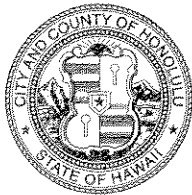


DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
TELEPHONE: (808) 768-8000 • FAX: (808) 527-6743
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MUFI HANNEMANN
MAYOR

HENRY ENG, FAICP
DIRECTOR

DAVID K. TANOUE
DEPUTY DIRECTOR

2007/ED-18 (sn)

December 11, 2008

The Honorable Katherine Kealoha, Director
Office of Environmental Quality Control
State of Hawaii
State Office Tower, Room 702
235 South Beretania Street
Honolulu, Hawaii 96813

Dear Ms. Kealoha:

Subject: Chapter 343, HRS and Chapter 25, ROH
Final Environmental Assessment (FEA)
Finding of No Significant Impact (FONSI)
DPP Project Reference No. 2007/ED-18
Project: Tropical Farms
Applicant: Tropical Farms
Owner: Kualoa Ranch Inc.
Agent: Analytical Planning Consultants, Inc.
Location: 49-227A Kamehameha Highway – Kualoa/Hakipuu
Tax Map Key: 4-9-3: Portion of 1
Proposal: Proposes (seeks to retain) an agribusiness activity and associated after-the-fact improvements. The project site is located within the boundaries of the Moliie Fishpond historic site, which is listed on the National Register of Historic Places.

REC'D
DEC 23 9:00
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

The Department of Planning and Permitting (DPP) has reviewed the comments submitted during the 30-day public comment period which began on December 23, 2007. The DPP has determined that this project will not have significant environmental effects and has issued a FONSI. Please publish this notice in the next available OEQC Environmental Notice.

We have enclosed a completed OEQC Publication Form, one copy of the document in pdf format, two copies of the FEA and the project summary on disk. Should you have any questions, please contact Sharon Nishiura of our staff at 768-8031.

Very truly yours,


Henry Eng, FAICP, Director
Department of Planning and Permitting

HE:cs
Enclosures

FINAL ENVIRONMENTAL ASSESSMENT

TROPICAL FARMS

49-227A Kamehameha Highway, Koolaupoko, Oahu, Hawaii
TMK: 4-9-003: por. 001

Accepting Authority:

City and County of Honolulu
Department of Planning & Permitting

Prepared By:

Analytical Planning Consultants, Inc.

December, 2008

FINAL ENVIRONMENTAL ASSESSMENT

Tropical Farms, 49-227A Kamehameha Highway, Koolaupoko, Hawaii (TMK: 4-9-003: por. 001)

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- Appendix E Report from Hida, Okamoto & Associates
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FINAL ENVIRONMENTAL ASSESSMENT

Tropical Farms, 49-227A Kamehameha Highway, Koolaupoko, Hawaii (TMK: 4-9-003: por. 001)

GENERAL INFORMATION

- A. Applicant:** Tropical Farms
Stephen Paty and Chrissy Kalehua-Hahaloa Paty
49-227A Kamehameha Highway
Kaneohe, Hawaii 96730
Mr. Steve Paty, Owner
Ph. (808) 237-1960
- B. Land Owner:** Kualoa Ranch, Inc.
PO Box 650
Kaaawa, Hawaii 96730
Mr. John Morgan
Ph. (808) 237-8529
- C. Agent:** Analytical Planning Consultants
928 Nuuanu Avenue, Suite 502
Honolulu, Hawaii 96817
Mr. Donald Clegg, President
Phone: 536-5695 Fax: 599-1553
- D. Property Profile:**
- | | |
|--|--|
| Location: | Koolaupoko, Oahu, Hawaii |
| Site Address: | 49-227A Kamehameha Highway, Kaneohe, Hawaii |
| TMK: | 4-9-3: 001, 58.613 acres total |
| Project Site: | The project site is 1.12 acres, which is located <u>within</u> the 58.613 acre lot referred to as TMK: 4-9-3: 001. |
| State Land Use: | Agricultural |
| Koolaupoko Sustainable Communities Plan: | Agricultural Areas |
| Zoning: | AG-2 General Agricultural |
| Height Limit: | 25 feet |
| Historic District: | Project site lies within the boundary the Molii Fishpond National Historic Site (No.80-06-313). |
| Special Management Area: | Yes |
| Flood Zone: | Flood Zone X – areas determined to be outside the 500-year flood plain. |
| Neighborhood Board: | Kahaluu Board No. 29 |
- E. Permits Required:**
- State Special Use Permit (less than 15 acre site)
 - Special Management Area Permit Minor
 - Conditional Use Permit
 - Zoning Variance
 - Building Permits

FINAL ENVIRONMENTAL ASSESSMENT

Tropical Farms, 49-227A Kamehameha Highway, Koolaupoko, Hawaii (TMK: 4-9-003: por. 001)

F. Agencies Consulted:

- Kahaluu Neighborhood No. 29
- City & County of Honolulu, Department of Planning & Permitting
- City and County of Honolulu Fire Department
- City and County of Honolulu Board of Water Supply
- City and County of Honolulu Department of Parks and Recreation
- City and County of Honolulu Police Department
- City and County of Honolulu Department of Environmental Services
- State of Hawaii, Department of Agriculture
- State of Hawaii, Department of Land & Natural Resources
- State Historic Preservation Division
- State of Hawaii, Office of Environmental Quality Control
- State of Hawaii Department of Health
- State of Hawaii Office of Hawaiian Affairs
- State of Hawaii Department of Transportation
- United States Department of Fish & Wildlife Service
- United States Department of the Interior

G. Purpose of the Document & Overview

This draft environmental assessment (EA) is being prepared in compliance with Chapter 343, Hawaii Revised Statutes (HRS). The “proposed action” is the continuation of Tropical Farms’ agribusiness activity, which is operates out of two buildings on a 1.12 acre site contained within TMK 4-9-3: 001. Tropical Farms has leased the 1.12 acre site and the two buildings from the landowner Kualoa Ranch for its agribusiness activities since 2001. No additional construction and no new uses are proposed within Tropical Farms’ 1. 12 acre site beyond what is there today.

Tropical Farms is in the process of applying for various permits (both current and after-the-fact) from the appropriate government agencies to continue its agribusiness activity at its present location. During this process, it became apparent that the Tropical Farms site is located within the Molii Fishpond historic site boundary as designated by the National Register of Historic Places (NRHP). The 1.12 acre Tropical Farms site is less than 1% of the land area of the approximately 148 acre Molii Fishpond “historic site”, as defined by the National Register of Historic Places nomination form and historic site boundaries located in **Appendix A**. The Molii Fishpond’s State Historic Site Number is 80-06-313. The Molii Fishpond (TMK 4-9-3: 043) and the land immediately surrounding the Fishpond, including the Tropical Farms site, are all privately owned by Kualoa Ranch. The purpose of this document is to comply with the requirements of Chapter 343, (HRS), for environmental review when “a project” (in this case the

FINAL ENVIRONMENTAL ASSESSMENT

Tropical Farms, 49-227A Kamehameha Highway, Koolaupoko, Hawaii (TMK: 4-9-003: por. 001)

continued operation of Tropical Farms) is within any historic site or district as designated in the National or Hawaii Register of Historic Sites.

The EA process is also triggered because the 1.12 acre Tropical Farms site is located within the Special Management Area. While it is anticipated that the project will require a SMP Minor as the estimated cost of development, not covered by a prior SMP for buildings on the project site, is approximately \$122,175, which is below the threshold of \$125,000 for an SMA Major, this EA has been prepared to also address the Revised Ordinances of Honolulu, “Chapter 25 – Special Management Area” in case it is determined that a SMP –Major is required. Further details will be provided in Tropical Farms’ application report for the Special Management Area Minor Permit to be submitted to the Department of Planning and Permitting. A discussion of the Special Management Area Guidelines, Section 25-2.3, Revised Ordinances of Honolulu, is contained in Section 5 “Relationship to Public Policies and Controls” of this environmental assessment.

As background, it should be noted that a portion of the main building that Tropical Farms occupies and leases from Kualoa Ranch was constructed in 1985 with an approved building permit and an approved Special Management Area Minor Permit, both of which were applied for by Kualoa Ranch in the mid-1980’s. The original building, which is now over 25 years old, was operated by Kualoa Ranch as a flower packing and processing building where flowers that were grown on Kualoa Ranch property were packed and prepared for sale and shipping. Over time, the original building was expanded and a second small building was constructed near the original flower packing building. The second building is referred to today as “Island Lady”, which Tropical Farms also leases from Kualoa Ranch.

Tropical Farms is not proposing any new construction or expansion within its 1.12 acre leased area nor is any change in use proposed beyond what is there today. Tropical Farms does not make any use of Molii Fishpond which is owned by Kualoa Ranch.

The purpose of this document is to determine whether the “proposed action” - the operation of Tropical Farms’ agribusiness activity – may have a significant impact on the environment and whether and Environmental Impact Statement is required. It is anticipated that the “proposed action” will not have a significant adverse effect on the environment and that a Finding of No Significant Impact (FONSI) will be issued.

FINAL ENVIRONMENTAL ASSESSMENT

Tropical Farms, 49-227A Kamehameha Highway, Koolaupoko, Hawaii (TMK: 4-9-003: por. 001)

LOCATION AND GENERAL DESCRIPTION OF THE PROPOSED ACTION

2.0 Location

Tropical Farms is located on the windward side of Oahu along the northern end of Kaneohe Bay, about three-quarters of a mile before the entrance to the City and County of Honolulu's Kualoa Regional Park. A general location map is shown in **Figure 1**. A tax map is shown in **Figure 2**. The Tropical Farms "site" is defined as an area of approximately 1.12 acres within the 58.6 acre parcel referred to as TMK 4-9-003: 001 at 49-227A Kamehameha Highway as shown in **Figure 3**. The subject site contains two buildings occupied by Tropical Farms and an accessory crushed coral parking area. The buildings are difficult to see from Kamehameha Highway because they are set back over two hundred feet from the roadway, they are at a lower elevation than the highway, and they are surrounded by lush agricultural vegetation typical of the rural area and a grove of mature trees. The Tropical Farms site, located on the makai side of Kamehameha Highway, is surrounded by Kualoa Ranch's active agriculture and active nursery uses. More specific details regarding the Tropical Farms agribusiness activity will be provided in the appropriate permit application reports, such as the State Special Use permit and Conditional Use Permit. The subject of this document is the proposed continuation of Tropical Farms' agribusiness activity within the Molii Fishpond historic site boundaries.

