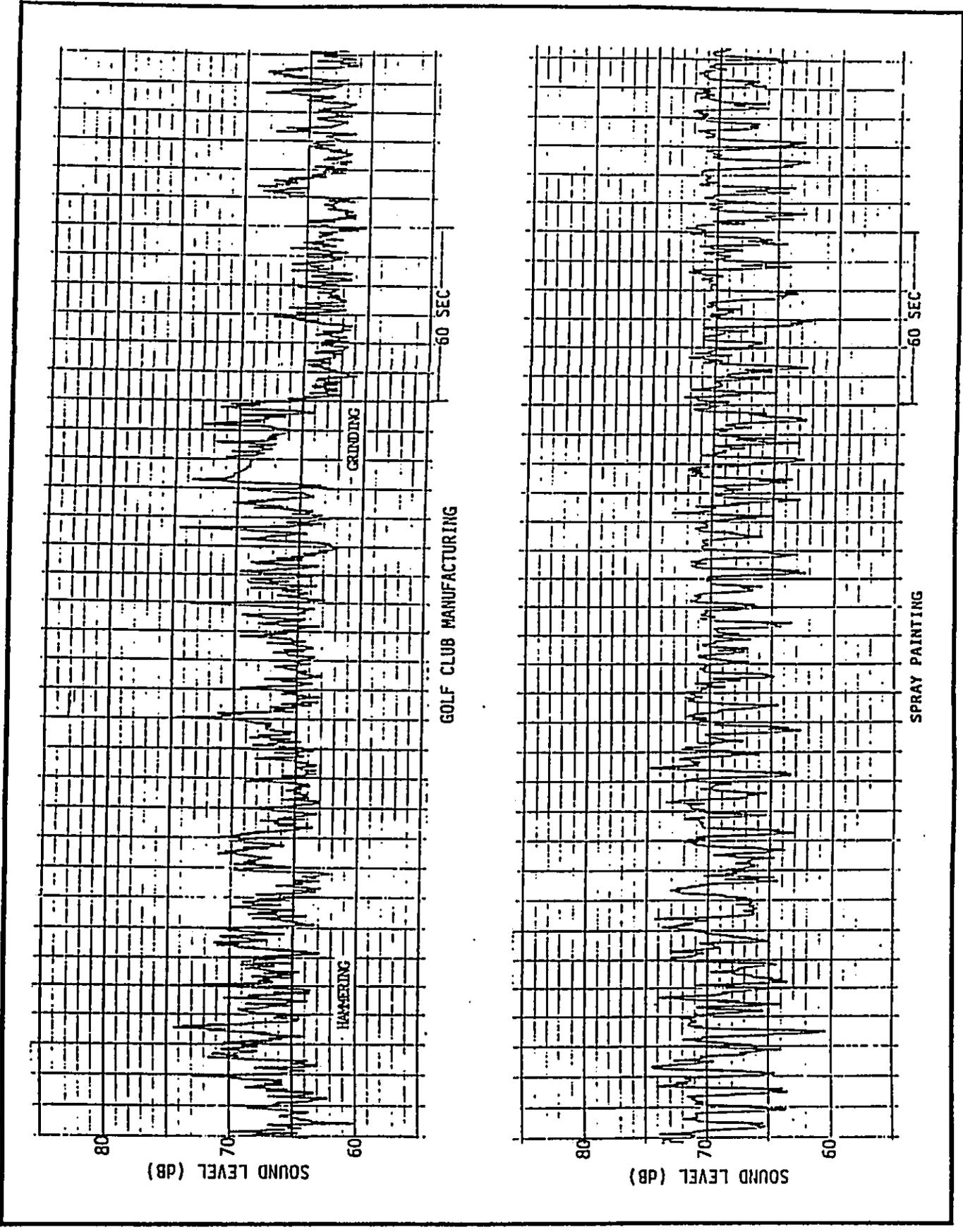


FIGURE 3

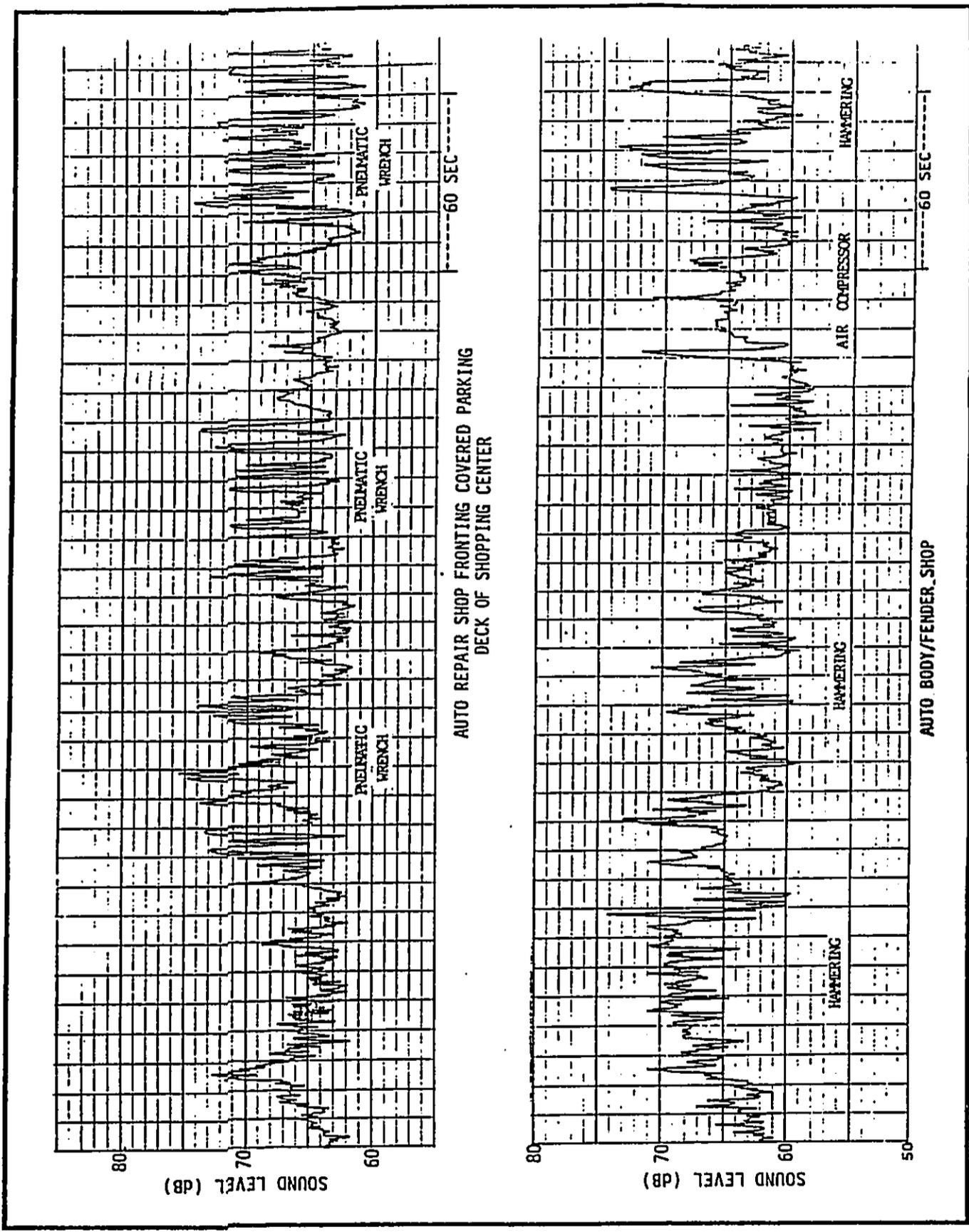
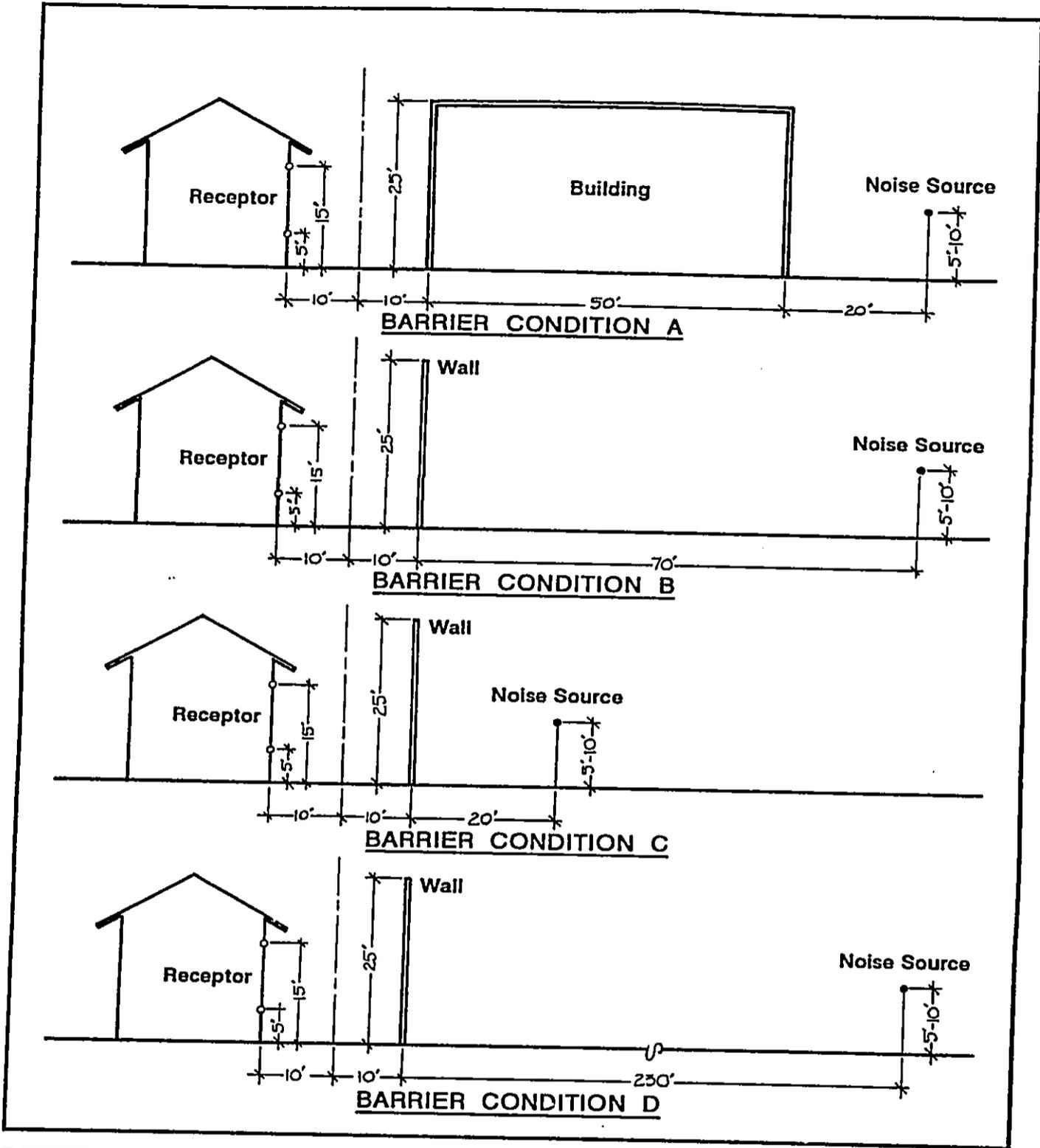


FIGURE 4



SOUND BARRIER, RECEPTOR, AND SOURCE LOCATION CONDITIONS A, B, C, AND D

FIGURE 5

TABLE 1

SUMMARY OF MEASURED WORKPLACE SOUND LEVELS

<u>Business Establishment (Measurement Location)</u>	<u>Background Ambient Noise Level</u>	<u>Transient Noise Sources</u>
Auto Body Repair & Paint Shop (At Doorway)	71 dBA	Air Compressor: 78 dBA Grinding: 85 dBA Hammering: 75 dBA
Tire Repair (Outside Entrance)	57 dBA	PA System: 80 dBA Pneumatic Wrench: 75 dBA Pneumatic Jack: 72 dBA Hammering: 70 dBA
Golf Club Manufacturing (At Doorway)	61 dBA	Grinding: 70 dBA Spray Painting: 68 dBA Hammering: 74 dBA
Spray Paint Shop (At Doorway)	61 dBA	Air Gun: 74 dBA
Upholstery Shop (At Doorway)	55 dBA	Stapler: 67 dBA Sewing Machine: 63dBA
Auto Repair Shop Below Parking Deck (30 Ft from Entrance)	62 dBA	Pneumatic Wrench: 74 dBA Hammering: 72 dBA
Auto Body Repair Shop (Outside and 8' from Entrance)	58 dBA	Hammering: 74 dBA PA System: 75 dBA Grinding: 65 dBA
Warehouse (Outside on Sidewalk)	60 dBA	Container Loading: 75 dBA

TABLE 2

PREDICTIONS OF NOISE LEVELS FOR VARIOUS SOUND SOURCES AND BARRIER COMBINATIONS

Sound Source	SPL @ 50 Ft.	***** SPL in dBA for Various Sound Barrier Conditions *****							
		A	B	C	D	A'	B'	C'	D'
On-Site Trailer Truck	78 dBA	50	55	61	46 (44)	43 (41)	53	60	44 (43)
Back-Up Alarm	79 dBA	39 (39)	53	61	43 (43)	39 (39)	53	61	43 (43)
Air Brake Release	87 dBA	47 (47)	61	69	51 (51)	46 (46)	61	69	51 (51)
15 Ton Fork Lift	84 dBA	56 (51)	61 (59)	66 (66)	53 (50)	48 (46)	59 (59)	66 (66)	50 (50)
General Yard Noise	73 dBA	47 (45)	51 (49)	57 (56)	42 (40)	41 (39)	49 (49)	56 (56)	40 (40)

Notes:

1. (xx) indicate dBA values for 5 foot receptor height.
2. Barrier Conditions A, B, C, and D utilized 25 foot wall and building heights.
3. Barrier Conditions A', B', C', and D' utilized 35 foot wall and building heights.

APPENDIX C

**A RECONNAISSANCE SURVEY LETTER REPORT
OF THE WAIKELE INDUSTRIAL SUBDIVISION
WAIPAHAU, O'AHU, HAWAII
[TMK: 9-4-02:Various]**

By

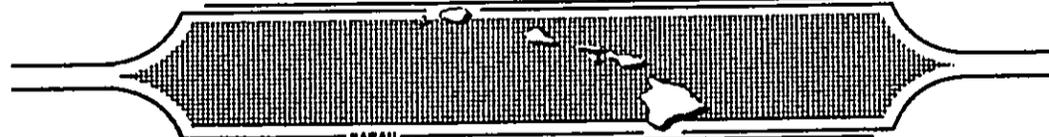
Robert L. Spear, Ph.D.

September, 1993

For

Amfac/JMB Hawaii

SCIENTIFIC CONSULTANT SERVICES Inc.



HAWAII
47-289 D HUI IWA STREET KANEHOE, HAWAII 96744

Dr. Tom Dye
Department of Land and Natural Resources
State Historic Preservation Division
33 So. King Street 6th Floor
Honolulu, Hawaii 96813

Dear Dr. Dye:

At the request of Amfac/JMB Hawaii an archaeological reconnaissance survey was conducted at the site of proposed rezoning and development of the Oahu Sugar Mill Project at TMK:9-4-02:Various at Waipahu, Hawaii (Figure 1). This survey was conducted on June 29th, 1993 by David Chaffee and Robert L. Spear, Ph.D.

A review of Land Commission Award (LCA) books found a single LCA within the bounds of the project area. This LCA, number 60, was petitioned by Mr. Thomas Hunt, a seaman in the employ of, and attendant to, Chief Kalaimoku. The claim was for a house lot. Nothing remains of any architecture that might once have been associated with this LCA. The extent to which the area of LCA number 60 has been bulldozed and graded makes it is highly unlikely that any subsurface component of this LCA remains intact.

The only archaeological site in the immediate vicinity of the project area is site number 50-80-09-1345 situated just south of the project area in the Waipahu Garden Park. This site is listed in the state files as Wakamiya Inari Shrine.

The project area is bounded on the east by Paiwa Street, on the south by Hans L'Orange Park, the Oahu Sugar Company's Mill site, and a portion of Waipahu Street, on the west by Waipahu Street, and on the north by residential development, including the Waipahu Hongwanji Mission. The survey of the project area showed that the entire parcel has been highly disturbed due to many years of sugarcane production and the associated heavy industry attendant to such activities.

Examination of the natural contours of the parcel area indicate that cutting and grading of the surface area has been wide spread. Bulldozer berms, cleared areas, and stockpiles of industrial equipment characterize the project area (Figures 2 and 3). In addition, a portion of the project area at the western end has been cut, leveled, and then graveled, and is currently used as a parking lot for school buses.

The soil within the project area is listed as Waipahu silty clay, with a 6 to 12% slope. The erosion hazard is slight to moderate (Foote, et. al. 1972: 135-136, Map 53). Waikele Stream is the closest water source and would not affect the project area in the event of flooding. Because there is little chance of sediment deposition due to erosion or flooding the likelihood of deeply buried archaeological features is considered to be very low.

Numerous roadways, both paved and unpaved criss-cross the property. No architectural features were noted in the project area. Given the extensive alteration of the project parcel by the clearing, cutting, and grading associated with the Sugar Mill's long term use of the land, no subsurface features are believed to exist.

It is our opinion that development of the project area will have no effect on any historic resources. It is our recommendation that no further archaeological investigations need be performed within the project area.

Sincerely,

Robert L. Spear D.C.

Robert L. Spear, Ph.D.
President
Scientific Consultant Services Inc.

REFERENCES CITED

Award Books

n.d

Awards Books (with maps of each LCA parcel), on file, Division of Land Management, State of Hawai'i.

Foote, D.E., E. Hill, S Nakamura, F. Stephens

1972

Soil Survey of the Islands of Oahu, Maui, Molokai, and Lani, State of Hawaii, US Dept. of Agriculture.

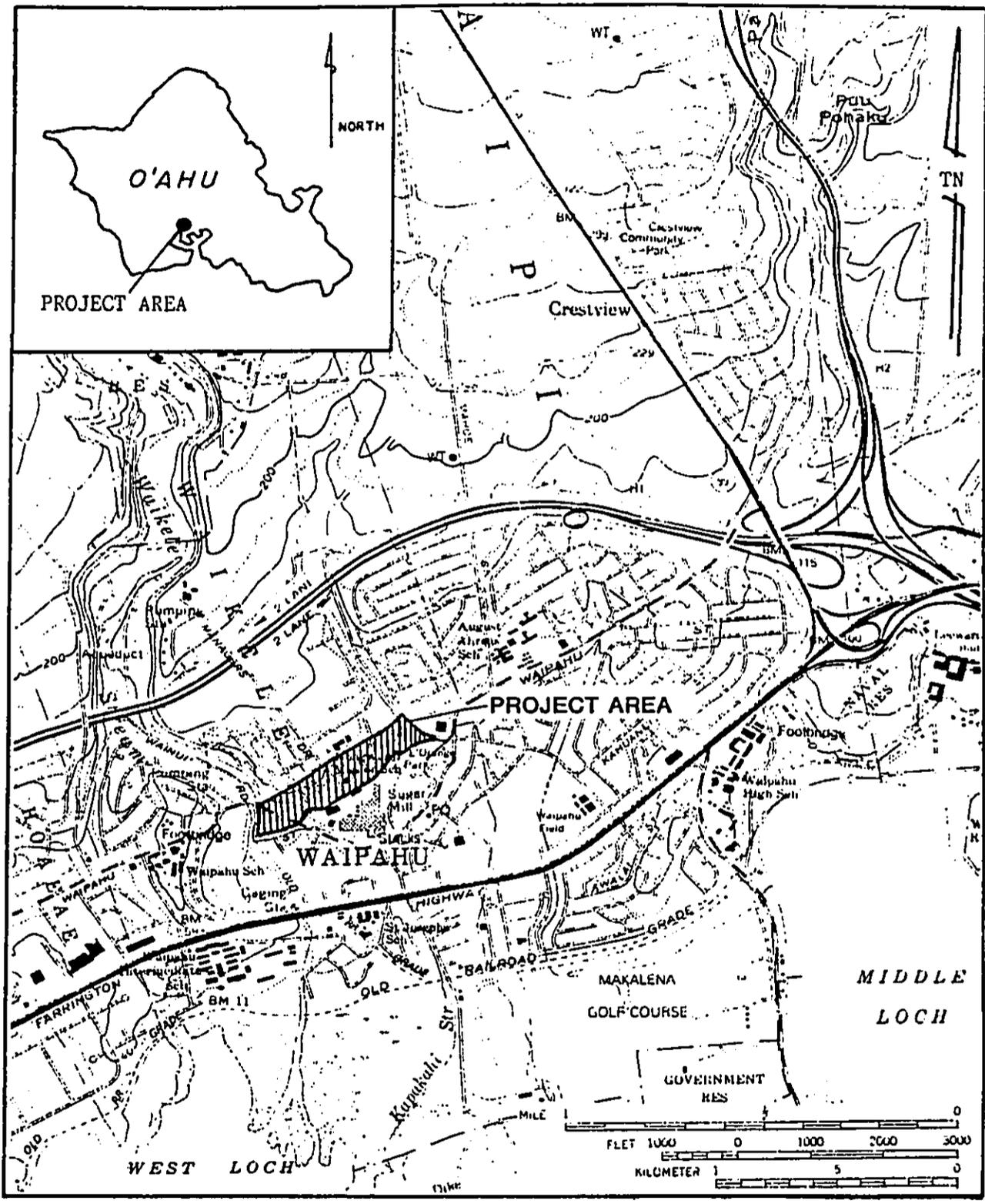


FIGURE 1: USGS WAIPAHA QUADRANGLE SHOWING PROJECT AREA (SHADED).



FIGURE 2: GENERAL PROJECT VIEW SHOWING CLEARED SURFACE AND INDUSTRIAL STOCKPILES, LOOKING EAST.



FIGURE 3: GENERAL PROJECT VIEW SHOWING CUT AND CLEARED SURFACE WITH BULLDOZER PILE, LOOKING WEST.

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JOHN WAHNE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
33 SOUTH KING STREET, 6TH FLOOR
HONOLULU, HAWAII 96813

September 27, 1993

Robert L. Spear
Scientific Consultant Services, Inc.
47-269 Hui Iwa Street
Kaneohe, Hawaii 96744

Dear Dr. Spear:

SUBJECT: **A Reconnaissance Survey Letter Report, AMFAC/JMB Oahu Sugar
Mill Project
Waialeale, 'Ewa, O'ahu
TMK: 9-4-2: por. 4 & por. 5**

Thank you for the opportunity to review this letter report. The report provides the information needed for our future review of developments proposed for this land.

Sincerely,

A handwritten signature in cursive script that reads "Don Hibbard".

for DON HIBBARD, Administrator
State Historic Preservation Division

TD:jt

KIITI AHUK, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCE

DEPUTIES

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HISTORIC PRESERVATION
DIVISION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

LOG NO: 9578
DOC NO: 9309TD37

AN ADDENDUM TO:
THE RECONNAISSANCE SURVEY LETTER REPORT
OF THE WAIKELE INDUSTRIAL SUBDIVISION
WAIPAHU, O'AHU, HAWAI'I
[TMK: 9-4-02: Por.of 4]

By

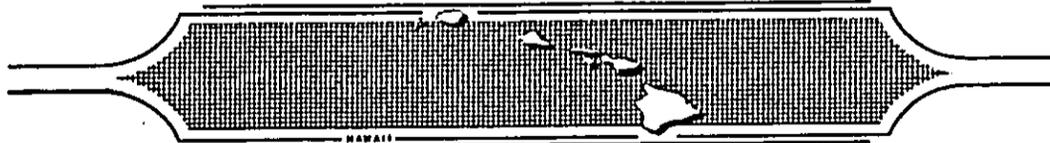
Robert L. Spear, Ph.D.

January, 1994

For

Amfac/JMB Hawaii

SCIENTIFIC CONSULTANT SERVICES Inc.



47-269 D HUI IWA STREET KANE OHE, HAWAII 96744

Dr. Tom Dye
Ms. Carol Ogata
Department of Land and Natural Resources
State Historic Preservation Division
33 So. King Street 6th Floor
Honolulu, Hawaii 96813

Dear Dr. Dye and Ms. Ogata:

At the request of Amfac/JMB Hawaii an archaeological reconnaissance survey conducted at the site of proposed rezoning and development of the Waikele Industrial Subdivision, was expanded to include additional acreage, [TMK 9-4-02: Por. of 4]. This additional survey was conducted on January 7th, 1994 by David Chaffee under the overall supervision of Robert L. Spear, Ph.D. The project was previously referred to as, "The Oahu Sugar Mill Project at Waipahu, Hawaii, [TMK:9-4-02:Various]".

The additionally surveyed area (approximately 5.5 acres) abuts the northern boundary of the project area originally surveyed in June, 1993. This newly added project area is bounded on the east by Managers Drive, on the south by the fence enclosing the Oahu Sugar Company's Mill site, on the west by a cane haul road, and on the north by vacant land, a coconut tree farm, and, farther north, the H-1 highway (Figure 1).

The information regarding environment, LCA research, previous archaeology, and soil description contained in the original report also applies to the parcel of land described in this report addendum.

A reconnaissance survey of the expanded project area showed the parcel to be an abandoned plantation camp. The area is characterized by roads with weeds growing through the remaining blacktop, house foundations, both of concrete and of stone, and the remains of historic wall segments delineating individual houselots. A few wooden frame structures in advanced stages of collapse and disrepair are also present within this additionally surveyed area.

Figure 2 shows the earliest map available (1920-1924) of the area under study. It is a proposed sewer system map of Waipahu by H. Olstad, Surveyor. Personal communication with retired Oahu Sugar Company Historian, Masao "Cranky" Watanabe established that the Waipahu Sugar Mill was, "constructed in 1899 and the plantation camp was established sometime after that".

A 1953 Sanborn Fire Insurance Map (Figure 3) shows the plantation camp dwellings and the names of the camp roads.

An Elias Shera photo of an Oahu Sugar Company plantation worker's camp at the Waipahu, Hawaii mill site is shown in Figure 4. Although it is impossible to tell if the houses in the photograph are within the current project area, they provide a representation of the type of camp structures present at the project site in circa 1930.

Most of the land comprising the abandoned plantation camp is flat. The parcel slopes slightly downward along the western edge. It is likely that cutting and grading of the surface area occurred when the plantation camp was constructed. Due to the disturbed nature of the parcel, the likelihood of deeply buried archaeological features is considered to be very low.

It is our opinion that no archaeological sites of any significance are in the project area and it is our recommendation that no further archaeological investigations need be performed there.

Sincerely,



Robert L. Spear, Ph.D.
President
Scientific Consultant Services Inc.

REFERENCES CITED

Spear, R. L.

1993

"A Reconnaissance Survey Letter Report, The Oahu Sugar Mill Project. Waipahu, Hawaii [TMK: 9-4-02:Various]".

Watanabe, M.

n.d.

Personal communication, January 13, 1994, through Lynn Owan, Oahu Sugar Company.

DOCUMENT CAPTURED AS RECEIVED

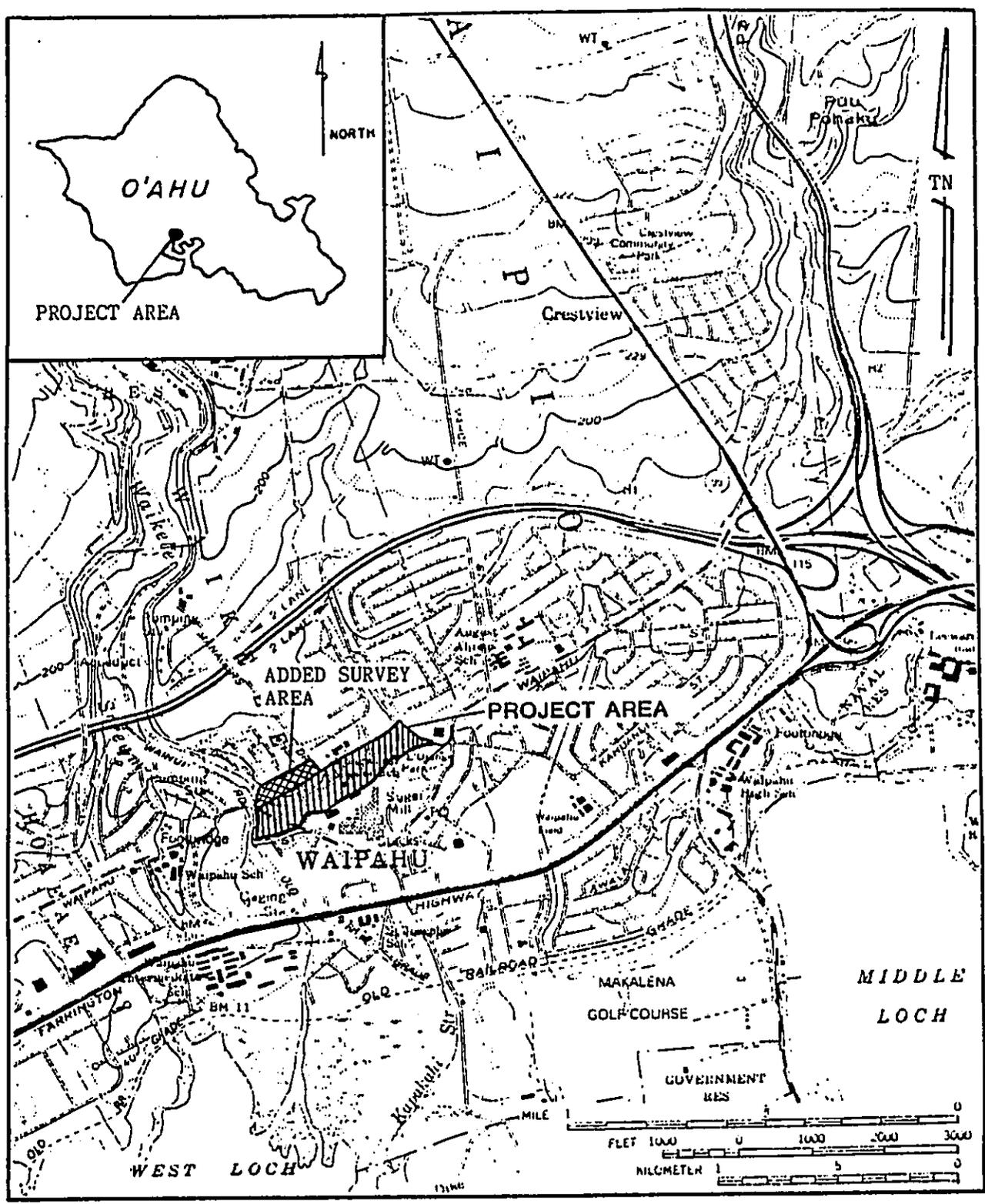


FIGURE 1: USGS WAIPAHA QUADRANGLE SHOWING ORIGINAL PROJECT AREA (SHADED), AND ADDITIONALLY SURVEYED AREA (CROSS-HATCHED).

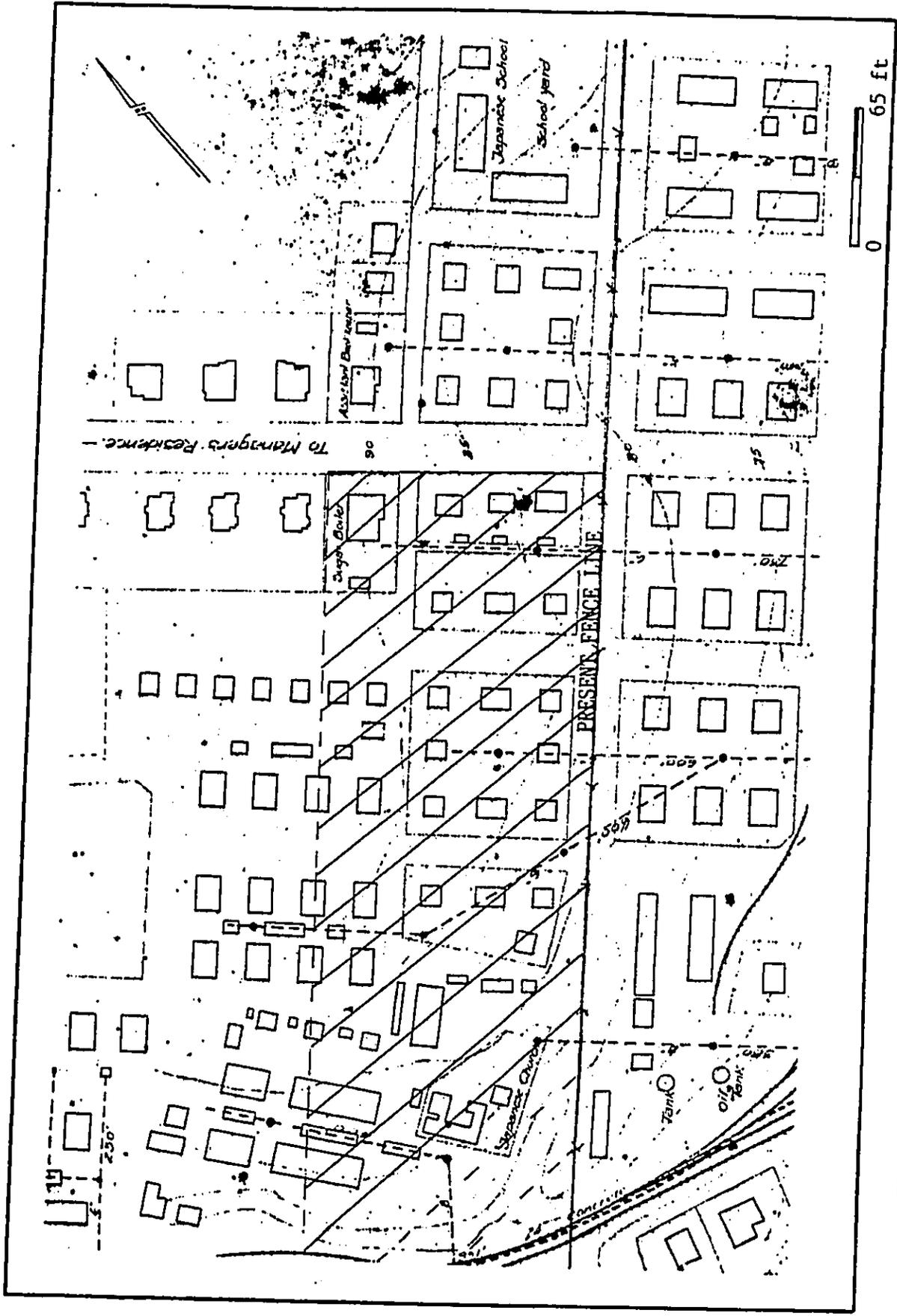


FIGURE 2: MAP OF 1920-1924 PROPOSED WAIPAHU SEWER SYSTEM SHOWING PROJECT AREA (SHADED).
REPRODUCED WITH PERMISSION OF OAHU SUGAR CO.