The 1.12 acre Tropical Farms site is approximately 400 feet mauka of the Molii Fishpond. To the north of the 58.6 acre parcel on which Tropical Farms is located and on the opposite side of the highway, is Kualoa Ranch pasture land which is used for livestock grazing. To the northeast is Kualoa Regional Park. To the northwest, the property adjacent to the 58.6 Kualoa Ranch parcel is developed with very low density private rural residences.

Kualoa Ranch, Inc. owns both the Molii Fishpond, which is a 124.102 acre parcel identified as TMK 4-9-03: 043, and the 58.6 acre TMK 4-9-3: 001 within which Tropical Farms' site is located. The Molii Fishpond National Register of Historic Places Nomination Form states that the boundaries of the historic fishpond site encompass approximately 148 acres (Appendix A).

The Molii Fishpond is zoned P-1 Restricted Preservation and is in the State Conservation District. The entire lot within which Tropical Farms is located is zoned AG-2 General

FINAL ENVIRONMENTAL ASSESSMENT

Tropical Farms, 49-227A Kamehameha Highway, Koolaupoko, Hawaii (TMK: 4-9-003: por. 001)

Agricultural and is in the State Agricultural District. The entire 58.6 acre parcel on which Tropical Farms is located is also within the Special Management Area. **Figure 4** illustrates the City and County of Honolulu's zoning designations. **Figure 5** illustrates the State Land Use classifications. **Figure 6** illustrates the Special Management Area boundary.

2.1 Background

Kualoa Ranch's Diversified Activities

Since the 1850s, Kualoa Ranch has been a family-owned and operated ranch for over 150 years. The Kualoa Sugar Mill, built by Charles H. Judd and Samuel G. Wilder in 1863, was closed around 1870 after years of light rainfall that effectively brought an end to sugar cultivation at Kualoa Ranch. Today, Kualoa Ranch has diversified agriculture and aquaculture operations, as well as its outdoor recreational operations. It has over 500 head of cattle and more than 70 horses. The Ranch has fishing lagoons, aquaculture ponds and acres of flowers and plants that are cultivated and sold, some of which are sold at Tropical Farms.

Due to the rising cost of running a working ranch, and economic difficulties with the cattle business, Kualoa Ranch pursued diversified agriculture and a variety of income-producing recreational activities in the 1980's. It was also the family's desire to keep Kualoa Ranch as open space. In order for Kualoa Ranch to remain economically viable, it was necessary to supplement ranch income with non-ranching activities. Kualoa Ranch was given approval for various permits by the City and County of Honolulu for its outdoor recreational activities in the mid-1980's. Additionally, revenues generated from Tropical Farms contribute toward the economic viability of Kualoa Ranch and help to maintain areas of the Ranch in open space and in active agriculture.

During that same time period, Kualoa Ranch developed diversified agriculture activities on the subject 58.6 acre parcel. Specifically, in 1985, the City and County of Honolulu issued Kualoa Ranch a building permit (BP#217345) (see **Appendix B**) and a Special Management Area Permit (minor) (85/SMA-107) (see **Appendix C**) for a flower packing and storage building to process and store flowers grown on the property that were then sold. Over the years, the building was expanded and has been occupied by Tropical Farms since 2001. Subsequent to receiving all the necessary permits to operate the agribusiness activity in its present location, after-the-fact building permits for the expansion of the existing structures will be obtained.

FINAL ENVIRONMENTAL ASSESSMENT

Tropical Farms, 49-227A Kamehameha Highway, Koolaupoko, Hawaii (TMK: 4-9-003: por. 001)

2.2 Action's Technical Characteristics

Proposed Uses

The applicant is seeking after-the-fact approval to continue the agribusiness activities on the site in the existing buildings. No changes to the Molii Fishpond are proposed. No additional construction is proposed.

Project Characteristics

Tropical Farms is a family-owned agribusiness which provides retail opportunities for products grown and made on Oahu and in Hawaii, with a focus on Windward, North Shore and the Central Oahu region; fruits and vegetables grown on the site and in the region; an outlet for local cottage industries; and, educational displays about agriculture, the local culture and island life.

Tropical Farms has been in operation at its current location for 6 years. Hours of operation are 9:00 am to 6:00 pm daily for 362 days per year with 20 full-time and 3 part-time employees. Approximately, 640 customers visit Tropical Farms daily. Most visitors are traveling to other destinations along the Windward coast such as the Polynesian Cultural Center or are traveling to the North Shore on an around-the-island tour. About seventy percent (70%) of these visitors arrive in buses, vans or limousines. Adequate parking is provided on site.

The Tropical Farms' agribusiness activity has the character and atmosphere of a country store and open market. The site and two buildings are very rural in character and are visually unobtrusive; the buildings are not readily visible from Kamehameha Highway. Visitors are able to experience a country setting, yet have a low impact on the environment because Tropical Farms is a physically small and contained operation, and access is directly off of Kamehameha Highway. The driveway and all vehicular circulation and parking areas are covered with crushed coral, which reflects the locale's rural character and setting. There are no plans for expansion or additional construction beyond what is there today.

Existing Conditions – Relationship to Molii Fishpond

The proposed project is to approve Tropical Farm's continued agribusiness activity within the boundary of the Molii Fishpond historic site. The Molii Fishpond is not visible from the Tropical Farms site and thick and lush vegetation and landscaping, as well as active landscaping

FINAL ENVIRONMENTAL ASSESSMENT

Tropical Farms, 49-227A Kamehameha Highway, Koolaupoko, Hawaii (TMK: 4-9-003: por. 001)

and plant crops, serve as a buffer between the site and the Moli Fishpond. The buildings leased by Tropical Farms are located over 400 feet away from the edge of Moli Fishpond and the agribusiness activity will not impact the fishpond. There has been diversified agricultural use in the same proximity to the Moli Fishpond in the building occupied by Tropical Farms within the 1.12 acre site for over 20 years beginning with the original permitted building that housed Kualoa Ranch's flower packing business.

The request to allow Tropical Farms to continue its operation would expand the scope of the existing Building Permit BP#217345 for the original flower processing shed and the Special Management Area Minor Permit (85/SMA-107) issued by the Department of Land Utilization on December 2, 1985. Since those permits were approved, the original 840 square foot flower processing building has been expanded by 2,153 square feet (for a total of 2,993 square feet) and the 472 square foot "Island Lady" building (which Tropical Farms also occupies) was built. Neither expansion received building permits. Although the flower packing building was expanded, the country character and simple functional "farm building" design of the structure has remained the same. Tropical Farms, both in physical character and use, is compatible with and compliments Kualoa Ranch's agricultural uses with minimal alteration to the property. The portions of the 58.6 acre parcel that are used for growing trees, fruits and flowers are not disturbed by Tropical Farms' operation. **Figure 7** illustrates the floor plans for the main Tropical Farms Building A and **Figure 8** illustrates the floor plan for the Island Lady Building B.

The trigger of this environmental assessment is the Moli Fishpond, its designation as an historic site and the fact that Tropical Farms' site is located within the historic site's boundary. Tropical Farms is applying for the necessary permits with the appropriate government agencies to continue its agribusiness activity. A more detailed discussion of Tropical Farms' agribusiness activities is contained in those permit application reports.

2.3 Existing Use, Structures, Parking and Prior Approved Permits

Approximately 50% of the parcel is currently devoted to active agricultural use. A wide variety of fruits and flowers common to Oahu, are grown on site some of which are sold at Tropical Farms. Kualoa Ranch also packages and ships flowers. A portion of the area is landscaped as a tropical garden for visitors to view.

FINAL ENVIRONMENTAL ASSESSMENT

Tropical Farms, 49-227A Kamehameha Highway, Koolaupoko, Hawaii (TMK: 4-9-003: por. 001)

The Tropical Farms agribusiness provides a marketing outlet and retail opportunity for products grown and made in Hawaii. The primary focus is on marketing diversified agricultural products that are grown on-site and in the region, and grown and produced by other Hawaii-based small agriculture related businesses. Tropical Farms occupies two buildings on its 1.12 acre site: (1.) The 2,993 square foot Main Tropical Farms (Building A), which was the original location of the flower packing building, and (2.), the smaller 472 square foot building referred to as “Island Lady” (Building B). **Figures 7 and 8** depict the existing floors plans of Building A and Building B.

Building A and Building B contain Tropical Farms retail areas; restrooms; interactive displays on agriculture and a macadamia nut husking machine for visitors to interact with; educational displays on plantation life, the Paty family that owns Tropical Farms, and the local culture; and an accessory business office and storage within Building A;

Existing Buildings used by Tropical Farms	Use	Staff	Floor Area (SF)	Height (feet)	7 days/week Hours
“A” Tropical Farms	Retail	16	2,993	17-21	9:00 am – 6 pm
“B” Island Lady	Retail	2	472	11	9:00 am – 6 pm
TOTAL EXISTING		18	3,465		

“Building A”

This is a one-story 2,993 square foot structure. The shaded portion of the floor plan in **Figure 7** illustrates the original 840 square foot structure. (The original building also had a 300 square foot uncovered lanai, for a total footprint of 1,100 square feet.)