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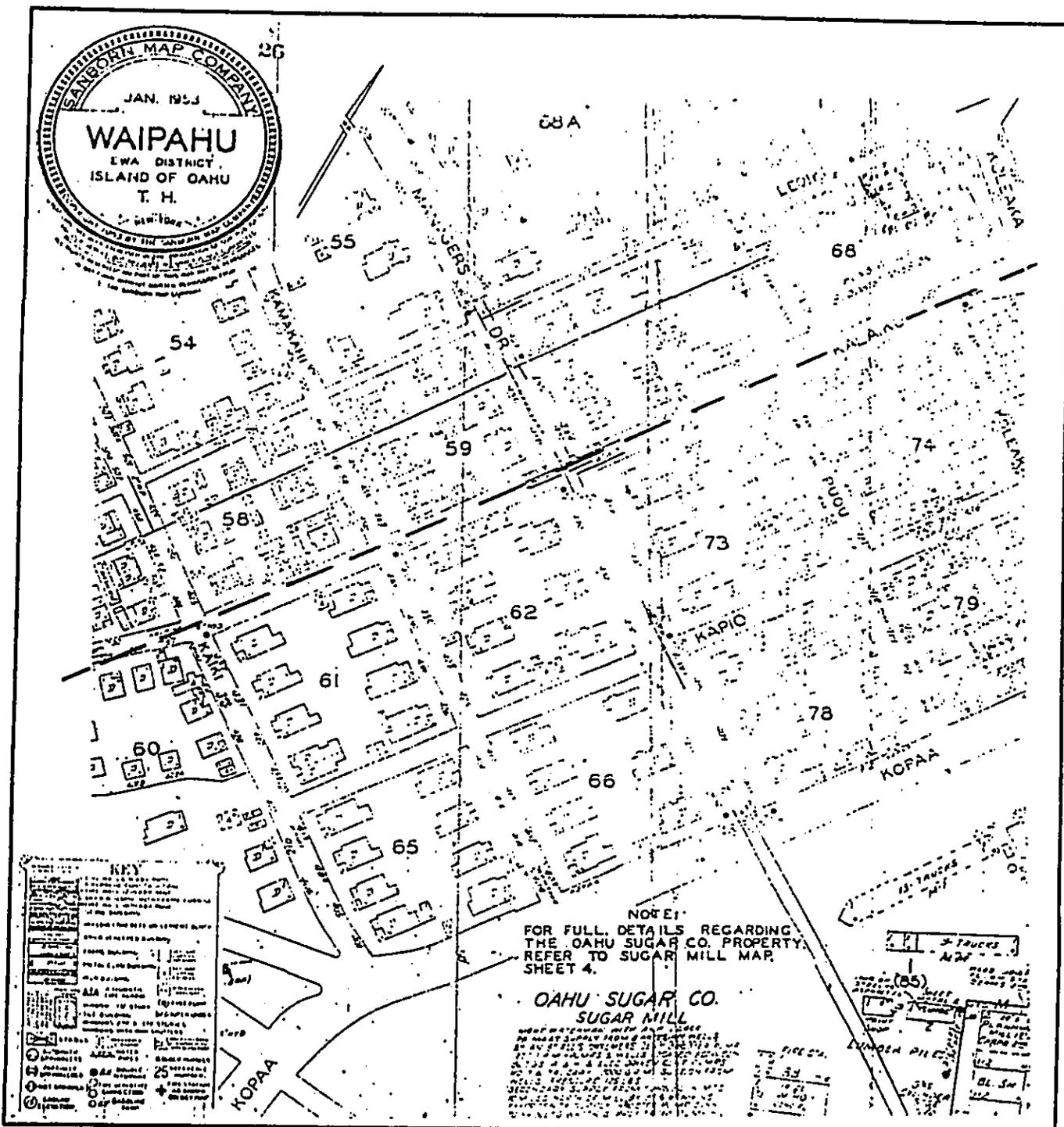


FIGURE 3: COMPILATION OF SANBORN FIRE INSURANCE MAPS OF OAHU SUGAR COMPANY AND SURROUNDING PLANTATION CAMP. (1953)
DASHED LINE INDICATES APPROX. CURRENT FENCE LINE.
ADDITIONALLY SURVEYED PROJECT AREA IS NORTH OF FENCE LINE.

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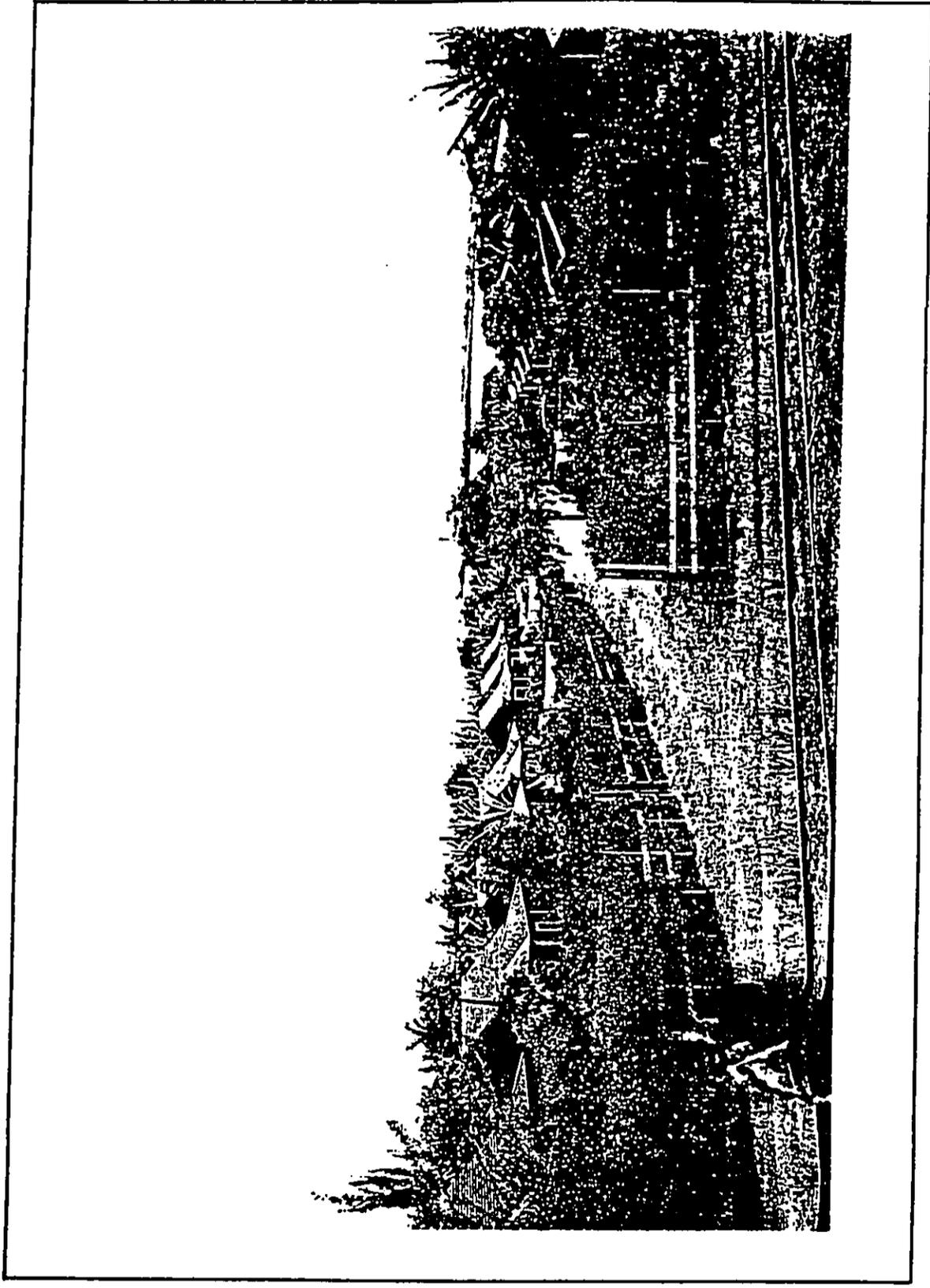


FIGURE 4: OAHU SUGAR COMPANY PLANTATION WORKER HOUSING CAMP. Ca. 1930 PHOTO BY ELIAS SHERA (REPRODUCED WITH PERMISSION OF BISHOP MUSEUM ARCHIVES [E108.729])

APPENDIX D

PLANNING DEPARTMENT
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET
HONOLULU, HAWAII 96813



FRANK F. FASI
MAYOR

ROBIN FOSTER
CHIEF PLANNING OFFICER
ROLAND D. LIBBY, JR.
DEPUTY CHIEF PLANNING OFFICER

LW

February 16, 1994

Mr. Vincent Shigekuni
PBR Hawaii
1042 Fort Street Mall, Suite 300
Honolulu, Hawaii 96813

Dear Mr. Shigekuni:

Central Oahu Development Plan Land Use Amendment
Application, Waikele Industrial Subdivision
Tax Map Key: 9-4-2: Portion of 4
Folder No. 94/CO-5

This is to acknowledge receipt of the subject application and Environmental Assessment (EA) on behalf of Oahu Sugar Company, Ltd. We have assigned file number 94/CO-5 to your application and request that you refer to this number in your correspondence.

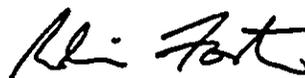
After reviewing the EA, we request that you provide more information on proposed uses for the site and future plans for the entire Waikele Industrial Subdivision (including future plans for sugar mill site) to allow a better assessment of long-term potential impacts on community. We are also concerned about the marketability of the proposed uses and, therefore, request you provide a market study to support your proposal.

We have notified the State Office for Environmental Quality Control (OEQC) of your proposal and filed copies of the Draft EA for public review and comment. Apart from comments received in response to the Draft EA, we recommend that you include the above information requested in the Final EA. If and when the Planning Department determines that the proposal will have no significant impact based on a review of the Final EA, a negative declaration will be issued and we will proceed with the Annual Amendment Review process. The department's recommendation for approval or rejection of proposed amendments will be issued on or before July 1, 1994.

Mr. Vincent Shigekuni
PBR Hawaii
February 16, 1994
Page 2-

Should you have any questions, please contact Lin Wong of
our staff at 523-4485.

Sincerely,



ROBIN FOSTER
Chief Planning Officer

RF:js

APPENDIX E

REAL ESTATE COUNSELING LETTER

COVERING
Supply and Demand Factor
Market Study Related to Proposed
Industrial Subdivision Activity at
the Project Site for the Proposed
WAIKELE LIGHT INDUSTRIAL SUBDIVISION

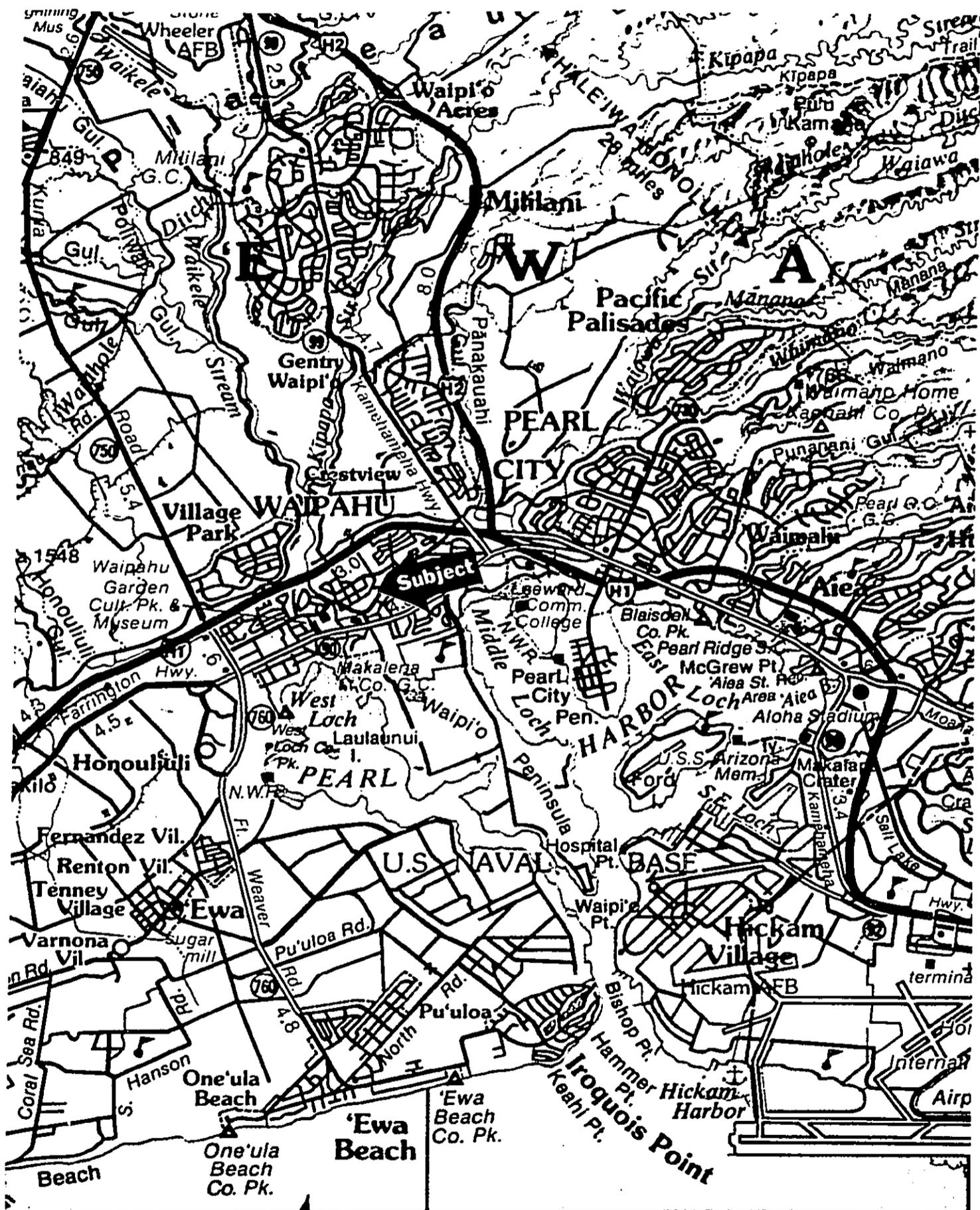
LOCATED AT
Paiwa Street, Waipahu,
Island of Oahu, State of Hawaii

TAX MAP KEY
Division 1, Zone 9, Section 4,
Plat 02, Portion of Parcel 004

PREPARED FOR
Mr. Timothy E. Johns
Vice President and General Manager
Real Estate Division
Oahu/Kauai Development
AMFAC/JMB HAWAII, INC.
700 Bishop Street, 21st Floor
Honolulu, Hawaii 96813

AS OF
March 25, 1994

DOCUMENT CAPTURED AS RECEIVED



SUBJECT AREA MAP

HOWELL & ASSOCIATES

Hugh M. Howell, MAI / Richard H. Sylva, MAI / Scot J. Voronoff / Steven D. Chee
Stephen E. Stadbauer / Patricia A. MacLean / Timothy W.L. Chee
Angela L. Atherley / Lowell T.S. Chung / Of Counsel: Joseph L. Hastings, MAI

Real Estate Appraisers & Consultants

March 25, 1994

Mr. Timothy E. Johns
Vice President and General Manager
Real Estate Division
Oahu/Kauai Development
AMFAC / JMB HAWAII, INC.
700 Bishop Street, 21st Floor
Honolulu, Hawaii 96813

RE: REAL ESTATE COUNSELING LETTER
Supply and Demand Factor Market Study Related to
Proposed Industrial Subdivision Activity at the
Project Site for the Proposed WAIKELE LIGHT INDUSTRIAL SUBDIVISION
Located at Paiwa Street, Waipahu, Island of Oahu, State of Hawaii
Tax Map Key: Division 1, Zone 9, Section 4, Plat 02, Portion of Parcel 004

Dear Mr. Johns:

At your request, we have conducted a supply and demand factor market study, relative to the proposed industrial use of 29.5 acres of land, which is currently adjacent to the Oahu Sugar Mill property, in Waipahu, Island of Oahu, State of Hawaii. Specifically, it has been requested, that we study Central and Leeward Oahu Industrial lot market supply data (*available or planned inventory*) and demand data (*sales data*) for purposes of ascertaining potential industrial use of the 29.5-acre subject bulk property. As of the date of this letter, the subject property is mostly County Development Plan Classified for industrial use (24.0 acres); and partially County Development Plan Classified for residential use (4.5 acres) and Public Facility Use (1.0 acre). It is our understanding that the client is currently attempting to change the entire County Development Plan Classification of the proposed subject industrial project site to an industrial classification. The effective date of this assignment is March 25, 1994.

FORMAT OF THIS COUNSELING LETTER

This letter is broken down into the following sections, in order of presentation:

- SECTION I:** Executive Summary of the Subject Area and Property
- SECTION II:** Purpose and Scope of This Study, and Current Preliminary Plans for Development of the Subject Project Site
- SECTION III:** Research Parameters and Findings of This Market Study

**SECTION I: EXECUTIVE SUMMARY OF THE
SUBJECT AREA AND PROPERTY**

SUBJECT AREA DESCRIPTION

The subject property is located in Waipahu Town, approximately twelve miles directly west of Downtown Honolulu. Waipahu Town has traditionally been the "anchor" for the sugar cane agricultural community in the central/southern portion of the Island of Oahu, with the location of the subject Oahu Sugar Mill property in the community. The only other operating sugar mill on Oahu is the Waialua Sugar Mill on the north shore of Oahu, near Haleiwa.

Waipahu is bounded to the south/makai by the ocean, in the form of Pearl Harbor's West Loch; to the west by Kunia Road, to the north/mauka by the H-1 Freeway, and to the east by certain open areas, and Middle Loch of Pearl Harbor.

Farrington Highway is the main traffic thoroughfare that runs through Waipahu, east to west, with commercial activity on each side (*retail/office/industrial*). The Oahu Sugar Mill sits approximately one-tenth of a mile north/mauka of Farrington Highway, separated from the highway by mostly commercial land uses.

As of April 1, 1990, Waipahu was estimated to have a population of 51,153 residents; and currently, the area appears to be well poised as an important commercial/industrial center for existing and planned residential activity nearby, in the Ewa area, makai/southwest, the Village Park and Royal Kunia Communities mauka/northwest, and the Waikele area, mauka/northeast.

The major change that will occur in 1995 in Waipahu, will be the closure of the Oahu Sugar Mill; and therefore, possible demographic shift of a portion of the community's employment and/or population base.

It should be noted, that certain discount retail commercial activity has been recently developed in the new Waikele community, just across H-1 Freeway, mauka/north of the subject Waipahu area, at the new Waikele Shopping Center.

Immediately surrounding the subject property is: the Oahu Sugar Mill itself, which shares the same tax map key parcel; and also Hans L'Orange Park (*makai/south*), as well as the Jack Hall multi-family residential rental housing project, and a bulk residential tract, mauka/north, which is planned for a future affordable residential project. Paiwa Street forms the east boundary of the subject, and will provide ingress and egress to the proposed subject project site; whereas, certain existing single-family residential subdivisions and open space define land uses immediately west of the subject.

Various Subject Area Maps are included on the facing and preceding pages. An aerial photograph of the subject and environs is provided following.

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AERIAL PHOTOGRAPH

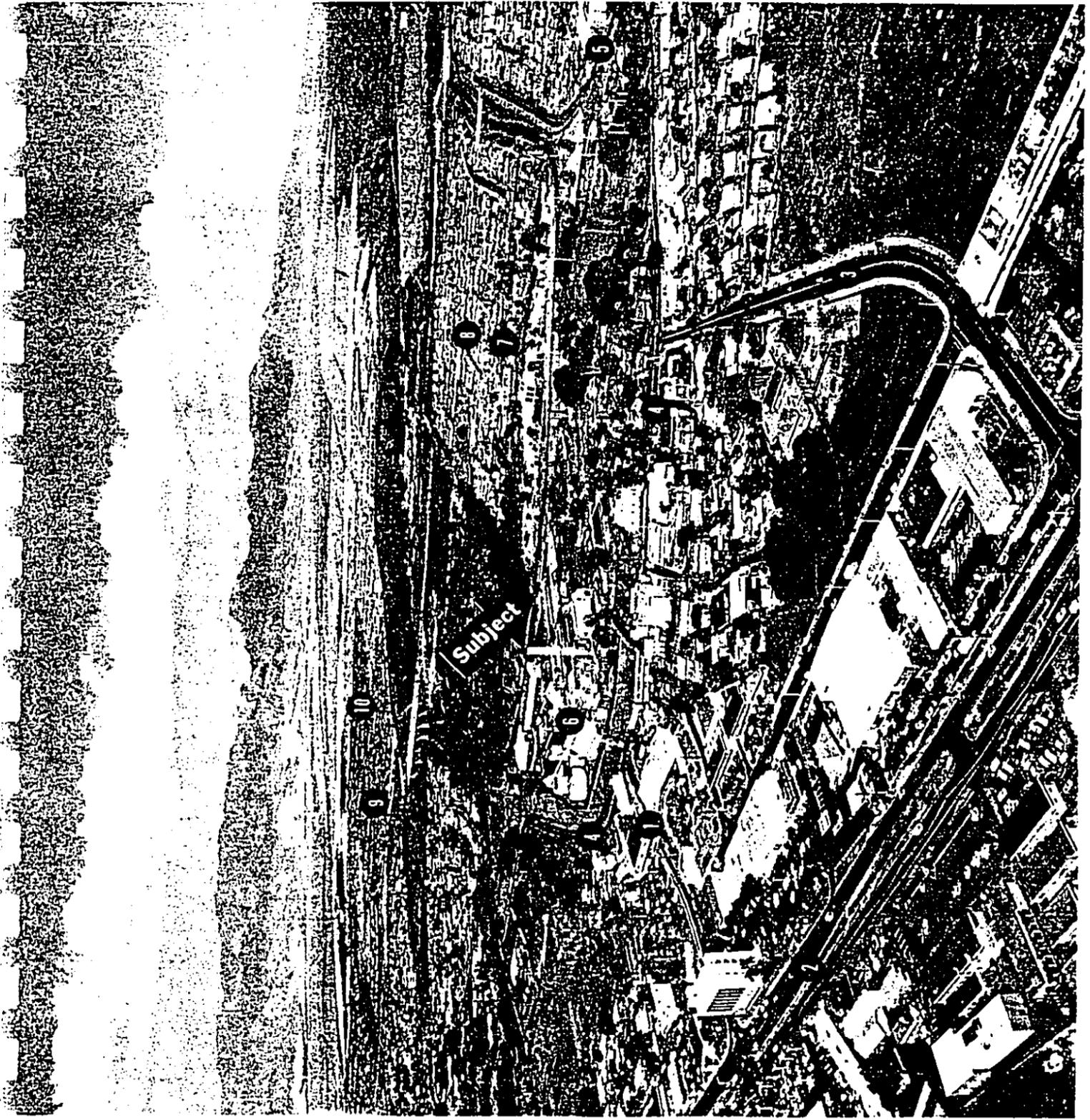
**AERIAL PHOTOGRAPH OF SUBJECT AND
GREATER NEIGHBORHOOD ENVIRONS
(KEY TO AERIAL PHOTOGRAPH)**

SUBJECT:

Denoted by Arrow

POINTS OF INTEREST:

- 1** Waipahu Depot Road
- 2** Farrington Highway
- 3** Mokuola Street
- 4** Waipahu Street
- 5** Paiwa Street
- 6** Waipahu Sugar Mill
- 7** Jack Hall Rental Housing
- 8** Waipahu Village Housing
- 9** Village Park Single-Family Residential Subdivision
- 10** Royal Kunia Single-Family Residential Subdivision



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PROPERTY DESCRIPTION

LOCATION: Paiwa Street, Waipahu, Island of Oahu, State of Hawaii

TAX MAP KEY: Division 1, Zone 9, Section 4, Plat 02, Portion of Parcel 004

**SITE DESCRIPTION/
PRESENT USE:** The 29.5-acre subject project site, forms the mauka/north portion of the 62.85-acre Oahu Sugar Mill property. Portions of the subject proposed industrial project site are vacant and periodically used for open storage use, and also for the parking of various heavy sugar cane harvesting vehicles.

A Subject Location Map is provided on the facing page.

**STATE LAND USE
COMMISSION CLASSIFICATION:** Urban

**CENTRAL OAHU DEVELOPMENT
PLAN USE MAP:** Industrial (24.0 Acres); Residential (4.5± Acres); Public Facility (1.0± Acres)

It should be noted, that currently the client is in the process of attempting to change the Residential and Public Facility Central Oahu Development Plan Use Map designations of 5.5 acres of the proposed subject project site to an Industrial designation, to allow for more specific County industrial zoning and use of the subject property.

COUNTY ZONING: R-5, Residential District (*Approximately 95%*); I-2, Intensive Industrial District (*Approximately 5%*).

UTILITIES: All public utility services are available to the subject site from both Paiwa and Waipahu Street (*water, power and sewer services*). Power delivery is via overhead conduits.

PROPOSED USE: Subdivision of the subject 29.5-acre site into an industrial subdivision.

HIGHEST AND BEST USE: Subdivision of the subject site into an industrial subdivision.

OWNERSHIP OF RECORD: Currently, the subject site is owned in fee simple by Oahu Sugar Company, Limited.

**REAL PROPERTY RIGHTS
INVOLVED IN THIS
ASSIGNMENT:** Fee Simple

**SECTION II: PURPOSE AND SCOPE OF THIS STUDY,
AND CURRENT PRELIMINARY PLANS FOR
DEVELOPMENT OF THE SUBJECT PROJECT SITE**

**PURPOSE AND SCOPE
OF THIS MARKET STUDY**

As indicated at the beginning of this letter, the purpose of this assignment is to conduct a supply and demand factor market study to determine the potential for industrial use on the 29.5-acre subject developer's site. As the request of the client, this market study specifically includes supply (*inventory*) and demand (*sales*) data from within the Honolulu, Central, and Leeward Oahu industrial markets. While certain macro-data involving business and residential trends is important in correlation with various industrial markets on the Island of Oahu, it was considered that this macro-data, while discussed briefly herein, was on a detailed basis, out of the scope of this study. The market study was primarily conducted on a practical basis, involving very basic industrial market data.

**PRELIMINARY PLANS FOR
DEVELOPMENT OF THE SUBJECT
29.5-ACRE DEVELOPER'S SITE**

Based on the findings of this market study, a preliminary subdivision plot plan was prepared by the planning firm of PBR Hawaii, which includes fifty-six (56) light industrial lots, which range in size from 16,000 square feet to 69,696 square feet. The average lot size for the preliminary planned lot mix is 18,400 square feet. The preliminary plot plan is exhibited on the following page.

The current preliminary proposed subject industrial subdivision plan has a planned road layout that appears to be very efficient; and therefore, would most likely support a maximum amount of industrial land to be potentially available to the subject industrial marketplace, on a flexible basis, depending on changing market conditions.

SECTION III: RESEARCH PARAMETERS AND FINDINGS OF THIS MARKET STUDY

RESEARCH PARAMETERS OF THIS MARKET STUDY

To determine the optimum lot size and lot mix for industrial lot development of the subject 29.5-acre developer's site, the appraisers conducted a market study with the following research parameters:

RESEARCH PARAMETERS

DEFINED MARKET AREA: Central and Leeward Oahu (*Typical Boundaries: Salt Lake and Red Hill areas to the east; Ewa Plain and Waianae Coast to the west; Wahiawa to the north, and the ocean to the south.*)

REAL PROPERTY PRODUCT SURVEYED/STUDIED: Industrial Lot Sales/Listings, Etc.

TIME FRAME OF THIS STUDY: **NEAR TERM:** 3 Years From Date of Assignment (*March 1, 1994*)
LONG TERM: Within Past 10 Years From Date of Assignment

PRIMARY DATA RESEARCH CONDUCTED FOR PURPOSES OF THIS STUDY:

- **SUPPLY FACTOR RESEARCH (COMPETITION ASSESSMENT) INVOLVING:**
 - 1) Resale industrial lot listings.
 - 2) Current and proposed new industrial lot listing data (*developer's inventory*); and
- **DEMAND FACTOR RESEARCH INVOLVING:**
 - 1) New sale activity (*developer's inventory*);
 - 2) Resale activity; and
 - 3) Purchaser profiles.

SECONDARY DATA RESEARCH CONDUCTED FOR PURPOSES OF THIS STUDY: Research and discussion of corollary economic and demographic factors that may have an influence on the future industrial development of the subject developer's site.

SOURCES:

- 1) Honolulu Board of Realtors Multiple Listing Service
- 2) City and County of Honolulu Real Property Tax Office
- 3) State of Hawaii Bureau of Conveyances
- 4) City and County of Honolulu Planning Department
- 5) Pacific Business News
- 6) Various Interviews With Commercial Real Estate Brokers and Developers' Representatives:
 - Mr. Steve Sofos, President and Principal Broker, Sofos Realty Corporation
 - Ms. Leslie McCabe, Marcus & Associates, Inc.
 - Mr. Dennis Weins, Principal Broker, Landmark Commercial Corporation
 - Mr. Ronald K. Watase, President, Herbert K. Horita Realty, Inc.
 - Ms. Lee Crerar, Kapolei Leasing Coordinator, for The Estate of James Campbell
 - Mr. Ron Lee, Senior Project Manager, Mililani Technology Park
 - Ms. Bobbi Lee, Realtor Associate, Sutton Group, Aloha Realty
 - Mr. Joe North, J. S. North Company, Owner's Representative, Kenai Industrial Park
 - Mr. Doug Pothul, Vice President, Industrial Division Manager, Monroe & Friedlander, Inc.
 - Mr. John Bulkley, Realtor Associate, Monroe & Friedlander, Inc.
 - Ms. Rita Jo Shoultz, Realtor Associate, Monroe & Friedlander, Inc.
 - Mr. Ray Garabito, Realtor Associate, Industrial Properties, CB Commercial
 - Mr. John Dooling, Realtor Associate, Industrial Properties, CB Commercial
 - Mr. Dana Peiterson, Realtor Associate, CB Commercial
 - Mr. Tosh Hosoda, Chief Planner, the Gentry Companies
 - Mr. Charles Pang, Commercial Real Property Broker, The Gentry Companies

FINDINGS OF THIS MARKET STUDY

Based on the above-cited research parameters of this study, the appraisers were able to summarize their findings, as indicated following, beginning with our *Supply Factors* discussion.

TABLE 1

**SUMMARY OF SELECTED RESALE LISTINGS
INDUSTRIAL LOTS
CENTRAL AND LEEWARD OAHU
STATE OF HAWAII**

Lot No.	Industrial Project, Location and Tax Map Key (Division 1)	Lot Area In Square Feet	Land Tenure	County Zoning	Listed Price
1	Halawa Business Park Halawa 9-9-077: Parcel 062	20,706 (.475 Acre)	Leasehold	I-2	\$1,000,000
2	Campbell Industrial Park Ewa 9-1-031: Parcel 035	158,036 (3.628 Acres)	Fee Simple	I-2	\$3,267,000
3	Campbell Industrial Park Ewa 9-1-031: Parcel 042	313,632 (7.207 Acres)	Fee Simple	I-2	\$7,850,000
4	Campbell Industrial Park Ewa 9-1-032: Portion of Parcel 063 Lot No. 6202A	42,642 (.979 Acre)	Fee Simple	I-2	\$1,900,000
5	Campbell Industrial Park Ewa 9-1-032: Portion of Parcel 063 Lot No. 6202B	66,121 (1.520 Acres)	Fee Simple	I-2	\$3,500,000
6	Campbell Industrial Park Ewa 9-1-032: Parcel 107	48,195 (1.106 Acres)	Fee Simple	I-2	\$1,253,070

SOURCE: HOWELL & ASSOCIATES, MARCH 1994

SUPPLY FACTORS (COMPETITION ASSESSMENT)

The appraisers researched various supply factors in the Central and Leeward Oahu industrial market, to ascertain the following: 1) to find out what industrial lot inventory may be currently available, or planned for development within say, five years, which may be potentially competitive with any lots proposed for the subject project property; and 2) based on the current and planned inventory of industrial lots in Central and Leeward Oahu, are there any market niches that show promise for product that might be developed on the subject developer's site.

Relative to the foregoing, the appraisers' research revealed the following, with respect to available resale and new sale (*developer's lots*) industrial lot inventory.

CURRENT AVAILABLE RESALE LOT INVENTORY

Research for industrial lot resale listing data was based on data collected from the Honolulu Board of Realtors, Multiple Listing Service, and various publications (*i.e., Pacific Business News*); and also on listed resumes provided by various Island of Oahu commercial real estate brokerage firms, as well as industrial park site inspections.

Our research of resale data reflected a limited resale aggregate. As indicated in facing Table 1, as of the date of this assignment, six industrial resale lots are available in Central and Leeward Oahu. This available product reflects one lot located at Halawa Business Park (*seven miles directly southeast of the subject*), and five lots located at Campbell Industrial Park (*eight miles directly southwest of the subject*). The Halawa Business Park lot is 20,706 square feet of in size; whereas, typically, the Campbell Industrial Park lots are large offerings, ranging in size from .979 acre to 7.207 acres. All of the resale lot listings are fee simple in land tenure, with the exception of the Halawa Business Park lot, which is leasehold.

It is the appraisers' opinion that the industrial lot resale market is very limited in Central and Leeward Oahu, in large part, because of strong owner-user purchaser activity, in which owner-users buy lots for business purposes, and therefore, rarely place lots back into the marketplace. It appears that most lots placed back into the marketplace, typically involve mostly investment, non-owner-user types of purchasers; and as is evident in Table 1, most of the resale listings involve lots of approximately 1.0 acre or more in size.

CURRENTLY AVAILABLE AND PROPOSED NEW SALE INVENTORY (DEVELOPER'S LOTS)

Our research for currently available and/or proposed new sale or developer's lots, involved various projects and product listed in following Table 2.