The 840 square foot portion of Building A was originally constructed by Kualoa Ranch in 1985 under Building Permit No. 217345 (**Appendix B**) as a flower packing and storage building. The original construction value was \$17,000 in 1985. A Special Management Area Permit was also obtained in 1985 for the flower packing and storage building – 85/SMA-107 (**Appendix C**). Today, the central 840 square foot portion of “Building A” is what remains of that original structure (**Figure 7**). The original flower building was added onto by Kualoa Ranch in the late 1980s to expand the flower packing business. This represents an increase of 2,153 square feet of floor area. An after-the-fact building permit for the expansion will be applied for at the appropriate time following the environmental review process. Today, the building contains

FINAL ENVIRONMENTAL ASSESSMENT

Tropical Farms, 49-227A Kamehameha Highway, Koolaupoko, Hawaii (TMK: 4-9-003: por. 001)

Tropical Farms' main retail area, offices, storage spaces, men's and women's restrooms and an open-air roofed lanai.

"Building B"

This is a one-story 472 square foot structure. It was originally constructed in the late 1990s by Kualoa Ranch for additional space for the flower packing business to handle international orders. **Figure 8** illustrates the building's floor plan.

Note: The Site Plan in Figure 3 includes Building C which is used for storage of agricultural equipment for the on-site farm activities of Kualoa Ranch and an outdoor eating area for workers. While Building C is shown located within the 1.2 acre site plan for Tropical Farms it is not part of the Tropical Farms operation.

Parking

The parking area, which is an accessory use to the agribusiness activity, is located between Tropical Farms "Building A" and Kamehameha Highway. The driveway and parking area were originally created by Kualoa for the agricultural activities on the parcel including the flower packing business and later leveled and resurfaced for Tropical Farms. Parking is located on the opposite side of the Tropical Farms' building in the direction away from the Moli'i Fishpond. The driveway, with access off of Kamehameha Highway, and all vehicular circulation and parking areas are covered with pervious crushed coral, which reflects the locale's rural character and setting. There is no pavement and there are no striped parking stalls. The parking area purposefully does not use the materials of or have the appearance of a shopping center's striped asphalt or concrete parking lot. Based on typical parking stall dimensions, the parking area can accommodate approximately 30 cars and 10 buses/minivans. Vehicle count ranges from 70-100 (cars and buses) per day. There is an existing parking sign that reserves the parking stall closest to the front entrance as designated handicapped parking. Truck deliveries are brought to the rear of Building A, via a small service lane from the parking lot to the back of Building A. The access driveway and parking area are also used by 1-3 ranch vehicles (tractors and trucks) which are associated with farming practices on the parcel. (Various zoning development standards, including required parking will be addressed in the permit application reports to be filed with the City Department of Planning and Permitting.)

FINAL ENVIRONMENTAL ASSESSMENT

Tropical Farms, 49-227A Kamehameha Highway, Koolaupoko, Hawaii (TMK: 4-9-003: por. 001)

2.4 Surrounding Uses

The Moli Fishpond parcel is surrounded by Kualoa Ranch property, the Kualoa Regional Park, and the Pacific Ocean. The 58.6 acre parcel, owned by Kualoa Ranch which contains the 1.12 acre Tropical Farms site, is located along the makai side of Kamehameha Highway about three-quarters of a mile before Kualoa Regional Park's entrance. The Kualoa Ranch parcel is bounded by Kamehameha Highway to the north, Moli Fishpond to the south, Johnson Road to the west and Kualoa Regional Park to the east. Within the 58.6 acre parcel, Tropical Farms is surrounded by active agriculture – landscape plants and various trees and fruit trees – which is cultivated by Kualoa Ranch.

2.5 Required Permits

The applicant, Tropical Farms, is applying for the necessary permits from the appropriate government agencies to continue its agribusiness activity within the 1.12 acre project site. After many months of preparation, submission and processing, the applicant learned that Tropical Farms' 1.12 acre site is entirely located within the boundary of the Moli Fishpond historic site. All permit applications with the City and County of Honolulu's Department of Planning and Permitting were placed on hold pending the preparation and processing of this environmental assessment. An overview of the permits that may be required for Tropical Farms is provided below.

Chapter 343 Environmental Review. The project site is located within the boundaries of the Moli Fishpond Historic Site, which was nominated in 1971 to the National Register of Historic Places. In accordance with the requirements of Chapter 343, HRS, an Environmental Assessment (EA) is required because Tropical Farms is located within an historic site. Tropical Farms' site is also located within the Special Management Area, therefore this Environmental Assessment had been prepared to also address the Revised Ordinances of Honolulu, "Chapter 25 – Special Management Area".

State Special Use Permit

Tropical Farms is located within the State Agricultural District. In general, agricultural land that is located in the State Agricultural District is typically zoned by the County as AG-1 Restricted Agricultural, while agricultural land in the State Urban District is typically zoned by the County

FINAL ENVIRONMENTAL ASSESSMENT

Tropical Farms, 49-227A Kamehameha Highway, Koolaupoko, Hawaii (TMK: 4-9-003: por. 001)

AG-2 General Agricultural. However, the Tropical Farms site is zoned by the County as AG-2 General Agricultural, but is in the State Agricultural District. This means that while the proposed agribusiness activity may be permitted by the County in the AG-2 zone through a Conditional Use Permit process, a State Special Use Permit is also required because Tropical Farms is located in the State Agricultural District. A State Special Use Permit will be submitted to the City and County of Honolulu's Department of Planning and Permitting.

Conditional Use Permit. Agribusiness activities, such as Tropical Farms, can be permitted by the City and County of Honolulu's Land Use Ordinance on land zoned AG-2 with approval of a Conditional Use Permit. An application for the Conditional Use Permit will be submitted to the City and County of Honolulu's Department of Planning and Permitting pending approval of the SUP. As a condition of approval, Kualoa Ranch will dedicate 50% or more of the project area for a minimum of 10 years to active agricultural use.

Zoning Variance. The project will require a variance from the Land Use Ordinance associated with the structure of the buildings and the sale of products as a portion of Tropical Farms' retail sales is from products not produced on Oahu and some agricultural products sold at Tropical Farms are not listed in the Land Use Ordinance's description of "agricultural products" for an agribusiness activity. The applicant will submit a zoning variance application to the City and County of Honolulu's Department of Planning and Permitting concurrently with the CUP application.

Special Management Area Permit. As mentioned above, the site is located within the Special Management Area (SMA) and the project must comply with the Revised Ordinances of Honolulu, "Chapter 25 – Special Management Area". A minor SMA permit will be requested for operation of the agribusiness activities within the SMA and the expansion of the structures which took place after issuance of a minor SMA permit in 1985 for construction of the flower packing operation.

FINAL ENVIRONMENTAL ASSESSMENT

Tropical Farms, 49-227A Kamehameha Highway, Koolaupoko, Hawaii (TMK: 4-9-003: por. 001)

	<u>LAND USE DISTRICT</u>	<u>REQUIRED PERMIT</u>
Chapter 343 HRS		<u>Environmental Assessment</u> The Project Site is located within the Moliie Fishpond historic site and within the Special Management Area.
County	Special Management Area	<u>Special Management Area Permit Minor.</u> The Project Site is located within the SMA. The valuation of construction is less than \$125,000, which triggers a minor SMA permit.
State Land Use	State Agricultural District	<u>Special Use Permit</u> Required for “agribusiness use”.
County Zoning	AG-2 General Agricultural	<u>Conditional Use Permit (minor)</u> Provides for “agribusiness activities” in the AG-2 General Agricultural zone.
County Zoning	AG-2 General Agricultural	<u>Zoning Variance</u> Associated with the structure and for the sale of specific products which are not included in the definition of “agribusiness”.
County		<u>Building Permits</u> After-the-fact building permits are required for the 2,153 square foot expansion of “Building A”, and the construction of the 472 square foot “Building B”.

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3.0 DESCRIPTION OF THE AFFECTED ENVIRONMENT, IMPACTS AND MITIGATION MEASURES

3.1. Climate and Air Quality

The Windward Oahu temperatures are mild and change little over the annual weather cycle. Rainfall average along the coastal area is about 60 inches per year. The highest rainfall occurs in the cooler months between November and March, while the lower rainfall amounts occur during the warmer months from May to September.

The air quality of Oahu and especially windward Oahu is generally good. The relatively constant tradewinds and rain showers together with a lack of concentrated human activity in the area of Tropical Farms would produce air quality that would be expected to be well within State and national Ambient Air Quality Standards (AAQS). The windward coast's lack of high traffic volumes and the prevailing northeast trade winds mitigate any effects of vehicular traffic on air quality.

Anticipated Impacts and Mitigative Measures

In terms of air quality, Tropical Farms's operation is not an industrial or manufacturing-type use. Potential sources of air pollutants would be traffic on Kamehameha Highway or agricultural activities. Any impact to air quality on the site would come from vehicles entering the site. Based on information from Tropical Farms, approximately 70 to 100 vehicles per day (both cars and buses) visit the Tropical Farms site between 9 am and 6 pm. This represents only one percent (1%) of the total number of vehicles traveling in both directions along Kamehameha Highway over a 24-hour period.

No new construction is proposed; therefore construction is not an existing or potential air quality issue. The proposed action to continue Tropical Farms' operations will not affect climatic conditions or air quality, therefore no mitigative measures are proposed.

3.2 Geology and Topography

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The windward coast of Oahu is the remnant of a deeply eroded basaltic shelf volcano. The valleys in the Koolau shield were carved by fluvial erosion, combined with ocean wave erosion of the cliffs. Portions of the windward coast are characterized by a relatively impermeable layer of sedimentary material – caprock – which is formed by deposits of terrestrial and marine sediments. The topography of the 1.12 acre Tropical Farms Project Site is generally flat and gently sloping from Kamehameha Highway; the area on which the structures are built is approximately 15 feet lower than the surface elevation of Kamehameha Highway.

Anticipated Impacts and Mitigative Measures

Any grading that was done in the past for the agricultural use of the property, including construction of and additions to the farm structures and parking area that is now used by the Tropical Farms' operation, was minimal. There does not appear to be any impact to the geology or topography of the subject parcel or of Moliie Fishpond. No new construction or grading is proposed. No impacts to geological resources are proposed. No changes in topography are proposed.

3.3 Soils

Below is information from the State of Hawaii's Department of Agriculture for the soils of the 1.12 acre Tropical Farms site. No construction or grading is proposed within Tropical Farms site. The Moliie Fishpond is a body of water which does not have soil types or classifications.

- 1) United States Department of Agriculture, Soil Conservation Survey (SCS):
Lolekaa silty clay (LoB) which is characterized by 3% to 8% slopes. This soil type is found on terraces and fans. Characteristics include moderately rapid permeability, slow runoff and slight erosion hazard. Waikane stony silty clay (WpaE) is characterized by moderate to severe runoff and workability is difficult. This soil type is typically used for pasture. (Figure 9)

- 2) Agricultural Lands of Importance to the State of Hawaii (ALISH): The subject property is classified as "Other Important" agricultural land. The ALISH classifications were developed by the Natural Resources Conservation Services of the U.S. Department of Agriculture, University of Hawaii College of Tropical

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Agriculture and Human Resources, and the State of Hawaii Department of Agriculture. (Figure 10)

Anticipated Impacts and Mitigative Measures

Kualoa Ranch has operated the main Tropical Farms building for over 20 years as some form of agribusiness activity – previously as a flower packing building. Expansion of the structure and accessory parking area to its present configuration would have had no impact to the overall soil quality for the site. The proposed action to continue Tropical Farms’ operation will not impact the soils found within the 1.12 acre site. No new construction or soil disturbing activities are proposed. There will be no impacts to soils.

3.4 Water Resources and Flood Hazard

No rivers or streams cross the Tropical Farms site. Tropical Farms is adjacent to Kamehameha Highway which creates a border between the site and runoff from upper elevations that could percolate into the ground before crossing the highway towards the project site. The Tropical Farms site is primarily characterized by pervious surfaces; it has significant amounts of landscaping and surrounding the site are farmed areas where agricultural products are grown. The parking and vehicular circulation areas are permeable surfaces because they are covered with crushed coral. There are no storm drain inlets within or directly adjacent to the site.

Figure 10 shows the National Flood Insurance Program Flood Insurance Rate Map, Panel No. 15003C0165F for the area. The Project Site is located in an area with a flood zone designation of “Zone X”. According to the FIRM map’s legend, Zone X is: “Other Flood Areas - Zone X: Areas determined to be outside the 500-year flood plain.”

Anticipated Impacts and Mitigative Measures

Tropical Farms’ operation is located in an area determined to be outside the 500-year food plain. Any grading that was done in the past for the agricultural use of the property, including construction of and additions to the farm structures and parking area that is now used by the Tropical Farms’ operation, was minimal. The majority of the site is open and consists of pervious surfaces such as the crushed coral parking and vehicular circulation area. The existing sheet flow drainage will be maintained. The landscaping and grassed areas further minimize storm water runoff. There are no visible signs of storm erosion. The continued operation of

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Tropical Farms is not anticipated to impact existing drainage or water quality. No new impervious surfaces are proposed. No new construction is proposed.

3.5 Flora and Fauna

The 1.12 acre Project Site has been previously disturbed over the last 20 years through the development of the parking area and construction of the buildings. Additionally, the Kualoa Ranch land surrounding the 1.12 acre Tropical Farms Project Site has been actively cultivated in a variety of crops for over 60 years, including tropical flowers, nursery plants, tropical fruit trees (bananas and papayas), and gardens. The entire TMK parcel contains a variety of introduced species in the form of landscaping plantings, grass, and naturally occurring mature trees. Typical introduced animal species such as dogs, cats, mongoose, chickens, cattle, horses, mice, rats, mynah birds, sparrows, doves, pigeons, and cardinals likely exist on the property.

Anticipated Impacts and Mitigative Measures

The Tropical Farms site has been previously developed with a parking area, two buildings and introduced landscaping. The continued operation of Tropical Farms would not significantly impact flora or faunal resources. Tropical Farms occupies two buildings and is located in an area that has been previously developed. No adverse impacts to flora or fauna are anticipated.

3.6 Noise

In terms of air quality and noise, Tropical Farms's operation is not an industrial or manufacturing-type use. The largest generator of noise in the general vicinity would be traffic on Kamehameha Highway or intensive agricultural uses in the area. During weekdays, area vehicular activity is sporadic and relatively insignificant noise levels occur. During weekends, noise levels increase in proportion to the number of passing cars and buses transporting residents and visitors to nearby beaches, the Kualoa Regional Park and those who travel onto destination points such as the Polynesian Cultural Center in Laie. Many visitors may also be on a "circle island" tour which typically originates from Waikiki hotels and circles Oahu via the Windward Coast to North Shore and back to Waikiki through Central Oahu.

Visitor traffic associated with Tropical Farms can be described as traffic that would in any case be contributing to the overall traffic noise levels of the Windward coast. This is because many of

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the visitors stop only momentarily at Tropical Farms while on their way to or from other points of interest along the Windward coast, such as the Polynesia Cultural Center, and the North Shore, such as the famous surf beaches (Pipeline) and Haleiwa. Approximately 70% of visitors at Tropical Farms are on a bus or van tour. Approximately 30 % are “free independent travelers” (FIT) or visitors who are in their own rental car. Tropical Farms is not a destination site, but is rather located along a popular “circle island” tour route that visitors travel from Waikiki to the Polynesia Cultural Center, to the North Shore and back to Waikiki.

State of Hawaii Maximum Permissible Sound Levels in dBA*

<u>Class</u>	<u>Zoning</u>	<u>Maximum Permissible Sound Level (dBA)</u>	
		<u>Daytime</u> <u>7:00 am to 10:00 pm</u>	<u>Nighttime</u> <u>10:00 pm to 7:00 am</u>
<u>A</u>	<u>Residential, conservation, preservation, public space, open space, or similar type</u>	<u>55</u>	<u>45</u>
<u>B</u>	<u>Multi-family dwellings, apartment, business, commercial, hotel, resort, or similar type</u>	<u>60</u>	<u>50</u>
<u>C</u>	<u>Agriculture, country, industrial, or similar type</u>	<u>70</u>	<u>70</u>

*dBA = A-weighted sound level in decibels

Source: HAR 11-46

Anticipated Impacts and Mitigative Measures

According to the State of Hawaii’s Administrative Rules, Tropical Farms is located in an area with the greatest maximum permissible sound levels for daytime and nighttime uses. Tropical Farms is located in an area with even greater maximum permissible sound levels than

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commercial or resort zoned areas such as Waikiki or Ala Moana Shopping Center. No new construction is proposed; therefore construction noise is not an existing or potential noise quality issue. The proposed action to continue Tropical Farms' agribusiness operation on the 1.12 acre site will not have a significant effect on ambient noise levels. The traffic that stops at Tropical Farms is traffic that would already contribute to the overall traffic noise levels of the Windward coast. Tropical Farms' agribusiness activities do not create an impact on ambient noise levels.

3.7 Archaeological, Historic and Cultural Resources

A Cultural Impact Assessment report was prepared in March 2004 by Archaeological Consultants of the Pacific, Inc. (Appendix D) The Cultural Impact Assessment was conducted for the entire 58.6 acre TMK: 4-9-03: 001 in which Tropical Farms is located. The cultural impact assessment consists of a historic background study and community consultations/interviews. The historic background research addresses traditional cultural accounts and land uses for the Hakipuu and Kualoa Ahupuaa. The community consultations address potential concerns that community members may have about the affect of Tropical Farms on places of cultural or traditional importance. In summary, community members expressed no objections to the use of the area as a "country store" (agribusiness activity) with regards to any areas of cultural or traditional importance.

Historic Background Research

The geographical extent of inquiry includes the entire ahupuaa of Hakipuu, even though Tropical Farms' Project Site is 1.12 acres. The historic background of the Hakipuu and Kualoa Ahupuaa were researched. This includes an examination of traditional accounts, land use from earliest occupation to present day, archaeological investigations and a summary of settlement patterns.

This research was conducted by means of reviewing a number of historical texts and documents (which are listed on page 4 of the cultural impact assessment report in Appendix D). Land Commission Awards were also researched. Research relating to previous archeological investigations was conducted at the State Historic Preservation Office's library in Kapolei.

The Tropical Farms site is located in the ahupuaa of Hakipuu, district of Koolaupoko, Island of Oahu. Hakipuu Ahupuaa is bordered on the north by the ahupuaa of Kualoa, to the east by the Pacific Ocean, to the west by Moli Fishpond and to the south by Waikane Ahupuaa. Hakipuu is

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literally translated as “broken hill” and is said to be the home of a famous navigator (Kahai) who lived in the area and traveled to Samoa to bring back seeds and breadfruit.

From traditional accounts of Hakupuu and Kualoa, the area was a focal point in Hawaiian mythology. A diverse agricultural history also occurred in the area, beginning with the earliest uses of shoreline resources, to use of the fishponds and the cultivation of various indigenous crops. Later, sugarcane arrived in Kualoa circa 1860 and a sugar mill was erected north of the Kualoa Peninsula. After the sugar mill closed in 1871, Kualoa Ranch was used for the grazing of cattle and horses.

World War II, however, brought about several changes to the landscape including the U.S. Army taking over an emergency landing strip that was originally constructed in 1930 along the east beach of the Kualoa Peninsula. Also, pillboxes were constructed along Moli Fishpond and the coast.