From our supply factor research it may be observed that standing inventory currently available in the subject industrial marketplace, regarding developer's inventory, significantly reflects mostly larger lots (*1.0 acre or larger*), with very little smaller product (*say, under 1.0 acre in size*). This developer lot inventory mix is similar, therefore, to the resale inventory mix described preceding. Currently, at least 28 larger lots are available at

TABLE 2

Page 1 of 2

**CURRENTLY AVAILABLE AND/OR PLANNED
NEW SALE INVENTORY - INDUSTRIAL LOTS
CENTRAL AND LEEWARD OAHU
(WITHIN FIVE YEARS)**

Project Name and Location	Acres	No. of Lots	Type of Lots Sizes	Land Tenure	Status
EXISTING/PARTIALLY DEVELOPED PROJECTS					
KENAI INDUSTRIAL PARK Barbers Point Harbor and Campbell Industrial Park Area Ewa	65.00	33	County I-3 (Waterfront Industrial Zoned Lots) 0.746 Acre to 2.909 Acres	Leasehold	Kenai Industrial Park was completely developed in late 1993. Two lots have closed and six lots are currently under contract. Contact: Mr. Joe North of J.S. North Company, Owner's Representative (Ciri Land Company)
KAPOLEI BUSINESS/INDUSTRIAL PARK PHASE I Kapolei, Ewa	130.00	42	County I-2 Zoned Lots 1.0+ Acres	Leasehold	Overall, 800 acres of industrial land will be developed in the future in Kapolei Business/Industrial Park. Phase I (130.0 acres) development was completed in September 1993; and currently, 3 lot transactions have occurred, involving a 2.3-acre lot, a 2.2-acre lot, and a 1.7-acre lot. Other development phases will be developed in the future; however, the scope of these phases and projected development dates have not yet been determined. Contact: Ms. Lee Crerar, Kapolei Leasing Coordinator for The Estate of James Campbell
MILILANI TECHNOLOGY PARK PHASE I Mililani	103.46	16	County IMX Zoned Lots 2.60 Acres to 5.93 Acres	Fee Simple	Currently, 11 lots out of a total of 16 lots in Phase I have been purchased, and 1 lot is in escrow. Hence, 4 lots are currently available. Phase II will consist of 115.0 acres of project area, and will be exposed to the marketplace in approximately two years. An expanded use County zoning, from I-2 to IMX was obtained in mid-1993. Contact: Mr. Dana Peiterson, Realtor Associate, CB Commercial Real Estate Group of Hawaii, Inc.
PROPOSED PROJECTS					
C&H AIEA SUGAR MILL INDUSTRIAL PROJECT Aiea	8.63	11	County I-2 Zoned Lots 18,000 Sq. Ft. to 25,000 Sq. Ft.	Fee Simple	Eleven industrial lots are planned for an 8.63-acre project area. The lots will reflect an average lot size of 25,000 square feet. Development is to begin by March 1995, and sales may commence within 1 to 2 years after this date. Contact: Mr. Jeffrey Zimmerman, Development Manager for Alexander & Baldwin, Inc.

N/A = Not Available

SOURCE: HOWELL & ASSOCIATES, MARCH 1994

TABLE 2

Page 2 of 2

**CURRENTLY AVAILABLE AND/OR PLANNED
NEW SALE INVENTORY - INDUSTRIAL LOTS
CENTRAL AND LEEWARD OAHU
(WITHIN FIVE YEARS)**

Project Name and Location	Acres	No. of Lots	Type of Lots Sizes	Land Tenure	Status
PROPOSED PROJECTS					
GENTRY EWA Ewa by Gentry, Ewa	12.00	N/A	N/A	Fee Simple	This project area received City and County of Honolulu Development Plan approval as of December 1993; however, no specific plan of development is yet formulated. At least 2.0 acres to 3.0 acres may be used for a production home fabrication yard for various future Ewa by Gentry residential development. Commencement of development has been pushed forward from 3 to 4 years, to 1 to 2 years. Contact: Mr. Tosh Hosoda, Chief Planner, The Gentry Companies
GENTRY WAIAWA RIDGE Waiawa (East and Across H-2 Freeway from Waipio by Gentry)	90.00	N/A	N/A	Leasehold	City and County of Honolulu Development Plan approval is intact for 90.0 acres of land to involve commercial and industrial use. These uses were to be mixed, but now will be allowed to be separate. Specific zoning of this land should occur by say, March 1995. Much planning and future development depends on infrastructure planning and development. A large bridge over a major gulch needs to be developed, and a sewage trunk line to the Pearl City sewage pump station needs to be constructed. Contact: Mr. Tosh Hosoda, Chief Planner, The Gentry Companies
ROYAL KUNIA, PHASE II Royal Kunia	123.00	N/A	N/A	Fee Simple	Development and presales are projected to begin in two to three years. No specific product has yet been determined Contact: Mr. Ron Watase, President, Herbert K. Horita Realty
WAIANAE INDUSTRIAL PARK Waianae	7.60	13	County I-2 Zoned Lots 20,000 Sq. Ft. to 25,200 Sq. Ft. (Typically, 20,000 Sq. Ft.)	Leasehold	Development of this project may begin during the summer of 1994, depending on pre-marketing actions and response. Sales activity could commence in mid-1995, based on this development/marketing schedule. Contact: Rita Jo Shultz/John L. Bulkley, Realtor Associates, Monroe & Friedlander, Inc., the Sales Agency for the Developer

N/A = Not Available

SOURCE: HOWELL & ASSOCIATES, MARCH 1994

TABLE 3 UNLISTED STANDING INVENTORY INDUSTRIAL LOTS* GENTRY BUSINESS PARK WAIPIO BY GENTRY ISLAND OF OAHU, STATE OF HAWAII					
No.	Tax Map Key (Division 1)	Lot Area In Square Feet	No.	Tax Map Key (Division 1)	Lot Area In Square Feet
1	9-4-099: 021	61,788	10	9-4-099: 063	38,367
2	9-4-099: 032	57,608	11	9-4-127: 012	127,195
3	9-4-099: 040	90,624	12	9-4-127: 013	126,324
4	9-4-099: 041	86,681	13	9-4-127: 014	483,080
5	9-4-099: 047	50,628	14	9-4-127: 015	246,550
6	9-4-099: 048	28,226	15	9-4-127: 018	94,961
7	9-4-099: 056	22,807	16	9-4-127: 021	94,525
8	9-4-099: 057	21,495	17	9-4-127: 023	6,098
9	9-4-099: 061	20,025			

*All of the lots are County zoned I-2, Intensive Industrial District

SOURCE: THE GENTRY COMPANIES; HOWELL & ASSOCIATES, MARCH 1994

Kenai Industrial Park, 39 larger lots are available at Kapolei Business Industrial Park (Phase I), and at least 3 large lots are available at Mililani Technology Park; resulting in a 70-large lot standing developer's inventory available aggregate.

Overall, the planned inventory falls into three categories: 1) future development at Kapolei Business Park and Mililani Technology Park that will involve lots 1.0-acre or more in size; 2) planned development that will involve two small scale projects with smaller industrial lots to range in size from 18,000 square feet to 25,000 square feet (*Aiea Sugar Mill Industrial Subdivision and Waianae Industrial Subdivision, as discussed preceding*); and 3) certain planned projects; wherein, no determined lot size mix is yet determined (*Gentry Ewa, Gentry Waiawa Ridge, and Royal Kunia, Phase II*).

Regarding potential primary competition with the 56 proposed subject lots, it would appear that this competition should primarily involve 11 lots to be developed within approximately one to two years at the Aiea Sugar Mill site, and certain unlisted standing inventory at the Gentry Business Park in Waipio by Gentry (*only involving 4 lots, ranging in size from 20,025 square feet to 28,226 square feet*). The small Waianae Industrial Park lots were initially considered as important competition, but were rejected, because of the leasehold land tenure of the proposed future offering, and also because of the far outlying Waianae location of the competitive project, which is significantly inferior to the subject location. It may be noted, that two unlisted vacant lots also exist at Halawa Business Park, but were not considered to offer serious competition to the subject lots, because of the leasehold land tenure of the lots, and very small number of lots. Table 3, on the facing page, lists certain unlisted standing inventory (*17 lots*) at the Gentry Business Park, which is currently unavailable. It is too speculative to estimate when or if this inventory will be available; and the scale of the potential offering is not very large, especially involving small lots.

The Gentry Companies currently appear content to slowly develop their unlisted inventory with warehouse and/or other structures; and it is uncertain as to when or if any of the Gentry Business Park lots will be exposed to the marketplace. The Gentry Business Park unlisted standing inventory was provided by Mr. Charles Pang, Commercial Broker with the Gentry Companies. The Halawa Business Park unlisted standing inventory was identified by the independent research of Howell & Associates.

DEMAND FACTORS

To research demand factors, the appraisers studied new sale and resale activity, purchaser profiles, and typical improvement construction. Our research findings are reported as follows.

RECENT NEW SALE AND RESALE ACTIVITY

Over the past three years, from the date of this assignment, relatively few industrial lot sales have occurred in the Central and Leeward Oahu marketplace (*approximately 24 lot sales*). Two sales recorded over this period of time, occurred in Halawa Business Park, 4 lot sales occurred at Gentry Business Park, 2 lot sales occurred at Waipahu Industrial Park, and 6 lot sales occurred in Kapolei Business/Industrial Park and Campbell Industrial Park combined. Most of the lots comprising this recent sales aggregate, are in excess of 20,000 square feet in size, as mostly large lot inventory has been available.

For longer term in-depth sales trend study purposes, Tables 4 and 5 are included following, which contain lot sales in the Halawa and Gentry Business Parks. It may be noted, that pronounced lot sale activity occurred at Halawa Business Park during 1989 and 1990 (37 lot sales, or roughly three lot sales per month, over a two-year period). In Gentry Business Park, 10 lot sales occurred from 1988 through 1991; however, the release of the Gentry lot inventory has been at a controlled slow pace over the last few years, and very little inventory is currently available at the park, as was indicated preceding, in our *Supply Factors* discussion.

It has generally been observed, that the industrial market in Central and Leeward Oahu, and on the Island of Oahu experienced robust growth during 1989 and 1990, due to foreign investment activity, and overall strong economic trends in the State of Hawaii and mainland U.S. economies. However, it is the appraisers' opinion, that this growth was also enhanced by certain windows of availability of industrial lots in various projects, over this time frame, because before this inventory was available, little product was on the market.

It has also generally been observed, that the State of Hawaii and U.S. economies have typically been sluggish from late 1990 to date, and these trends have had a slowing affect on the Central and Leeward Oahu industrial market, as well as other industrial markets on the Island of Oahu. This most recent trend is usually gauged by a slowdown in transactions; however, it is the appraisers' opinion that certain recent and current sluggish sales trends in the Central and Leeward Oahu Industrial lot market are more due to a recent and current lack of inventory, than to general economic conditions. This lack of inventory pertains typically to industrial lots under 1.0-acre in size, and our assumption is supported by our preceding *Supply Factors* discussion; wherein, we indicated that currently, in the Central and Leeward Oahu industrial marketplace, mostly only large industrial lots are available: in Phase I of the Kapolei Business/Industrial Park in the Campbell Industrial Park area, the Kenai Industrial Park at Barbers Point Harbor, and at Mililani Technology Park in Mililani; and very little of any other product is available. These large lots appear to be selling very slowly, if at all, partially because of the current narrowness of this market (*large lots, 1.0+ acres*), and also because of the leasehold nature of the lots in the Kapolei Business Industrial Park and Kenai Industrial Park; and the outlying locations of the lots/projects on the Ewa plain, or in the Mililani area.

It may be observed, that when 0.5-acre lots and under, were sold from 1988 through 1992, typically sales occurred on a timely basis. Even if the 1989-1990 growth market were to be reduced by a factor of 50%, for statistical and analytical study purposes herein, the absorption rate would still appear reasonably favorable. Hence, again, it is our assumption that demand for industrial lots in the subject marketplace would appear to be currently hindered by lack of available inventory, and any available inventory should probably be positioned to service industrial lot consumers desiring lots of 0.5 acres or less in size.

Demand Factors External to the Central and Leeward Oahu Marketplace

Industrial lot demand factors external to the Central and Leeward Oahu marketplace particularly pertain to: 1) the transitional use or reuse of certain industrial parcels in Honolulu, either due to airport expansion at Honolulu International Airport (*Airport Industrial Park*), or due to various other redevelopment scenarios; wherein, property users will have to relocate; 2) various ground lease rent renegotiations which are currently in progress at Airport Industrial Park and Mapunapuna Industrial Park in Honolulu; wherein, large numbers of various owner-user lessees may elect to move their companies to other Oahu industrial areas, which would probably lie west of Honolulu, and be more cost

TABLE 4

**SELECTED GROUND LEASEHOLD INDUSTRIAL
LOT TRANSACTIONS
HALAWA BUSINESS PARK
HALAWA, ISLAND OF OAHU, STATE OF HAWAII**

Transaction No.	Tax Map Key (Division 1)	Lot Area in Square Feet	Instrument	Transaction Date	Ground Lease Premium
1	9-9-077: 001	22,088	Assignment of Lease Lease	09-06-90 02-17-89	\$1,400,000 \$297,900
2	9-9-077: 006	30,546	Sublease Lease	12-28-89 03-31-89	\$541,200 \$442,700
3	9-9-077: 007	40,658	Lease	02-24-89	\$734,700
4	9-9-077: 008	37,782	Lease	11-09-89	\$1,160,100
5	9-9-077: 010	31,884	Assignment of Lease Lease	03-14-90 06-27-89	\$1,000,000 \$979,900
6	9-9-077: 011	22,951	Assignment of Lease Lease	12-19-90 02-28-89	\$1,000,100 \$339,255
7	9-9-077: 015	35,643	Lease	03-30-89	\$885,900
8	9-9-077: 019	20,905	Assignment of Lease Lease	11-20-89 03-30-89	\$533,000 \$476,100
9	9-9-077: 020	20,801	Assignment of Lease Lease	12-10-93 03-28-89	\$600,000 \$446,900
10	9-9-077: 021	20,801	Lease Assignment of Lease Lease	02-25-93 02-25-93 03-28-89	\$1,654,270 \$600,000 \$438,800
11	9-9-077: 022	20,801	Lease	07-26-90	\$435,000
12	9-9-077: 023	20,801	Lease	07-26-90	\$427,700
13	9-9-077: 024	26,509	Lease	08-31-90	\$548,700
14	9-9-077: 037	21,000	Assignment of Lease Lease	05-10-90 04-13-89	\$1,582,300 \$592,300
15	9-9-077: 039	23,807	Lease	03-30-89	\$530,500
16	9-9-077: 042	22,000	Lease	03-31-89	\$424,800
17	9-9-077: 045	23,592	Lease	02-24-89	\$514,900
18	9-9-077: 046	22,000	Lease	02-24-89	\$459,100
19	9-9-077: 051	29,983	Lease	05-02-89	\$625,800
20	9-9-077: 055	23,051	Lease	03-28-89	\$577,400
21	9-9-077: 056	22,014	Lease	03-28-89	\$531,500
22	9-9-077: 060	41,113	Lease	03-17-89	\$587,700
23	9-9-077: 061	23,967	Assignment of Lease Assignment of Lease	06-15-90 06-16-89	\$925,000 \$388,000
24	9-9-077: 062	20,706	Assignment of Lease Lease	09-18-90 02-24-89	\$886,015 \$228,200
25	9-9-077: 063	20,123	Lease	02-24-89	\$316,400
26	9-9-077: 064	21,724	Assignment of Lease Lease	01-25-90 07-14-89	\$445,000 \$217,000
27	9-9-077: 065	32,007	Lease Assignment of Lease	03-31-89 04-06-90	\$414,400 \$925,000

SOURCE: HOWELL & ASSOCIATES, MARCH 1994

TABLE 5

**CHRONOLOGICAL LISTING
SELECTED INDUSTRIAL LOT TRANSACTIONS
GENTRY BUSINESS PARK
WAIPIO BY GENTRY
ISLAND OF OAHU, STATE OF HAWAII**

Transaction No.	Tax Map Key (Division 1)	Lot Area in Square Feet	Date of Sale	Sales Price
1	9-4-099: 060	21,179	12-07-93	\$1,200,000
2	9-4-127: 010	16,000	03-10-93	\$875,000
3	9-4-099: 026	28,118	11-12-92	\$1,236,562
4	9-4-127: 009	16,000	09-04-91	\$960,000
5	9-4-099: 017	16,004	10-05-90	\$950,000
6	9-4-099: 026	28,118	02-09-90	\$1,150,000
7	9-4-127: 011	17,207	06-28-89	\$410,300
8	9-4-127: 009 & 010	32,000	06-28-89	\$763,200
9	9-4-099: 004 & 005	99,008	04-26-89	\$2,277,000
10	9-4-099: 023	20,000	10-05-88	\$420,000
11	9-4-099: 052	25,193	09-02-88	\$540,000
12	9-4-099: 024	20,000	07-08-88	\$450,000
13	9-4-099: 001 & 002	109,379	05-31-88	\$2,500,700
14	9-4-099: 027	27,588	12-23-87	\$482,700
15	9-4-099: 055	25,000	06-12-87	\$440,000
16	9-4-099: 053	27,320	06-10-87	\$478,100
17	9-4-099: 054	25,001	08-29-86	\$412,500
18	9-4-099: 003	63,443	06-04-86	\$1,110,200
19	9-4-099: 049	24,918	12-03-85	\$417,377
20	9-4-099: 038 & 039	111,167	11-29-85	\$1,450,000
21	9-4-099: 046	12,107	06-13-85	\$162,000
22	9-4-099: 025	19,875	09-01-83	\$278,200
23	9-4-099: 006	25,645	08-18-83	\$305,000

SOURCE: HOWELL & ASSOCIATES, MARCH 1994

TABLE 6

**SUMMARY OF EXISTING AND PROPOSED
CENTRAL AND LEEWARD OAHU DEVELOPMENTS**

DEVELOPMENT	TYPE OF PRODUCT	LOCATION	STATUS
Amfac Residential/Visitor Entertainment Attraction	Recreational Facility	Ewa	Proposed
Ewa Marina	Residential/Commercial	Ewa	Proposed
Kapolei Knolls	Residential	Ewa	Under Development
Kapolei Town Center	Commercial/Industrial/Residential	Ewa	Existing and Under Development
Kapolei Village	Residential	Ewa	Existing and Under Development
Ko'Olina Resort	Residential/Commercial	Ewa	Existing and Under Development
Makakilo - Palailai Ridge	Residential	Ewa	Existing and Under Development
Mililani - Mauka	Residential/Industrial	Ewa	Existing and Under Development
Ewa by Gentry	Residential/Commercial	Central Oahu	Existing and Under Development
Waiawa - Gentry	Residential (Conventional and Retirement)/Commercial/Industrial	Central Oahu	Proposed
Gentry 515	Residential (Conventional and Retirement)/Commercial/Industrial	Central Oahu	Proposed
Royal Kunia	Residential/Industrial	Central Oahu	Existing and Under Development
Waikale	Residential/Commercial/Industrial	Central Oahu	Existing and Under Development
West Loch Estates	Residential	Central Oahu	Existing and Under Development

SOURCE: HOWELL & ASSOCIATES, MARCH 1994

effective for their business needs; and 3) various prospective industrial owner-users which would be willing to buy a Central or Leeward Oahu industrial lot to avoid the high land costs associated with Honolulu industrial lots. This latter potential demand group might be willing to compromise property location for property value.