Previous Archeological Work

A formal archaeological reconnaissance study was not undertaken for the following reasons cited in the Cultural Impact Assessment report:

“Because of required archaeological investigations previously conducted in Hakipuu and Kualoa, support of the present activity (Tropical Farms) by community members, and the fact that the boundary of activity would occur within the proximity of existing structures (Tropical Farms) on the subject property, no further archaeological investigations are recommended.”
(Archaeological Consultants of the Pacific, March 2004)

A number of archaeological investigations have been conducted within the Kualoa Ahpuua. They are referenced in the Cultural Impact Assessment Report (**Appendix D**). The report describes the fishponds in the area (Molii, Apua and Koholalele). The report also references prior archeological survey work done for Kualoa Park. In summary, an archeological reconnaissance study was not undertaken because the existing Tropical Farms operation occurs on 1.12 acres of land and in buildings that were already developed and constructed prior to Tropical Farms’ occupation of those buildings. No new construction or earth disturbing activities are proposed.

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The State Historic Preservation Division in their letter dated 2/11/08 believes that as no ground disturbing activities are proposed that the undertaking will have no adverse effect on Moli'i Fish Pond.

Community Consultations

The consultant identified and contacted individuals and organizations with expertise concerning cultural resources, practices and beliefs in Hakipuu, as well as those knowledgeable of the area potentially affected by Tropical Farms. Interviews were conducted and questions were asked about their association with the Tropical Farms site, and how the proposed action to allow Tropical Farms' agribusiness activity to continue would affect or physically alter any place of cultural/traditional importance, or access to any such place. Cultural consultations were conducted in person.

Areas of cultural and traditional importance in the vicinity of the project area and in the Kualoa Ahupuaa were identified during ethnographic consultations, in particular, from three kupuna from the Hakipuu area. When asked if proposed construction would affect or alter any place or access to any place of cultural or traditional importance, two of the kupuna (who used to live and work the land on which Tropical Farms is located and today live on an adjacent lot on Johnson Road) expressed "*...no objections and agreed that the facilities at Tropical Farms create an atmosphere which allows visitors to experience the real beauty, culture and history of Hawaii*".

The third kupuna (who has worked on the property for almost 30 years) had no objections to the existing Tropical Farms operations and supports construction (although no construction is proposed) as a means to facilitate the further sharing of the beauty and culture of Hawaii with locals and visitors alike. He also noted that the one-story buildings match the environment and therefore do not destroy or take away from the natural landscape.

Summary and Recommendations

Hakipuu and Kualoa Ahupuaa have been a focal point in Hawaiian mythology and the placement of Moli'i Fishpond on the National Register of Historic Places signifies the importance of the area from a cultural perspective.

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The area has experienced a diverse agricultural history. The use of the fishponds and the cultivation of various crops, such as melons, figs, grapes, peanuts, mangos, corn, sweet potatoes and taro, are some examples. The area underwent further change during World War II and the U.S. Army's addition of extending the landing strip, pillboxes and a motor pool on Kualoa Ranch land.

Finally, community members expressed no objections to the use of the area as a "country store" (agribusiness activity) with regards to any areas of cultural or traditional importance. The community members that were interviewed expressed no objections to the continuation of the Tropical Farms agribusiness activity and continued use of the site and buildings.

Anticipated Impacts and Mitigative Measures

There is no record of whether any archeological resources were discovered at the time that the previous agricultural activities and construction were done. Community members expressed no objections to the continued use of the project site and the buildings as Tropical Farms' "country store" (agribusiness activity) with regards to Moli Fishpond or any areas of cultural or traditional importance. No new construction or ground disturbing activities are proposed. The Office of Hawaiian Affairs had no comment on the project as long as there are no plans for expansion or additional construction.

3.8 Scenic and Visual Resources

The windward coast of Oahu has spectacular views of the ocean and the Koolau mountain range. According to the 1987 Coastal View Study, prepared by Michael S. Chu and Robert B. Jones for the City and County of Honolulu, the portion of Kamehameha Highway fronting the Tropical Farms site is classified as a "coastal roadway with intermittent coastal views". Specifically, the stretch adjacent to the site is referred to as "KP-2". The Study says the following about KP-2:

"Intermittent makai views from Kualoa Regional Park through the Waiahole/Waikane area. The natural vegetation and agricultural crops are the primary elements that characterize the viewing experience."

The views of the Tropical Farm site are characterized by the natural vegetation, mature trees and surrounding active agriculture; fruit trees, nursery plants and tropical flowers, as stated in the City's Coastal View Study report. As previously described, Tropical Farms' buildings are very

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rural in character, appearance and scale. The two buildings, which are set back over 130 feet from the highway, are not readily visible due to the large mature trees and lush vegetation fronting the property along the highway and throughout the site. There is also a change in elevation downwards from the highway towards the parking area and the buildings beyond, so the buildings are difficult to see because they are at a lower elevation than the highway. The view of the Tropical Farms site is limited to the entrance/exit driveway. Within Tropical Farms, views are limited to the surrounding vegetation and agricultural areas. The Molii Fishpond is not visible from Tropical Farms' buildings due to lush vegetation, mature trees and a change in elevation downward towards the Fishpond.

Anticipated Impacts and Mitigative Measures

There are no impacts to views cited in the Coastal View Study because the site is not readily visible from Kamehameha Highway due to thick vegetation and a downward change in slope. Tropical Farms' buildings are not readily visible from Kamehameha Highway due to heavy vegetation and mature trees. The buildings are relatively small in size compared to the vast verdant and tropical lushness of the area. The buildings have a rural character and appearance and an open-air design so as to minimize solid surfaces and provide views of the natural surrounding landscape. There are no significant effects on the visual setting.

3.9 Roadways and Traffic

Access to the Tropical Farms site is from Kamehameha Highway, which serves the Windward coast of Oahu. Kamehameha Highway is a two-lane asphalt roadway under the jurisdiction of the State Department of Transportation. Generally, the posted speed limit is 35 to 45 miles per hour. Access is by vehicle directly off of the highway via an on-site private two-lane crushed coral driveway. Traffic and cars are separated from the Molii Fishpond by the existing Tropical Farms' buildings. The parking area and driveway are not visible from Molii Fishpond.

The Tropical Farms operation has been at its present site since 2001. Information obtained from the State Department of Transportation (DOT) 24-hour traffic counts indicates that vehicle counts changed very little from 2000 to 2004 along Kamehameha Highway in the vicinity of the Old Sugar Mill Stack on Kualoa Ranch property, which is approximately one mile past Tropical Farms' entrance. The Old Sugar Mill Stack on Kualoa Ranch property was the location of one of DOT's traffic count stations.

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Vehicle counts traveling in a single direction totaled approximately 5,500 to 5,600 for a total of approximately 11,000 to 11,200 vehicles traveling in both directions in a 24-hour period along the stretch of Kamehameha Highway near Tropical Farms. Approximately 70% of those who visit Tropical Farms are on a group tour that is bound for a destination such as the Polynesian Culture Center or a circle-island tour and arrive in buses, vans or limousines and are not driving individual automobiles. As such, the traffic that visits Tropical Farms is part of existing visitor traffic that tours the Windward side of Oahu. Tropical Farms is not a destination, but rather is located along a route that is popular with tours and visitors who wish to drive to the North Shore, around the island or to the Polynesian Cultural Center in Laie. The amount of traffic that stops at Tropical Farms is a very small portion of the total traffic traveling along that area of Kamehameha Highway.

Anticipated Impacts and Mitigative Measures

- Traffic Counts

Hours of operation are 9:00 am to 6:00 pm daily for 362 days per year with 20 full-time and 3 part-time employees. Approximately, 640 customers visit Tropical Farms daily. Based on information from Tropical Farms, approximately 70 to 100 vehicles per day (both cars and buses) visit the Tropical Farms site with 70% arriving as part of a group tour. This represents less than one percent (1%) of the total number of vehicles traveling in both directions along Kamehameha Highway over a 24-hour period. The operating hours (9:00 am to 6 pm daily) are scheduled to minimize any impacts on traffic on Kamehameha Highway during weekday peak morning and evening hours.

- Road Conditions and Line of Site

Kam Highway is 50' wide and there is a clear line of site for a of minimum of 1000' on either side of the access driveway to Tropical Farms (see photos and map). There are no known existing traffic hazards.

- Need for a left-hand turn lane from Kamehameha Highway

Management at Tropical Farms has noted that the majority of traffic stopping at the store comes from Kaneohe side and then continues on to the North Shore (80-90%). Visitors coming from the North Shore are much fewer (10-20%) and generally come in the early

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afternoon before any windward rush hour traffic. A left hand turn lane would provide a waiting lane only for these vehicles coming from the north shore and wanting to turn into the driveway of Tropical Farms. Those vehicles exiting Tropical Farms and heading towards Kaneohe wait on site before making a left turn onto Kam Highway.

Note: There are no left hand turn lanes along Kamehameha Highway for the Hygenic Store, Coral Kingdom, Johnson Road, Kualoa Ranch, Crouching Lion, Waihee Road, or the Kaawa 7-11. It appears that traffic concerns have not warranted left hand turn lanes for these establishments. Kualoa Beach Park has a left turn lane which holds only one car at a time.

- Traffic Impact Analysis Report (TIAR)
No TIAR has been indicated at this time.

- Review by the State Department of Transportation (DOT)

In December 2007, the DOT was sent the DEA for review and comment as to whether a Traffic Impact Analysis will be required. The DOT is backlogged in its review of projects along State highways and has been unable to issue a determination at this time. The applicant has indicated that Tropical Farms will comply with requests from the DOT or terminate the operation. Whether or not there is a turn lane should have no impact on the Fishpond or the Special Management Area.

3.10 Socio-Economic Characteristics

Population and Housing

Tropical Farms will not affect resident population because no housing is involved or proposed. The project site is in 103.03 census tract. Census data for 2000 were used to describe population and housing characteristics for the Kualoa area. The population of the Kualoa area census tract is relatively small at only 4,537 persons. Residents of the area are predominantly of Asian (39%), Caucasian (31%), or Hawaiian or other Pacific Islander (28%) decent. The average household size is 3.4 persons per unit. The total number of housing units in 2000 was 1,414. Almost 90% of Kualoa's units are single-family detached structures, reflective of the agricultural character of the region. The Kualoa region remains rural and agricultural in nature and its communities rely upon the natural resources of the area to maintain their rural and country ways of life.