**Demographic Factors That May Influence
Future Demand for Industrial
Development in Central and Leeward Oahu**

**PROJECTED GROWTH -
CENTRAL AND LEEWARD OAHU**

The subject property is in the middle southern portion of the Ewa Judicial District of the City and County of Honolulu, which comprises a portion of Leeward Oahu and all of Central Oahu. The Ewa Judicial District is defined geographically by the ocean and Pearl Harbor to the south, the ocean again, to the west, the Waianae Mountain Range to the west, Wahiawa District to the north, the Koolau Mountain Range (*east*), and Honolulu proper (*southeast*).

Along with the Ewa Plain, the Central Oahu area of the subject is planned for major secondary urban growth, by the City and County of Honolulu planning authorities. The Central and Leeward areas of the Island of Oahu, will play a major role in the future of the Island of Oahu, as developable land in other areas becomes less available. These areas are experiencing, and will continue to experience, the majority of new residential development. Various service industries, community amenities, and medical facilities have evolved in recent years, paralleling rapid population growth in the areas. The major Ewa Judicial District core areas in the future will be: planned Kapolei Town on the Ewa Plain; Makakilo, above the Ewa Plain; Waipahu Town near Pearl Harbor, and below Waikele, just west of Waipio; Waipio By Gentry, just above Waikele; Mililani Town, between Waipio By Gentry and Wahiawa; and Pearl City, just southeast of Waikele. Listed on the facing page, as Table 6, are certain developments that are either planned for, or currently exist in Leeward and Central Oahu.

As of April 1, 1990, various U.S. Bureau of the Census data estimated the population of the Ewa Judicial District to be 230,189, or approximately 28% of the total population estimate for the City and County of Honolulu (836,231).

Based on our research, we have projected a total of 50,475 new residential units which are planned for development in the Ewa and Central Oahu markets, between now and the year 2010.

The projected increase in housing correlates with various population figures projected for the Central/Leeward Oahu area. As of 1988, the City and County of Honolulu had a total population of 838,500 residents. Of this total, the population of the Ewa and Central Oahu areas had a share of 166,405 residents. By the year 2010, the population of the Ewa and Central Oahu areas is expected to increase to 274,000 residents, or an anticipated increase of 64.7%.

Based on current public policy allowing and projecting current and future urban growth for Central and Leeward Oahu, it would appear that any current and future urban expansion would require a reasonably substantial industrial base. It appears that current and future industrial development in Central and Leeward Oahu, as well as on the subject project site, would be supported by this projected future demographic activity.

PURCHASER PROFILES

Our purchaser profile research was undertaken to explore the mix and needs of various industrial lot purchasers in the subject Central and Leeward Oahu marketplace. The research was conducted by observing certain ownership/use patterns in various industrial parks, and also through interviews with various commercial real estate brokers.

Typically, the appraisers have observed that industrial user activity in Central and Leeward Oahu reflects light manufacturing, wholesaling, and service industries; wherein, a large amount of property users are owner users, say, at least 60% to 70%, and a significant number of users are rental tenants (say, 30% to 40%).

Our broker interviews revealed that currently many prospective industrial lot buyers are interested in fee simple lots ranging between 10,000 and 20,000 square feet in size. This correlates with the observation that there are generally many more small businesses than large businesses, and these entities desire smaller industrial lots.

Typical industrial zoning (I-1 or I-2) precludes lots smaller than 7,500 square feet in size; and many brokers interviewed were of the opinion that small industrial lots in Central and Leeward Oahu should not be any smaller than 10,000 to 15,000 square feet in size.

SECTION IV: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

After conducting our research and analyses for this study, the appraisers formulated the following conclusions and recommendations, regarding any proposed industrial lot development on the subject 29.5-acre developer's tract.

- **The most important outcome of our research, in our opinion, relates to the significant current lack of smaller industrial lot inventory in the subject Central and Leeward Oahu marketplace (i.e., lots of 0.5-acre or under). Our research suggests that this condition should continue for at least three to four years from the date of this assignment.**
- **Based on the above-cited lack of available smaller lot inventory, it would appear that if county industrial zoning can be secured for the entire subject proposed project site (29.5 acres), it would be reasonable to typically develop industrial lots of no larger than 0.5 acres each (21,780 square feet); which would support an industrial lot mix proposed for the subject project site, of lots typically 16,000 to 20,000 square feet in size. This is supported statistically by the relatively rapid sell-out of 0.5-acre lots at Halawa Industrial Park during 1989 and 1990, and the successful development of certain small Gentry lots (typically, 16,000 square feet in size). Additionally, a preliminary plot plan has been created by PBR Hawaii, in response to the outcome of our research, which follows preceding Page 6 of this letter.**
- **Observing that smaller lots should be feasible for development on the subject developer's site, the appraisers' challenge was to determine how small these lots should be, to maximize the site utility of each lot, and to maximize the unit sales price of each lot (sales price per square foot), as dictated by the marketplace. Also, as will be discussed following, the appraisers considered the size of the subject lots important, to help insure the general acceptance of the subject industrial lot project/product by the surrounding community, which in some areas is residential in nature.**
- **It has been indicated by industrial lot sales data in various Oahu industrial markets, that all property factors being equal, except for lot size, typically, smaller lots sell for higher unit prices than larger lots. Based on the scarcity of smaller lot product in the subject marketplace, it is our opinion that the subject lots should at least approximate the size of the small Gentry Business Park lots, which are 16,000 square feet in size. The size of the Gentry Business Park lots is very supportive to a 2-to-1 lot length/lot width ratio that many commercial real estate brokers and buyers and sellers indicate is optimum for lot configuration, and therefore utility of use for industrial lots. The Gentry Business Park lots are typically 200 feet in depth from road frontage, and 80 feet wide; and the lots are a proven product in the subject industrial lot marketplace. Typical lot coverage of the Gentry Business Park small lots is 60% of lot area, with a single-level high cube warehouse structure.**
- **Small lot development should be viable, based on our interviews with various commercial real estate brokers; wherein, it has been indicated repetitively, that a sufficient depth of demand exists for small industrial lot purchasers, who for the most part would be owner users.**

If 16,000-square foot lots are developed on the subject developer's site, primary target purchasers should involve owner-users who would be purchasing lots for business purposes. This owner-user group has a history of paying premiums for lots, above and beyond pure real estate value; and many owner-user transactions typically reflect relatively high sales prices; wherein, it is difficult to separate real estate value from business value. This owner-user purchaser group thrives on probability and control for business purposes, and is therefore often willing to pay a premium for property on this basis. The availability of fee simple product greatly adds to this probability and control, as would be the case with the proposed subject lots. This purchaser group may also be the most optimum purchaser group for providing future jobs to the community; especially after the shut down of the Oahu Sugar Mill in 1995.

- Based on our research, it is our opinion, that specific small owner-user businesses that should be "target" lot purchasers, should be construction contractors/subcontractors that also need supply space; and also, wholesalers/quasi-retailers that also need supply space. It is believed that these two groups will not excessively use or tax any utility infrastructure base, and by conducting much of their business activity external to their properties, any market expansion and/or contraction will hopefully not cause them to need to change their physical plant, or change its location. It is assumed that these "target" purchasers would place less strain on any utility infrastructure, than other types of owner-users, such as light manufacturing concerns, etc., which might necessitate intense uses of power and/or water and sewage utilities, and potential generators of noise.
- The development of smaller industrial lots on the proposed subject project site, would not rule out larger lot market activity if a prospective purchaser would need a larger lot. In this case, a marketing program should be created with the potential to flexibly allow the combining of lots for different lot size and density requirements. Many Airport Industrial and Mapunapuna Industrial lot owner-users in Honolulu, are currently leasing lots of at least 20,000 square feet in size. To capture substitution from this market, some larger lots through consolidation, might be needed, or a small number of subject lots will have to be at least 0.5 acres in size. It should be noted that the average small lot usage at Airport Industrial Park is typically 60% lot coverage, similar to the Gentry Business Park small lot usage cited preceding. The preliminary development plan of the 29.5-acre subject developer's site, involves 56 lots, with a very efficient road access system.
- The subject project may be perceived as a new viable employment base, to substitute for the soon to be closed Oahu Sugar Mill.
- An industrial park use of the subject project site should be well planted out, with vegetation that is compatible with the surrounding residential community, that effectively softens the proposed industrial development, as well as buffers the development from the surrounding community. Also needed would be various stringent covenants, conditions and restrictions (CC&Rs), relative to any planned uses, and the surrounding community.
- The subject project site has a good location, near to the H-1 Freeway (via Paiwa Street). The small scale of a 56-lot light industrial subdivision, in combination with this location, and especially the fee simple aspect of the subject project, would appear to support favorable sales prices and absorption for the proposed development cited herein. Based on the foregoing, an absorption period of 2 to 3 years would not be an unreasonable assumption for the preliminary planned 56 subject industrial lots.

- Our supply factor research suggests that at least a three to four-year window of opportunity would appear to exist for the development and marketing of the subject lots. The only known near-term competition for the subject lots would appear to be the 11 lots planned near-term for the Aiea Sugar Mill site.

The opinions and conclusions included in this marketing study, are subject to the *Definitions and Terminology, and Assumptions and Limiting Conditions* as stated herein (as are presented in the *Addenda* of this marketing study as Exhibits A and B, respectively).

The opinions and conclusions contained in this marketing study are based on additional research and analysis materials contained in our files. If there are any inquiries concerning our opinions and conclusions contained herein, the appraisers are available for discussion at the client's convenience, and the appraisers' files are available for review upon the client's request.

It is hereby certified that, to the best of the appraisers' knowledge and belief:

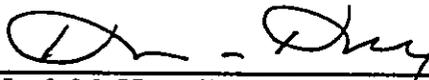
- 1) The statements of fact contained in this marketing study are true and correct to the best of the appraisers' knowledge.
- 2) The reported opinions and conclusions in this marketing study are limited only by the assumptions and limiting conditions set forth, and are the personal, unbiased, professional analyses, opinions, and conclusions of the appraisers.
- 3) The appraisers have no present or prospective interest in the subject property that is the subject of this marketing study, and have no personal bias with respect to the parties involved.
- 4) The appraisers' compensation is not contingent upon the reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulated result, or the occurrence of a subsequent event.
- 5) The appraisers' analyses, opinions and conclusions were developed, and this marketing study has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice, and with the requirements of the Code of Professional Ethics and Standards of Professional Practice of the Appraisal Institute.
- 6) Mr. Hugh M. Howell has made a personal inspection of the property that is the subject of this marketing study.
- 7) Use of this marketing study is subject to the professional requirements of the Institute regarding review by its duly authorized representatives.
- 8) No persons, other than the appraisers or stated within the context of this marketing study, provided significant professional assistance required for the execution of this marketing study.
- 9) Mr. Hugh M. Howell is currently certified under the voluntary continuing education program of the Appraisal Institute.

Recognition is given to Patricia A. MacLean for her contribution to the real estate research and analyses contained in this counseling assignment.

Thank you for the privilege of assisting you in this assignment.

Very truly yours,

HOWELL & ASSOCIATES



Hugh M. Howell, MAI
Hawaii State Certified General Appraiser, CGA-116
Expiration Date: 12/31/95

12 11 10 9 8 7 6 5 4 3 2 1

ADDENDA

HOWELL & ASSOCIATES

Hugh M. Howell, MAI / Richard H. Sylva, MAI / Scot J. Voronaeff / Steven D. Chee
Stephen E. Stadlbauer / Patricia A. MacLean / Timothy W.L. Chee
Angela L. Atherley / Lowell T.S. Chung / Of Counsel: Joseph L. Hastings, MAI

Real Estate Appraisers & Consultants

COMPANY PROFILE

Howell & Associates is a real estate appraisal and consulting firm located in Honolulu. The goal of the company is to offer appraisal and consulting services to clients in a professional and timely manner, covering all types of real estate located throughout the State of Hawaii, South Pacific, and certain areas of the west coast of the United States. Owner/principal, Hugh M. Howell, MAI, and the staff members are dedicated to carrying out the Company's goals, which involve serving clients' needs to the fullest, by implementation of various traditional appraisal approaches, and also creative solutions to any real estate appraisal/consultation problem. We enjoy working with our clients on a personal basis.

The principal and staff members of Howell & Associates have extensive experience in providing appraisal and consultancy services for all types of real property and real property interests, on a large and small scale, in the above-cited geographic venues. For example, the firm has been involved in valuing small and large industrial and office properties in Honolulu, or on the other hand, all of the real estate assets statewide for a large agribusiness company. Additionally, appraisals, market studies, and various consultations have involved properties with a wide range of geographical locations (*i.e., office building valuation in Guam, resort-residential market studies in Pebble Beach, Los Angeles, and Palm Springs California, etc.*).

Hugh M. Howell, MAI (*Member Appraisal Institute*), has been actively involved in commercial real estate appraisal and consultation since 1977. Prior to the formation of Howell & Associates in 1993, Mr. Howell was the managing partner of Sylva, Howell & Associates, which was formed in 1988 with partner Richard H. Sylva, MAI. Before the formation of Sylva, Howell & Associates, Mr. Howell was a senior appraiser and vice president with Raymond A. Leshner & Company, Ltd., for 11 years.

Mr. Howell's work experience is represented by a broad variety of past assignments, involving typical commercial appraisals (*i.e., office buildings, shopping centers, residential subdivisions, etc.*) and also more specialized and unique appraisals and/or consultation (*involving for example, master planned resorts, condemnation valuation, legal and expert testimony work, and arbitration, etc.*).

To serve our clients, Howell & Associates enjoys the services of an exceptionally experienced and talented senior appraisal staff. These associates involve Richard H. Sylva, former partner in the firm, and now senior associate; Scot J. Voronaeff, MBA, senior appraiser with the firm since 1988; and Steven D. Chee, senior appraiser, with the firm since 1988; and Stephen E. Stadlbauer, senior appraiser, joined the firm in 1993.

Richard H. Sylva, MAI (*Member Appraisal Institute*), has been a commercial real estate appraiser and consultant since 1974, and holds a senior designation from the Appraisal Institute. Mr. Sylva served as the 1989 President of the Honolulu Chapter of the Society of Real Estate Appraisers, and is currently serving on the Board of Directors. He was with Raymond A. Leshner & Company, Ltd., for 11 years as a senior appraiser and

COMPANY PROFILE - Page Two

vice president, prior to the formation of the partnership of Sylva, Howell & Associates in 1988. Mr. Sylva's experience is extensive, covering a wide range of real properties and interests; and currently his focus primarily involves the valuation of small and large retail/office complexes, residential projects, and arbitration work.

Scot J. Voronaeff is currently a senior appraiser with Howell & Associates. Prior to his current position with Howell & Associates, Mr. Voronaeff was a senior appraiser with Sylva, Howell & Associates between 1988 to 1993. Before working at Sylva, Howell & Associates, Mr. Voronaeff was both an appraiser and research analyst with Realty Research Corporation in Honolulu for seven years, from 1981 to 1988, working under Don Voronaeff, MAI (*his father*). Mr. Voronaeff earned an MBA in Finance and Real Estate Development from the University of California, Irvine, in 1987, and is currently an advanced candidate with the Appraisal Institute. He has a wide range of appraisal experience with all types of real property; and currently specializes in complex income producing properties.

Prior to his current position as a senior appraiser with Howell & Associates, Steven David Chee was a senior appraiser with Sylva, Howell & Associates from 1988 to 1993. Mr. Chee has a broad range of appraisal experience with a wide variety of income and non-income producing properties located throughout the State of Hawaii, and in the territory of Guam. The scope of his appraisal experience also includes involvement as an expert witness in the State of Hawaii. Mr. Chee is currently an advanced candidate with the Appraisal Institute. Additional professional real estate experience has included a position as a commercial real estate asset manager with Chaney Brooks & Company, during 1987 and 1988.