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Employment

Tropical Farms employs area residents and supports a large number of Hawaii small businesses. Tropical Farms has 20 full-time and 3 part-time employees. Sixteen (16) of the employees are of native Hawaiian descent. Tropical Farms is a family business; thirteen of the employees are directly related to one another. Almost all of the 23 employees live on the Windward Coast or North Shore of Oahu as shown in the table below.

TROPICAL FARMS

<u>Place of Residence</u>	<u>No. of Employees</u>
Kaneohe	7
Kualoa	2
Hauula	7
Haleiwa	4
Waialua	1
Kalihi	2
<hr/>	
Total Oahu Employees	23

Economic Impact

Tropical Farms’ agribusiness operations help support the economic viability of Kualoa Ranch and the surrounding agricultural area. The agribusiness activity is a continuation of a history of diversified agricultural activities on the site including Kualoa Ranch’s flower processing and packing operations.

Anticipated Impacts and Mitigative Measures

The proposed action to continue Tropical Farms’ agribusiness activity will have a positive economic impact on the local and State economy and supports the economic viability of Kualoa Ranch, which owns and maintains the historic Moliī Fishpond. The proposed action does not have any significant direct impact on population or housing.

3.11 Utilities and Public Services

Water: Potable water to Tropical Farms is provided via a private 5-inch distribution line which is connected to the Board of Water Supply system’s water line located in Kamehameha Highway. Service is adequate for the use. No new construction or expansion is proposed

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beyond what presently exists on the site. The BWS has confirmed the availability of water for the project and all requirements will be met at the time that after-the-fact building permits are submitted for approval.

Wastewater: In order to protect the quality and quantity of our precious ground and surface water resources, the City and County of Honolulu Board of Water Supply (BWS) has delineated areas on Oahu where wastewater septic systems will be permitted. Approval and regulation of wastewater facilities is under the jurisdiction of the State of Hawaii Department of Health (DOH). Based on the BWS maps, the DOH has determined that the Tropical Farms site is located in the “Pass Zone” which permits one wastewater system per 10,000 square feet.

Wastewater services for the flower packing operation was handled by a cesspool until 2004 when Kualoa Ranch upgraded to a septic system consisting of a 1,250 gallon septic tank. The system services the existing restrooms in Building A and is located on the parking lot side of Building B (approximately 400 feet from Molii Fishpond). Tropical Farms estimates that the facilities are used daily by approximately 100-175 people. Plans to increase the capacity of the IWS to a 1,500 gallon tank with a 1,140 SF absorption bed were submitted and reviewed by the Department of Health in October 2008. The DOH confirmed that the IWS plans conform to the applicable provisions of Chapter 11-62. The DOH recommends that the soil absorption area should not be located beneath an area that will contribute to the compaction of soil (i.e. parking or driveway area). No new construction or expansion of existing uses and structures is proposed beyond what presently exists on the site.

Solid Waste: Solid waste is collected by a private disposal company. No condition of approval is required.

Drainage: The 1.12 acre Project Site ranges in elevation from about 60 feet mean sea level at Kamehameha Highway, to an elevation of 35 feet at a southwestern corner, is relatively flat. Generally, the Project Site slopes in a southwesterly direction at a 5-7% grade range. Except for the Tropical Farms’ buildings, the Project Site is primarily covered with pervious surfaces such as crushed coral, grass and landscaping. It appears that historical drainage patterns were maintained. Storm drain water sheet flow is detained and retained at an agricultural area surrounding the Project Site, promoting sediment trapping and velocity reduction. Thus continued operation of Tropical Farms is not anticipated to impact on the Molii Fish Pond, existing drainage nor storm water quality.

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Any grading that was done in the past for the agricultural use of the property was minimal and appropriate. It appears that the grading work consisted of leveling and placement of coral for the area which has been used for agricultural vehicles parking for more than 30 years. The 1985 building permit for construction of the flower packing and storage area did not require a grading permit and did not indicate that any grading work was required. Any additional grading that would have been done in 2001 to accommodate the parking area needed for the Tropical Farms' use would have been at the edge of the existing coral parking area and have been less than 50 cubic yards; and thus, a grading permit would not have been required. And it appears that the historical patterns were not affected.

Should the Department of Planning and Permitting determine that a grading permit is required the applicant will obtain one concurrent to applying for the after-the-fact building permits for the structures.

Parks and Playgrounds: There are no public parks on the Project Site or in its immediate vicinity. The City and County's Kualoa Regional Park is adjacent to the far end of the 58.6 acre parcel on which Tropical Farms is located. Tropical Farms has no adverse impacts to public recreational resources.

Education Facilities: Tropical Farms operation does not impact the local school system.

Fire Protection: The Kaaawa Fire Station No. 21 provides service for the existing facilities at Tropical Farms and Kualoa Ranch. No change in services is required. The Fire Department, in its review of the DEA, reiterated its requirements for a fire access road to be located within 150 feet of the exterior wall of any structures, a water supply capable of supplying the required flow and on-site fire hydrant as required. Fire and building code requirements can be further satisfied in the building permit review process at the appropriate time following the environmental review and entitlement processes.

Police Protection: The Kailua-Kaneohe-Kahuku Police Station No. 4 serves the existing Tropical Farms and Kualoa Ranch area. The need for services has been minimal. No change in services is expected. The Police Department has confirmed that the project will have no significant impact of their facilities or operations.

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Electrical Power: Hawaiian Electric Company has existing power lines serving this area, Tropical Farms and Kualoa Ranch. Capacity is adequate to support the existing operations. No expansion is proposed; therefore no increase in demand for electrical service is expected.

Telephone: Hawaiian Telcom (formerly Verizon) has existing utility service lines in the area. These service lines are adequate to support the existing use. No expansion of existing operations is proposed. No increase in demand for telephone service is expected.

Anticipated Impacts and Mitigative Measures

There will be no increase in utility or infrastructure requirements. No impacts on public services or public facilities are anticipated. No new construction or expansion is proposed beyond what exists on the site today.

4.0 ALTERNATIVES TO THE PROPOSED ACTION

4.1 Preferred Alternative: Allow Tropical Farms to continue to operate

This Alternative would result in the applicant – Tropical Farms - maintaining the existing agribusiness activity in the existing buildings and the accessory parking area on the approximately 1.12 acre project site. The existing Tropical Farms operations support the economic viability of Kualoa Ranch, which owns and maintains the historic Moliie Fishpond. Tropical Farms' operation take places in a heavily landscaped setting with relatively small-scale rural structures that are located over 400 feet away from Moliie Fishpond. Tropical Farms' agribusiness activity is a continuation of a history of diversified agricultural activities which have taken place at the present location for over 20 years. The applicant is seeking after-the-fact approval for and ceasing operations is not a viable alternative.

4.2 Other Alternatives

No Country Store

Any agricultural use of the land has the potential for impact on the Fishpond. Returning the land to its original agricultural use of the growing and packing of flowers by Kualoa Ranch is an alternative which would deprive more than 66 producers of agricultural based products a venue for their products. A low-key retail operation, such as Tropical Farms, is vital to the success of

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diversified agriculture not only on the parcel but for the whole island of Oahu; and, as such, this alternative is not desirable. Furthermore, should the store be removed, the impact of increased agricultural production on the property could potentially have an unforeseen impact on the Fishpond.

Roadside Stand

Both the City and County of Honolulu Land Use Ordinance and Hawaii Revised Statutes Chapter 205-4.5 identify roadside stands, for the sale of agricultural products grown on the premises, as a permissible use within agricultural districts. A roadside stand, which is limited to selling products grown on site, is not a viable alternative for the increasing numbers of agricultural based products which are produced in the state and which are best displayed in an agricultural setting, such as Tropical Farms provides. In addition, this alternative would not be supportive of the reality of the importance of diversified agricultural products as an alternative to small single farmers or large-scale plantation agriculture with single crops and corporate buyers of agricultural products. It is expected that State land use policies will be favorable towards the operation of the “roadside country store” and a State Special Use Permit will be granted to continue the operation.

Revision of Retail Operations

Revision of the specific retail operation of the store is not germane to the EA. Except for the number of visitors to the site, operation of the country market has no impact on the Fishpond or the shoreline area. Tropical Farms was conceived and is operated as a quaint country market for diversified agricultural products. It is rural in character and provides an atmosphere for visitors which is not found anywhere else on Oahu while offering products which are unique and desirable. Approximately 70% of the products sold are agriculturally based with the majority supporting small cottage industries. Revision of the retail operations would not serve either Tropical Farms nor the producers who are dependent on this venue for their economic viability.

Relocation of Retail Operations

The operation has no impact on the Moli'i Fishpond or the shoreline and the location conveys the atmosphere of rural Hawaii which contributes to the success of the enterprise. Viability of the store is vital for the agricultural cottage industries in the area that depend on the store as an outlet for their products and it has become established for

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both producers and consumers in its present location. There is no reason to move the operation to another location.

No Action

This alternative would mean that Tropical Farms continue operation without obtaining the necessary permits to function as an agribusiness. This would not be satisfactory to State and City agencies.

5.0 RELATIONSHIP TO PUBLIC POLICIES AND CONTROLS

5.1 State of Hawaii

5.1.1 Land Use District

The 1.12 acre Project Site, which is located in the State Agricultural District, represents a small portion (only 2%) of the 58.6 acre parcel on which it is located and an extremely small portion of the over 4,000 acres owned by Kualoa Ranch. The use of 1.12 acres of the 58.6 acre parcel will not affect the Moli Fishpond or Kualoa Ranch's agricultural and ranching operations. The use of the Project Site is not contrary to the objectives of the State Land Use Law and Regulations. For areas of 15 acres or less, the County Planning Commissions can approve a Special Use Permit (SUP) to allow certain uses within the State Agricultural District, other than the uses permitted in the District. For areas greater than 15 acres the County Planning Commission can deny an SUP, but any approval must be confirmed by the State Land Use Commission.

Special Use Permit

The applicant, Tropical Farms, will apply for a Special Use Permit with the City and County of Honolulu's Department of Planning and Permitting to permit the expansion of the agricultural activities on the site including after-the-fact approval for the expansion of the farm structures. Hawaii Revised Statutes Chapter 205, Relating to the Land Use Commission, establishes four major land use districts for all lands in the State of Hawaii. These districts are classified as Urban, Rural, Agricultural, and Conservation. There are no Rural areas on Oahu. The entire 58.6 acre parcel (TMK 4-9-3: 001) within which Tropical Farms is located is within the State Agricultural District. In determining whether a proposed use is deemed "unusual and reasonable", Section 2-45 of the Planning Commission Rules established five guidelines to be

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applied. These guidelines are also found in Title 15-15 of the Hawaii Administrative Rules for the Land Use Commission.

- Guideline 1. Such use shall not be contrary to the objectives sought to be accomplished by the (State) Land Use Law and Regulations.
- Guideline 2. That the desired use would not adversely affect surrounding property.
- Guideline 3. Such use would not unreasonably burden public agencies to provide roads and streets, sewers, water, drainage and school improvements, and police and fire protection.
- Guideline 4. Unusual conditions, trends and needs have arisen since the district boundaries and regulations were established.
- Guideline 5. That the land upon which the proposed use is sought is unsuited for the uses permitted within the District.

Discussion: Tropical Farms' operations support the economic viability of Kualoa Ranch, which owns and maintains the historic Molii Fishpond. Tropical Farms' operation take places in a heavily landscaped setting with relatively small-scale rural structures that are located over 400 feet away from Molii Fishpond. The applicant, Tropical Farms, will submit a Special Use Permit application that will address the existing use and the Special Use Permit guidelines in greater detail.

5.1.2 State Environmental Policy

Compliance with Chapter 343, HRS is required for a proposed action that proposes one or more of eight land uses or administrative acts, including: (1) use of land within any historic site as designated in the National Register of Historic Places or the Hawaii Register of Historic Places; and (2) use within the shoreline area as defined by Section 205A-41.

The proposed action –the continuation of Tropical Farms' agribusiness activity – is subject to review under Chapter 343, HRS and requires approval by the City and County of Honolulu Department of Planning and Permitting because Tropical Farms is located within the boundaries of the Molii Fishpond which is on the Hawaii Register Historic Places, and because Tropical Farms is located within the boundaries of the City and County of Honolulu Special Management Area.

5.1.3 Coastal Zone Management Area

The objectives and policies of the Hawaii Coastal Zone Management (CZM) Program are described in Chapter 205A-2, HRS, Part 1. The objectives of the program are intended to promote the protection of coastal resources. Part II of Chapter 205A, HRS contains the general objectives and policies upon which all counties within the State of Hawaii, including the City and County of Honolulu, have established Special Management Areas (SMAs).

Tropical Farms' agribusiness activity is within the City and County of Honolulu's SMA and is therefore subject to the City's SMA regulations (Chapter 205, Revised Ordinances of Honolulu). As such, the two existing buildings occupied by Tropical Farms will require an after-the-fact Special Management Area Use Permit. It should be noted that an approved SMA Minor Permit (85/SMA-107) was obtained in 1985 for the original 840 SF main building occupied by Tropical Farms. That building was expanded by 2,153 SF to a total of 2,993 SF. A second building, which is 472 SF and is referred to as "Island Lady", does not have an SMA Permit. The date of the expansion is unknown as it was done over a period of time without building permits. The specific provisions of the County's SMA are discussed in section 5.2.4.

Coastal Zone Management Objectives and Policies (Section 205A-2, HRS)

This section addresses the project's relationship to applicable coastal zone management considerations, as set forth in Chapter 205A (HRS).

(a) The objectives and policies in this section shall apply to all parts of this chapter.

(b) Objectives:

(1) Recreational resources

(A) Provide coastal recreational opportunities accessible to the public.

Discussion: The project site does not abut the shoreline and there are no coastal recreational activities associated with the project.

(2) Historic Resources:

(A) Protect, preserve, and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.

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Discussion: There is no record of whether any archeological resources were discovered at the time that the previous agricultural activities and construction were done. The cultural impact assessment found that community members expressed no objections to the continued use of the project site and the buildings as Tropical Farms' "country store"/agribusiness activity. No additional ground disturbing activities are proposed.

(3) Scenic and open space resources;

(A) Protect, preserve, and, where desirable, resort or improve the quality of coastal scenic and open space resources.

Discussion: Tropical Farms is not readily visible from Kamehameha Highway due to heavy lush vegetation and mature trees located throughout the property. The buildings have a rural character and the project area is small compared to the entirety of the parcel which is otherwise open. There are no significant impacts on the visual setting. There are no impacts on views cited in the City's Coastal View Study report.

(4) Coastal ecosystem;

(A) Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.

Discussion: Tropical Farms' buildings are over 400 feet away from Moli Fishpond and situated at a higher elevation than the Moli Fishpond. No ground disturbing activities are proposed. Wastewater treatment on-site is handled by a private septic system located adjacent to the buildings.

(5) Economic uses:

(A) Provide public or private facilities and improvements important to the State's economy in suitable locations;

Discussion: Tropical Farms agribusiness operations help support the economic viability of Kualoa Ranch, which owns and maintains the historic Moli Fishpond. Tropical Farms' agribusiness activity is a continuation of a history of diversified agricultural activities on the site including Kualoa Ranch's flower processing and packing operations.

(6) Coastal hazard;

(A) Provide public or private facilities and improvements important to the State's economy in suitable locations;

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Discussion: Tropical Farms is located in an area with a flood zone designation of “Zone X”, which according to that FIRM map’s legend is an area determined to be outside the 500-year flood plain. The project site is not adjacent to the shoreline. The location is suitable for the agribusiness activities.

(7) Managing development;

(A) Improve the development review process, communication, and public participation in the management of coastal resources and hazards.

Discussion: A presentation was made to the Neighborhood Board. The processing of the various permits and the environmental assessment will provide for further public participation.

(8) Public participation;

(A) Stimulate public awareness, education, and participation in coastal management.

Discussion: A presentation was made to the Neighborhood Board. The processing of the various permits and the environmental assessment will provide for further publication participation.

(9) Beach protection;

(A) Protect beaches for public use and recreation.

Discussion: The project site does not abut the shoreline.

(10) Marine resources;

(A) Promote the protection, use, and development of marine and coastal resources to assure their sustainability.

Discussion: The project site does not abut the shoreline.

(c) Policies.

(1) Recreational resources;

(A) Improve coordination and funding of coastal recreational planning and management;
and

(B) Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:

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- (i) *Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;*
- (ii) *Requiring replacement of coastal resources having significant recreational value including, but not limited to, surfing sites, fishponds, and sand beaches, when such resources will be unavoidably damaged by development; or requiring reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable;*
- (iii) *Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;*
- (iv) *Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;*
- (v) *Ensuring public recreational uses of county, state, and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources;*
- (vi) *Adopting water quality standards and regulating point and non-point sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;*
- (vii) *Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing; and*
- (viii) *Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land and natural resources, and county authorities; and crediting such dedication against the requirements of section 46-6.*

Discussion: Generally not applicable because the project site does not abut the shoreline.

(2) Historic resources;

(A) Identify and analyze significant archeological resources;

(B) Maximize information retention through preservation of remains and artifacts or salvage operations; and

(C) Support state goals for protection, restoration, interpretation, and display of historic resources.

Discussion: The 1.12 project site has been previously disturbed and developed and in active agricultural cultivation for over 60 years. No new ground disturbing activities are proposed. The cultural impact assessment found that community members expressed no objections to the continued use of the project site and the buildings as Tropical Farms' "country store".

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(3) Scenic and open space resources;

(A) Identify valued scenic resources in the coastal zone management area;

(B) Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views by and along the shoreline;

(C) Preserve, maintain, and where desirable, improve and restore shoreline open space and scenic resources; and

(D) Encourage those developments that are not coastal dependent to locate in inland areas.

Discussion: Although the 1.12 acre Tropical Farms project site is located within the SMA, it is located inland, is surrounded by other land-based uses, and is adjacent to Kamehameha Highway. It does not abut the coastline, thereby minimizing potential impacts on coastal resources. The views of the Project Site are characterized by the natural vegetation, mature trees and surrounding active agriculture; fruit trees, nursery plants and tropical flowers, as stated in the City's Coastal View Study report. There are no significant effects on the visual setting. The buildings have a rural character and the project area is small compared to the entirety of the parcel which is otherwise open. There are no impacts to views cited in the Coastal View Study because the site is not readily visible from Kamehameha Highway due to vegetation and change in slope.

(4) Coastal ecosystems;

(A) Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources;

(B) Improve the technical basis for natural resource management;

(C) Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance;

(D) Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and

(E) Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and non-point source water pollution control measures.

Discussion: The project site does not abut the shoreline. There has been no known impact to marine resources by the previous and existing agricultural activities on the property. No new construction or expansion beyond what is on the property today is proposed.

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(5) Economic uses;

(A) Concentrate coastal dependent development in appropriate areas;

(B) Ensure that coastal dependent development such as harbors and ports, and coastal related development such as visitor industry facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area; and

(C) Direct the location and expansion of coastal dependent developments to areas presently designated and use for developments and permit reasonably long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when:

(i) Use of presently designated locations is not feasible;

(ii) Adverse environmental effects are minimized; and

(iii) The development is important to the State's economy.