Stephen E. Stadlbauer, senior appraiser with Howell & Associates, has been a commercial real estate appraiser and consultant since 1985, and most recently was engaged as Vice President of the Commercial Appraisal Division of Yamaguchi & Yamaguchi, Inc. (1989 to 1993). Qualified as a Certified General Appraiser by the State of Hawaii, Mr. Stadlbauer is also an advanced candidate with the Appraisal Institute, working toward his MAI designation. In addition to an extensive background in retail, office and industrial property valuation/consultation, Mr. Stadlbauer's expertise in the valuation of public and private sector housing has been recognized by the United States Department of Housing and Urban Development, selecting him as one of a limited number of appraisers in Honolulu qualified to perform appraisals under the Low Income Housing Preservation and Resident Homeownership Act of 1990 (LIHPRHA).

To assist the principal and staff members in carrying out their duties to clients, the firm has, at their disposal, state of the art computer equipment, analytical software programs, an extensive library of comparable and resource data, a computer data retrieval system and other necessary tools and information relevant to the real estate appraisal and consultation field.

COMPANY PROFILE - Page Three

PROFESSIONAL SERVICES

Valuation Reports - Market valuation is the major focus of most real property appraisal assignments. It involves defining an appraisal problem, and finding a solution via preliminary data collection and analyses, highest and best use analysis, application of three appraisal valuation approaches, if applicable, reconciliation and final value estimation, (*also if applicable*), and the reporting of a defined value. Other valuation studies may involve the estimation of investment value for various real property interests, or may involve the valuation of special use properties.

Real Estate Consulting - Consulting assignments covering all property types, are usually performed to assist clients with a specific problem or situation. Providing competent, unbiased, professional guidance on diversified problems in real estate has taken on ever increasing importance in the real estate field. The principals have undertaken such tasks as highest and best use analyses, various product market studies, subdivision analyses, resort analyses, office/retail analyses, project planning studies, market and feasibility analyses, expert witness services, etc.

Howell & Associates considers its clients to be its most valuable assets. The firm has had the privilege of serving various small and large corporations, financial institutions, developers, private individuals, attorneys, residential community associations, and governmental agencies. Following, is a sampling of various clients Howell & Associates has had the privilege of serving:

Ainalani Associates
Alexander & Baldwin Corporation
Aloha State Corporation
All Pool & Spa, Inc.
Alston Hunt Floyd & Ing
American Landmark Development Co.
American Savings Bank, FSB
Amfac Corporation
Aston Hotels and Resorts
Atherton Family Foundation
Bank of America
Bank of Hawaii
Bay Street Investments
Bishop Square Management, Inc.
Bishop Trust Company, Ltd.
Bradley Properties
C. Brewer and Company, Ltd.
California and Hawaiian Sugar
The Estate of James Campbell
Carlsmith, Wichman, Case,
Mukai and Ichiki
Case & Lynch
Castle and Cooke Corporation
Chevron USA, Inc.
City and County of Honolulu
Crown Pacific - Hawaii

Damon, Key, Char & Boken
Davis & Levin
F.J.Schumann Funding, Ltd.
Federal Savings & Loan
First Federal Savings and Loan
First Hawaiian Bank
First Hawaiian Creditcorp, Inc.
First Interstate Bank
Fujiyama, Duffy & Fujiyama
Gannet Pacific Corporation
Gasco
GECC Financial Corporation
Gentry-Pacific, Limited
The Gentry Companies
Albert B. Glickman & Associates
Goodsill Anderson Quinn & Stifel
GSA
Guild Mortgage Company
Hiroshi Sakai, Esquire
HMF, Inc.
Honfed Bank, FSB
Honolulu Board of Realtors
Honolulu Club
Honolulu Mortgage Company, Inc.
Intellect, Inc.
JDC (*America*) Corporation

COMPANY PROFILE - Page Four

Kaiser Permanente
Kodak Corporation
Kohala Ranch
Knight Development Corporation
KRC Hawaii Company, Ltd.
L.A. Gear
Lanai Company
Long-Term Credit Bank of Japan, Ltd.
Malama Pacific Corporation
Mauna Loa Macadamia Nut Corporation
Meridian Pacific Corporation
Mitsubishi Bank
Mitsui Fudosan Company
Moon, O'Connor, Tam & Yuen
Nakamoto, Yoshioka & Okamoto
Nakano Company
Nansay Hawaii, Inc.
National Mortgage & Finance Co., Ltd.
The Nature Conservancy of Hawaii
Onipa'a Development
Pacific Construction Co., Ltd.
Pankow Development Co., Ltd.
Pannel Kerr Forster
Princeville Development Corporation
Property Resources Consultants, Inc.
Queen Emma Foundation
Reinwald O'Connor Marrack
 Hoskins & Playdon
Reynolds + Shidler
Richard Smart Trust
Royal Bank of Canada
San Wa Bank
Security Pacific Bank
Shell Oil Company
South Pacific Restaurants, Ltd.
Torkildson, Katz, Jossem
 Fonseca, Jaffe and Moore
Tobishima USA, Inc.
Waikiki Joy Hotel
W.H. Shipman, Ltd.
Waitec Development Inc.
Waterhouse Properties
Watt Hawaii, Inc.
Western Physicians Services, Inc.
Wilcox Estate

**PROFESSIONAL QUALIFICATIONS
OF
HUGH M. HOWELL, MAI**

PROFESSIONAL ORGANIZATIONS

- Appraisal Institute - MAI Designation Received March 1992.
- Current Member of American Arbitration Association.
- Associate - The Urban Land Institute (*ULI*).

PROFESSIONAL EXPERIENCE

- Owner/Principal, Real Estate Appraiser/Consultant, Howell & Associates, Honolulu, Hawaii, since April 1993. (*Experience consists of extensive appraisal/consultation assignments involving a wide variety of commercial investment, and residential real estate in the State of Hawaii, South Pacific, and Mainland U.S. West Coast.*)
- Managing Partner/Real Estate Appraiser, Sylva, Howell & Associates, Appraisers/Consultants, Honolulu, Hawaii, July 1988 to March 1993.
- Senior Real Estate Appraiser/Consultant/Vice President, Raymond A. Leshner & Company, Ltd., Appraisers/Counselors, Honolulu, Hawaii, 1977 to 1988.
- Real Estate Sales Experience: Bishop Associates, Ltd., Honolulu, Hawaii, 1977 to February 1993; Howell Properties, Honolulu, Hawaii, March 1993 to Current.

PROFESSIONAL LICENSES

- State of Hawaii, Realtor-Associate License No. 17913, Dated January 24, 1977.
- Hawaii State Certified General Appraiser, License No. CGA-116, Expiration Date December 31, 1995.

EDUCATION

- Bachelor of Arts, Political Science (*With Distinction*), University of Hawaii, Honolulu, Hawaii, 1974.

Appraisal Courses

- Course 2-1: Case Studies Real Estate Valuation (*American Institute of Real Estate Appraisers*), University of Portland, Portland, Oregon, 1986.

**PROFESSIONAL QUALIFICATIONS
OF
HUGH M. HOWELL, MAI**

(Continued)

EDUCATION (Continued)

Appraisal Courses (Continued)

- Course 2-2: Valuation Analysis and Report Writing (*American Institute of Real Estate Appraisers*), University of North Carolina, Chapel Hill, North Carolina, 1985.
- Standards of Professional Practice (*American Institute of Real Estate Appraisers*), Honolulu, Hawaii, 1980.
- Course 201: Principles of Income Property Appraising (*Society of Real Estate Appraisers*), Honolulu, Hawaii, 1979.
- Course 101: An Introduction to Appraising Real Property (*Society of Real Estate Appraisers*), Honolulu, Hawaii, 1979.
- Course VIII: Residential Valuation (*American Institute of Real Estate Appraisers*), Honolulu, Hawaii, 1977.
- Comprehensive Examination (*American Institute of Real Estate Appraisers*), Passing Grade Received on August 8, 1988.

Appraisal Seminars

- Capitalization and Income Approach Update Seminar (*American Institute of Real Estate Appraisers*), Honolulu, Hawaii, 1981.
- Money Market and Economic Analysis Seminar (*Society of Real Estate Appraisers*), Honolulu, Hawaii, 1978.
- Memorandum R41c and the Recordkeeping Requirements of the Federal Home Loan Bank Board (*American Institute of Real Estate Appraisers*), Honolulu, Hawaii, 1987.
- Current Appraisal Policy of Hawaiian Thrift Institutions, Presented by the Federal Home Loan Bank of Seattle (*Society of Real Estate Appraisers*), Honolulu, Hawaii, April 1989.
- Hotel/Motel Valuation Seminar (*Appraisal Institute*), Honolulu, Hawaii, June 1992.
- Valuation in Today's Capital and Financing Markets (*Appraisal Institute*), 1992 Region VII Appraisal Conference, Honolulu, Hawaii, June 1992.

**PROFESSIONAL QUALIFICATIONS
OF
HUGH M. HOWELL, MAI**

(Continued)

EDUCATION (Continued)

Appraisal Seminars (Continued)

Arbitration Principles, Procedures and Pitfalls (*Appraisal Institute*), 1992 Region VII Appraisal Conference, Honolulu, Hawaii, June 1992.

Institutional Real Estate in the 1990s: A Valuation Perspective (*Appraisal Institute*), 1992 Region VII Appraisal Conference, Honolulu, Hawaii, June 1992.

Valuation of Leased Fee Interests (*Appraisal Institute*), Honolulu, Hawaii, May 1993.

Valuation of Leasehold Interests (*Appraisal Institute*), Honolulu, Hawaii, May 1993.

Appraising the Tough Ones, (*Appraisal Institute*), Honolulu, Hawaii, May 1993.

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EXHIBIT A

Definitions and Terminology

DEFINITIONS AND TERMINOLOGY

Throughout this letter, the reader will encounter various technical words or phrases necessary to the appraisers for the proper presentation of material and conclusions. In addition, certain Hawaiian words, by common usage, which are a part of the everyday local and business language, will be utilized. We present at this point those most commonly used in the letter, together with a brief explanation.

MARKET VALUE

Market value is the major focus of most real property appraisal assignments. Both economic and legal definitions of market value have been developed and refined. Continual refinement is essential to the growth of the appraisal profession. The current economic definition of market value, is the most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale when both buyer and seller act prudently and knowledgeably, assuming that price is not affected by other than customary market factors. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title when:

- 1) *Buyer and seller are typically motivated;*
- 2) *Both parties are well informed or well advised, and acting in what they consider their own best interests;*
- 3) *A reasonable marketing time is allowed for exposure to the open market;*
- 4) *Payment is made in terms of cash in U.S. dollars, or in terms of financial arrangements comparable thereto; and*
- 5) *The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions arranged by anyone associated with the sale.*

Many of the legal definitions of market value are based on the following:

The highest price estimated in terms of money that the land would bring if exposed for sale in the open market, with reasonable time allowed in which to find a purchaser, buying with knowledge of all of the uses and purposes to which it was adapted and for which it was capable of being used. {Sacramento Southern R. R. Co. v. Heilbron 156 Cal. 408, 104 P. 979 (1909).} [2]

A definition that incorporates concepts that are most widely agreed upon, such as willing, able, and knowledgeable buyers and sellers who act prudently, gives an appraiser a choice among three bases: 1) all cash, or 2) terms equivalent to cash, or 3) other precisely revealed terms, and still requires increments or diminutions from the all-cash market value to be quantified in terms of cash. [3]

DEFINITIONS AND TERMINOLOGY

(Continued)

HIGHEST AND BEST USE

The reasonably probable and legal use of vacant land or an improved property, which is physically possible, appropriately supported, financially feasible, and that results in the highest value. The four criteria the highest and best use must meet are legal permissibility, physical possibility, financial feasibility, and maximum profitability.

Highest and best use of land or a site as though vacant. The use of a property based on the assumption that a parcel of land is vacant or can be made vacant through demolition of any improvements.

Highest and best use of property as improved. The use that should be made of a property as it exists. [2]

FEE SIMPLE ESTATE

Absolute ownership unencumbered by any other interest or estate subject only to the four powers of government (*limitation of eminent domain, escheat, police power, and taxation*). [2]

LEASED FEE ESTATE

An ownership interest held by a landlord with the right of use and occupancy conveyed by lease to others; the rights of lessor or the leased fee owner and leased fee are specified by contract terms contained within the lease. [2]

LEASEHOLD ESTATE

The right to use and occupy real estate for a stated term and under certain conditions; conveyed by a lease. [2]

EASEMENT

Easements represent another division of property ownership. An easement is *an interest in real property that conveys use, but not ownership, of a portion of an owner's property* [1]. Easements frequently permit a specific portion of a property to be used for access to an adjoining property or as a public right-of-way. Although surface easements are the most common, subterranean and overhead easements are used for public utilities, subways, and bridges. [3]

DEFINITIONS AND TERMINOLOGY

(Continued)

CASH EQUIVALENCY ANALYSIS

The procedure in which the sale prices of comparable properties sold with atypical financing terms are adjusted to reflect typical market terms. [2]

DIRECTIONAL TERMS

The individual islands do not generally lie on a clear north/south axis. Directional terminology therefore, frequently makes reference to location, such as: mauka - (*uka*) inland, upland, towards the mountain [4]; makai - (*kai*) toward the sea [4]; and townside - toward the town.

SOURCE: [1] Rules and Regulations, *Federal Register*, Volume 55, No. 165, Page 34696 (1989).

[2] Appraisal Institute, *The Dictionary of Real Estate Appraisal*, 3rd Ed. (1993).

[3] Appraisal Institute, *The Appraisal of Real Estate*, 10th Ed. (1992).

[4] *Hawaiian Dictionary*, Pakui and Elbert (1973).

EXHIBIT B

Assumptions and Limiting Conditions

ASSUMPTIONS AND LIMITING CONDITIONS

This real estate counseling letter has been made with the following general assumptions:

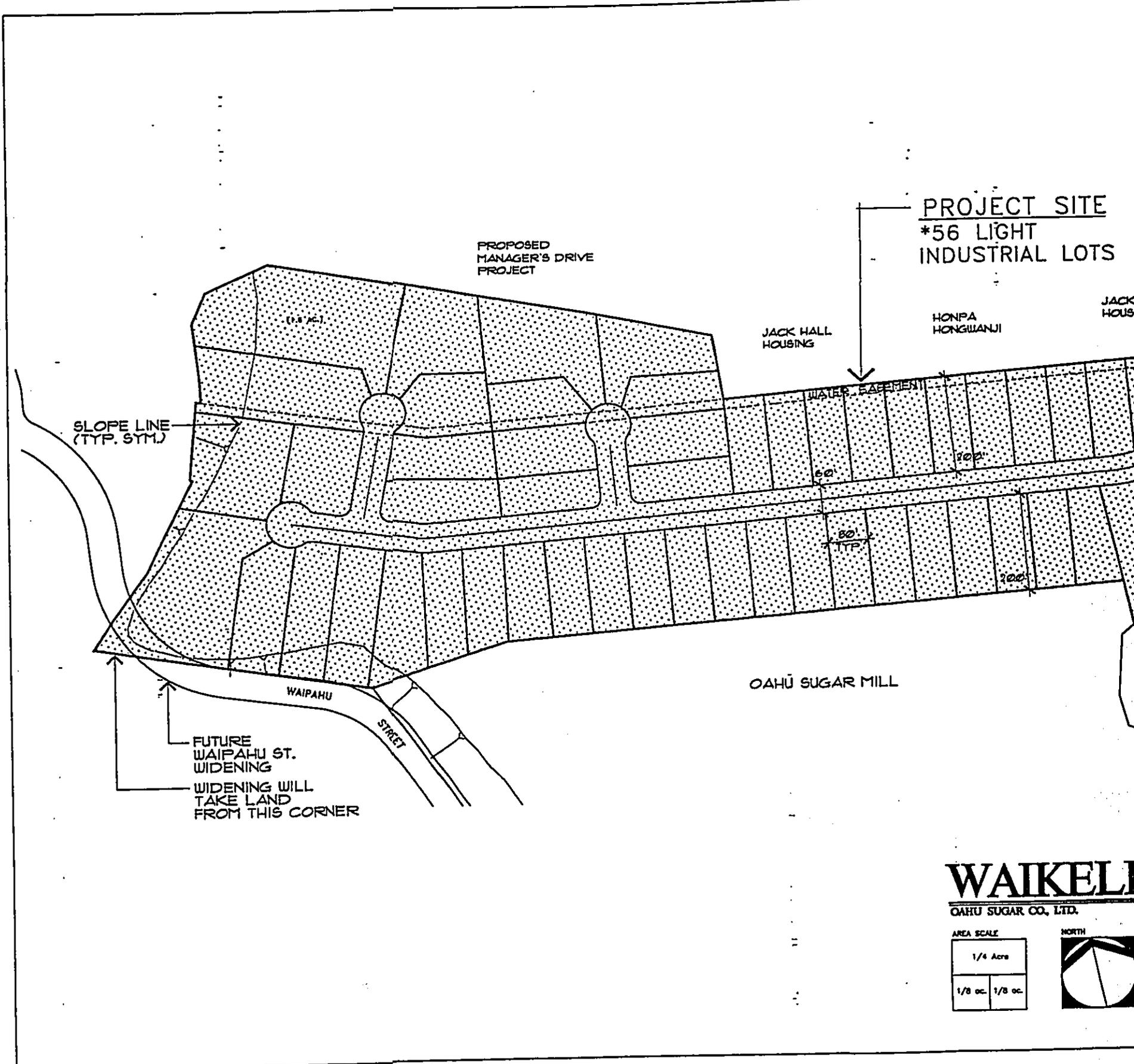
- 1) No responsibility is assumed for the legal description or for matters including legal or title consideration. Title to the property is assumed to be good and marketable unless otherwise stated.
- 2) The property is appraised free and clear of any or all liens or encumbrances unless otherwise stated.
- 3) Responsible ownership and competent property management are assumed.
- 4) The information furnished by others is believed to be reliable. However, no warranty is given for its accuracy.
- 5) All engineering is assumed to be correct. The plot plans and illustrative material in this real estate counseling letter are included only to assist the reader in visualizing the property.
- 6) It is assumed that there are no hidden or unapparent conditions of the property, subsoil, or structures that render it more or less valuable. No responsibility is assumed for such conditions or for arranging for engineering studies that may be required to discover them.
- 7) It is assumed that there is full compliance with all applicable federal, state, and local environmental regulations and laws unless noncompliance is stated, defined, and considered in this real estate counseling letter.
- 8) It is assumed that all applicable zoning and use regulations and restrictions have been complied with, unless a nonconformity has been stated, defined, and considered in this real estate counseling letter.
- 9) It is assumed that all required licenses, certificates of occupancy, consents, or other legislative or administrative authority from any local, state, or national government or private entity or organization have been or can be obtained or renewed for any use on which the value estimate contained in this real estate counseling letter is based.
- 10) It is assumed that the utilization of the land and improvements is within the boundaries or property lines of the property described and that there is no encroachment or trespass unless noted in this real estate counseling letter.

ASSUMPTIONS AND LIMITING CONDITIONS

(Continued)

This real estate counseling letter has been made with the following general limiting conditions:

- 1) The distribution, if any, of the total valuation in this real estate counseling letter between land and improvements applies only the stated program of utilization. The separate allocations for land and buildings must not be used in conjunction with any other appraisal and are invalid if so used.
- 2) Possession of this real estate counseling letter, or a copy thereof, does not carry with it the right of publication.
- 3) The appraiser, by reason of this real estate counseling letter, is not required to give further consultation, testimony, or be in attendance in court with reference to the property in question unless arrangements have been previously made.
- 4) Neither all nor any part of the contents of this real estate counseling letter (*especially any conclusions as to value, the identity of the appraiser, or the firm with which the appraiser is connected*) shall be disseminated to the public through advertising, public relations, news, sales, or other media without the prior written consent and approval of the appraiser.
- 5) In this real estate counseling letter, the existence of potentially hazardous material used in the construction or maintenance of the building, such as the presence of urea-formaldehyde foam insulation, asbestos, and/or the existence of toxic waste, which may or may not be present on the property, was not observed by us; nor do we have any knowledge of the existence of such materials on or in the property. The appraiser, however, is not qualified to detect such substances. The existence of urea-formaldehyde insulation or other potentially hazardous waste material may have an effect on the value of the property. We urge the client to retain an expert in this field, if desired.
- 6) All appraisal reports must state that it is the intention of the appraiser that the report complies with all statutes, rules and regulations prohibiting discrimination on the basis of race, color, religion, sex, or national origin, and martial status.



PROJECT SITE
***56 LIGHT INDUSTRIAL LOTS**

PROPOSED
 MANAGER'S DRIVE
 PROJECT

JACK HALL
 HOUSING

HONPA
 HONGWANJI

JACK
 HOUSING

SLOPE LINE
 (TYP. SYM.)

WATER EASEMENT

OAHU SUGAR MILL

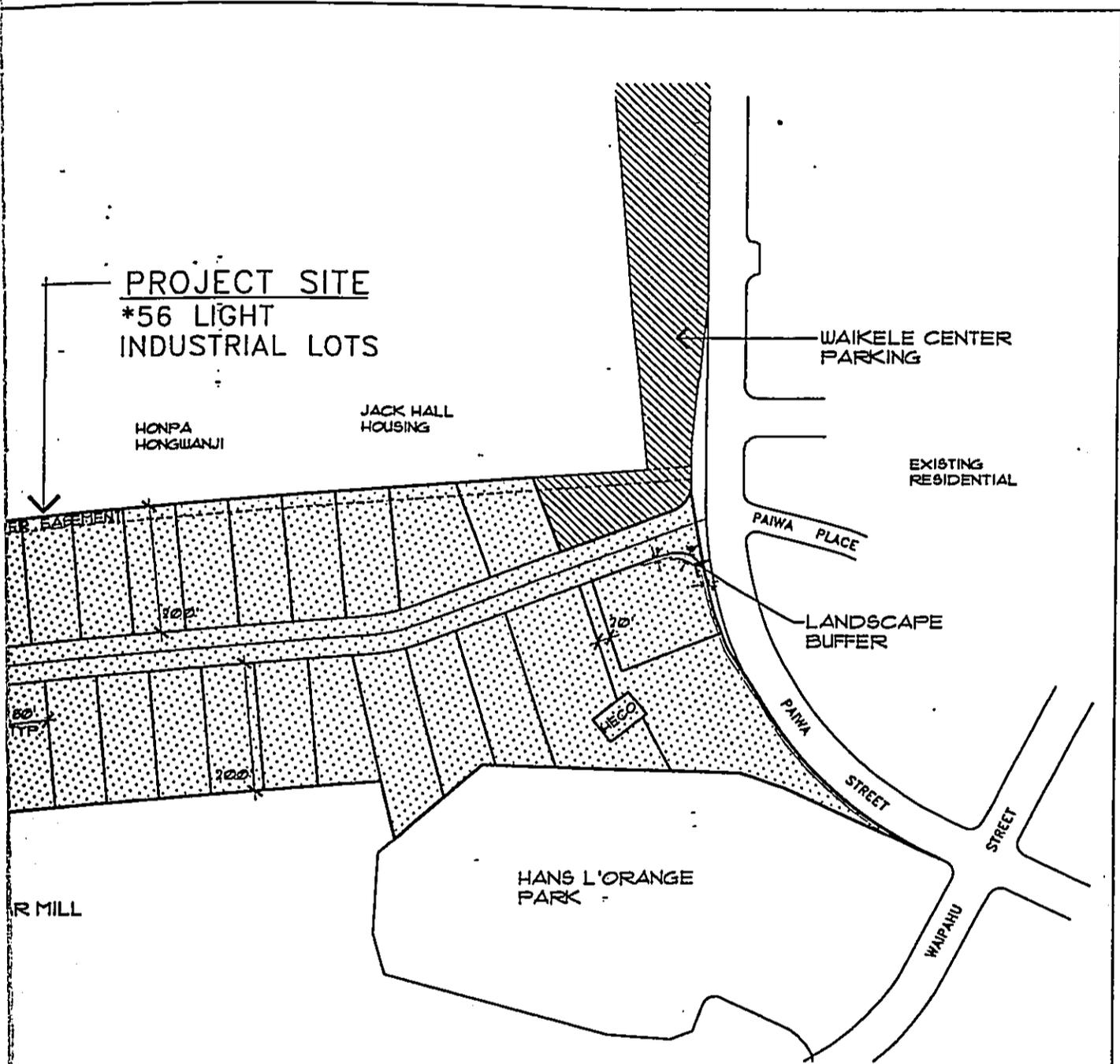
FUTURE
 WAIPAHI ST.
 WIDENING
 WIDENING WILL
 TAKE LAND
 FROM THIS CORNER

WAIKELI
 OAHU SUGAR CO., LTD.

AREA SCALE

1/4 Acre	
1/8 ac.	1/8 ac.





WAIKELE LIGHT INDUSTRIAL

OAHU SUGAR CO., LTD.

WAIPA'AHU, ISLAND OF OAHU

AREA SCALE

1/4 Acre
1/8 ac. 1/8 ac.



DATE: 03/25/94

APPENDIX F

PROJECT SITE
*56 LIGHT
INDUSTRIAL LOTS

PROPOSED
MANAGER'S DRIVE
PROJECT

JACK HALL
HOUSING

HONPA
HONGWANJI

JACK
HOUSING

WATER EASEMENT

SLOPE LINE
(TYP. SYM.)

(1.8 AC)

60'

200'

80'
TYP.

200'

WAIPAHU

STREET

OAHU SUGAR MILL

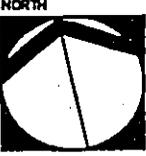
FUTURE
WAIPAHU ST.
WIDENING
WIDENING WILL
TAKE LAND
FROM THIS CORNER

CONCEPT
WAIKELE I

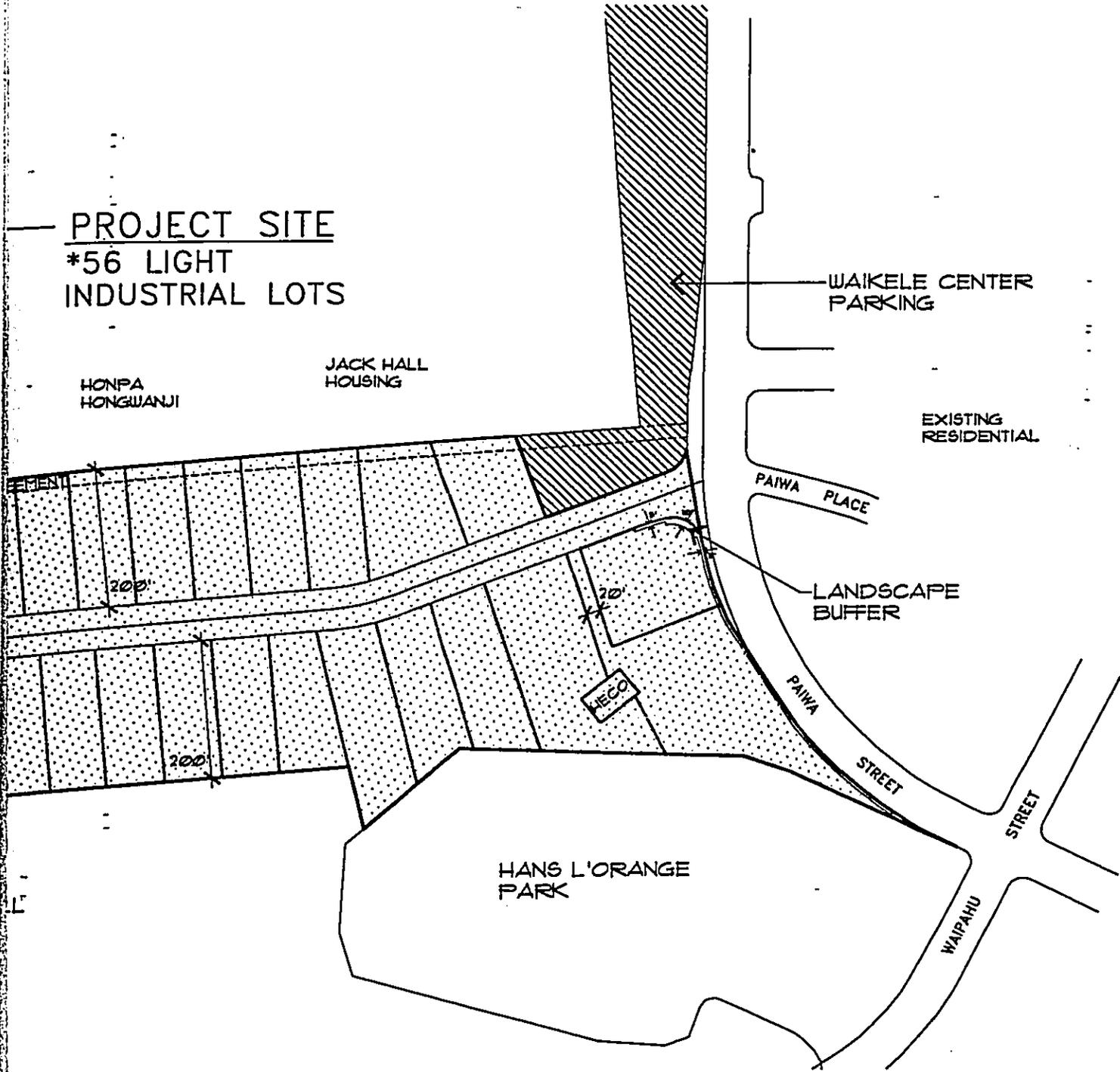
OAHU SUGAR CO., LTD.

AREA SCALE

1/4 Acre	
1/8 ac.	1/8 ac.



PROJECT SITE
***56 LIGHT INDUSTRIAL LOTS**



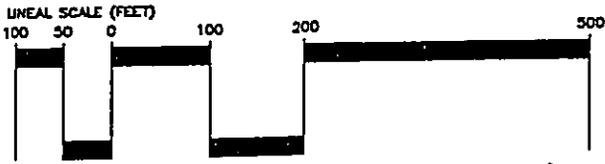
CONCEPTUAL MASTER PLAN
WAIKELE INDUSTRIAL SUBDIVISION

OAHU SUGAR CO., LTD.

WAIPAHU, ISLAND OF OAHU

AREA SCALE

1/4 Acre	
1/8 ac.	1/8 ac.



DATE: 04/15/04

END

CERTIFICATION

**I HEREBY CERTIFY THAT THE MICROPHOTOGRAPH APPEARING IN THIS REEL OF
FILM ARE TRUE COPIES OF THE ORIGINAL DOCUMENTS.**

2004

DATE

Jelle Kasi

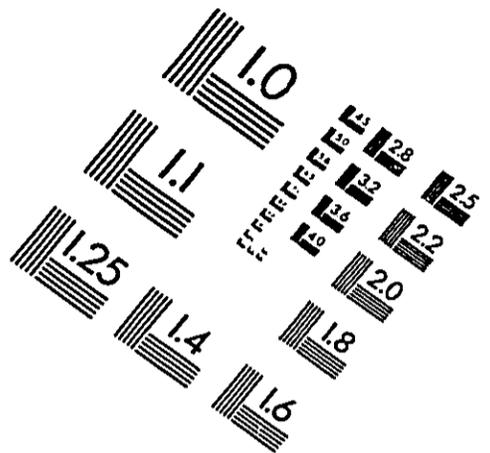
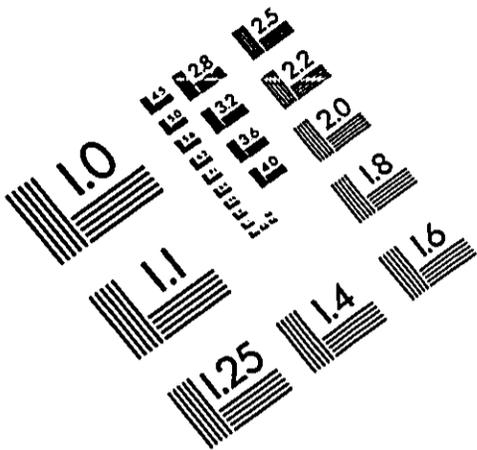
SIGNATURE OF OPERATOR



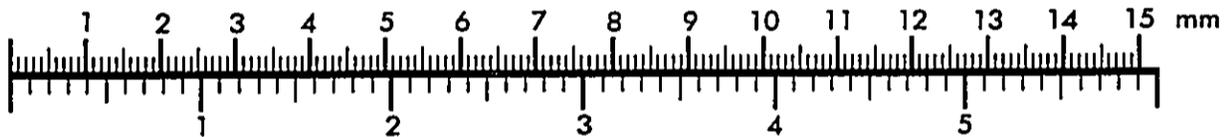
AIM

Association for Information and Image Management

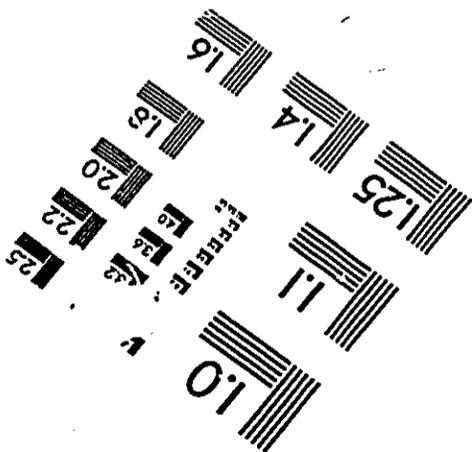
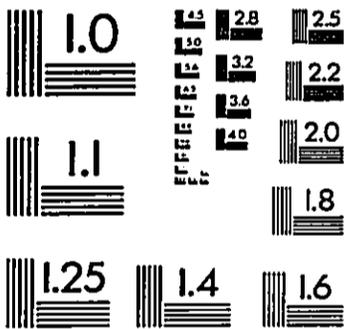
1100 Wayne Avenue, Suite 1100
Silver Spring, Maryland 20910
301/587-8202



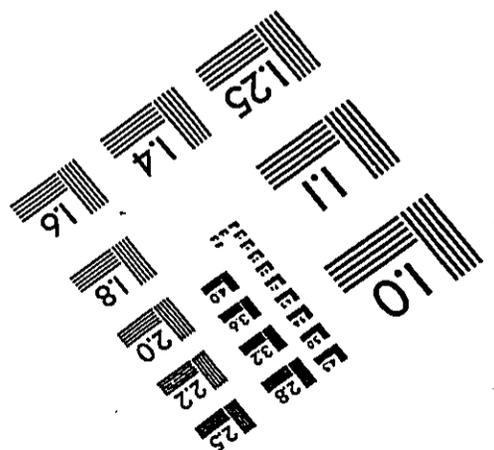
Centimeter



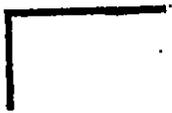
Inches



MANUFACTURED TO AIM STANDARDS
BY APPLIED IMAGE, INC.



DENSITY TARGET



ADVANCED MICRO-IMAGE SYSTEMS HAWAII