Discussion: Tropical Farms is not located on the shoreline and therefore, is in conformance with the economic objective (A). Tropical Farms' agribusiness operations help support the economic viability of Kualoa Ranch, which owns and maintains the historic Molii Fishpond.

(6) Coastal hazards;

(A) Develop and communicate adequate information about storm wave, tsunami, flood erosion, subsidence, and point and nonpoint source pollution hazards;

(B) Control development in areas subject to storm wave, tsunami, flood, erosion, hurricane, wind, subsidence, and point and nonpoint source pollution hazards;

(C) Ensure that developments comply with requirements of the Federal Flood Insurance Program; and

(D) Prevent coastal flooding from inland projects.

Discussion: The project site is within an area designated "Zone X" on the Federal FIRM, which is described as an area outside of the 500-year floodplain. There are no known coastal hazards associated with the property.

(7) Managing development;

(A) Use, implement, and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development;

(B) Facilitate timely processing of applications for development permits and resolve or overlapping or conflicting permit requirements; and

(C) Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life cycle and in terms understandable to the public to facilitate public participation in the planning and review process.

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Discussion: Tropical Farms is pursuing the appropriate permits and environmental review from the relevant agencies to retain the existing structures and to continue the agribusiness.

(8) Public participation;

(A) Promote public involvement in coastal zone management processes;

(B) Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and organizations concerned with coastal issues, developments, and government activities; and

(C) Organic workshops, policy dialogues, and site-specific mediations to respond to coastal issues and conflicts.

Discussion: Tropical Farms is pursuing the appropriate permits and environmental review from the relevant agencies. These permit processes include the opportunity for public input and comment.

(9) Beach protection;

(A) Locate new structures inland from the shoreline setback to conserve open space, minimize loss of improvements due to erosion;

(B) Prohibit construction of private erosion-protection structures seaward of the shoreline, except when they result in improved aesthetic and engineering solutions to erosion at the sites and do not interfere with existing recreational and waterline activities; and

(C) Minimize the construction of public erosion-protection structures seaward of the shoreline.

Discussion: Tropical Farms is not located along the shoreline and is not adjacent to the beach.

(10) Marine resources;

(A) Ensure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial;

(B) Coordinate the management of marine and coastal resources and activities to improve effectiveness and efficiency;

(C) Assert and articulate the interests of the State as a partner with federal agencies in the sound management of ocean resources within the United States exclusive economic zone;

(D) Promote research, study, and understanding of ocean processes, marine life, and other ocean resources in order to acquire and inventory information necessary to

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understand how ocean development activities relate to and impact upon ocean and coastal resources: and

(E) Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.

Discussion: The policies articulated above focus on the role of public agencies, and therefore, are not applicable to the applicant. The property is not located on the shoreline.

5.2 City and County of Honolulu

5.2.1 The General Plan

The City and County of Honolulu directs land use and growth through a three-tier system of objectives, policies, planning principles, guidelines and regulations. The General Plan forms the first tier of this system. The General Plan, first adopted by resolution in 1977, is a short document that provides broad statements of objectives and policies to guide the future of the City and County of Honolulu. The basic objectives and policies set forth in 1977 remain intact, although the General Plan has been amended many times.

The City's General Plan contains comprehensive objectives and policies that outline the City's long-range development goals. Tropical Farms conforms to the following objectives and policies of the City's General Plan:

Chapter II Economic Activity:

<u>Objective A:</u>	<u>"To promote employment opportunities that will enable all the people of Oahu to attain a decent standard of living."</u>
Policy 1:	"Encourage the growth and diversification of Oahu's economic base."
Policy 2:	"Encourage the development of small businesses and larger industries which will contribute to the economic and social well-being of Oahu residents."
Policy 3:	"Encourage the development in appropriate location on Oahu of trade, communications, and other industries of a nonpolluting nature."

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Policy 4: “Encourage the development of local, national, and world markets for the products of Oahu-based industries.”

Objective C: “To maintain the viability of agriculture on Oahu.”

Policy 2: “Support agricultural diversification in all agricultural areas on Oahu.”

Policy 3: “Support the development of markets for local products, particularly those with the potential for economic growth.”

Policy 5: Maintain agricultural land along the Windward, North Shore, and Waianae coasts for truck farming, flower growing, aquaculture, livestock production, and other types of diversified agriculture.”

Discussion: Tropical Farms is consistent with the objectives and policies stated above. Tropical Farms provides direct employment opportunities at its agribusiness activity. Tropical Farms’ agribusiness operations help support the economic viability of Kualoa Ranch, which owns and maintains Moliie Fishpond. Tropical Farms encourages the development of broader based markets as some businesses may experience repeat business via mail order or internet sales.

Chapter III Natural Environment:

Objective A: “To protect and preserve the natural environment.”

Policy 1: “Protect Oahu’s natural environment, especially the shoreline, valleys, and ridges from incompatible development.”

Discussion: Tropical Farms is consistent with and supports the objective and policy stated above. The square footage occupied by Tropical Farms is less than one tenth of one percent of the entire 4,000 acre Kualoa Ranch property. The 1.12 acre Tropical Farms site is less than 1% of the land area of the approximately 148 acre Moliie Fishpond historic site, as defined by the National Register of Historic Places nomination form and historic site boundaries.

5.2.2 Koolaupoko Sustainable Communities Plan

The second tier of the system is the development plans – now many are called Sustainable Communities Plans. These are adopted and revised by ordinance and are required to implement the objectives and policies set forth in the General Plan. In August 2000, the Koolaupoko

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Sustainable Communities Plan was adopted by the City Council as Ordinance 00-47, replacing the Koolaupoko Development Plan.

Chapter 2 The Vision for Koolaupoko's Future

Section 2.2.2 "Preserve and Promote Agricultural Uses and Open Space in Rural Areas"

This section notes that Koolaupoko is unique because it offers a rural lifestyle and has a rural ambience, but it is in close proximity to Honolulu's major metropolitan area.

Section 2.2.2 of the Plan notes some of the challenges facing Koolaupoko:

"To preserve and protect agricultural use in Koolaupoko, it will be necessary to sustain commercially successful operations, as well as subsistence or culturally-based farming."

The Plan goes on to recognize that there are challenges for commercially viable agriculture due to the fact that only an extremely small fraction of the land area within the State Agricultural District on Oahu is presently in production. Also, Koolaupoko's agricultural producers face competition from other larger agricultural producers on Oahu, throughout the State as well as imported products.

The Plan also acknowledges that Koolaupoko's agricultural operations consist primarily of small farms due to various historical, physical and economic factors. It notes that, "many people are attracted to the lifestyle of the small farms in the region, pursuing agriculture for subsistence or supplemental income." The Plan states that the sustainability of agricultural uses will continue to be an issue of concern in light of the gradual conversion of agricultural areas into large-lot residential neighborhoods.

Discussion: Tropical Farms supports agricultural uses in Koolaupoko. Most of Tropical Farms' employees are from the Koolaupoko region. Tropical Farms is rural in character and blends in with its surrounding environment. It helps preserve the rural character along Koolaupoko's coastline.

The Koolaupoko Sustainable Communities Plan makes the following statement on page 2-9:

Other appropriate accessory uses including recreation or education programs, or other uses consistent with the character of a rural, agricultural area can provide supplemental income necessary to sustain the primary agricultural activity.

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Discussion:

Tropical Farms is an example of “...other uses consistent with the character a rural, agricultural area...”. Tropical Farms’ agribusiness activity provides supplemental income to Kualoa Ranch, which owns and maintains the historic Moliie Fishpond. This economic activity provides supplemental income which helps to sustain Moliie Fishpond and preserve agricultural activity.

Chapter 3 Land Use Policies, Principles and Guidelines

Section 3.1.12.5 “Agricultural Areas”

This section of the Koolaupoko Sustainable Communities Plan discusses the role agricultural areas play in contributing to open space. Some of the specific guidelines in the Plan for open space in agricultural areas includes:

“Design and locate buildings and other facilities that are accessory to an agricultural operation in a way that minimizes visual impacts within the view corridors (identified in the Plan);”

Discussion:

The buildings occupied by Tropical Farms have a rural country architectural design. They are single-wall construction with open windows – no glass – and no air conditioning. The buildings are setback over 400 feet away from Moliie Fishpond and are not readily visible from Kamehameha Highway when driving by the property due to lush vegetation and mature trees.

Section 3.5.3 “Agricultural Use – Planning Principles”

Section 3.5 provides an overview, guidelines and general policies on agricultural development in Koolaupoko. The focus of this section tends to be on supporting agricultural uses so that land is not converted to large-lot residential development and other non-agricultural related uses. Below is some of the Planning Principles for Appropriate Use Standards:

“...Non-agricultural uses should be limited to those that provide support services for agricultural operations or the rural community or that are otherwise directly related to an agricultural use...”

Discussion: Tropical Farms’ agribusiness activity is a continuation of a history of diversified agricultural activities on the site including Kualoa Ranch’s flower processing and packing operations. No change in use is projected.

5.2.3 City and County of Honolulu Land Use Ordinance

The third tier of the system consists of implementing the ordinances, including the Land Use Ordinance (LUO) (Honolulu's zoning code) and the City's Capital Improvements Program. These ordinances, mandated by the City Charter, constitute the primary means of implementing the City's plans. The zoning ordinances are required to be consistent with and carry out the purposes of The General Plan, the Sustainable Communities Plans, and each other.

The zoning maps adopted under the provision of the LUO indicate that the 1.12 acre project site is located on land with the AG-2 General Agricultural District zoning designation (**Figure 4**). According to Section 21-3.50 (a) of the LUO, the purpose and intent of the Agricultural Districts is the following:

The purpose of the agricultural districts is to maintain a strong agricultural economic base, to prevent unnecessary conflicts among incompatible uses, to minimize the cost of providing public improvements and services and to manage the rate and location of physical development consistent with the city's adopted land use policies. To promote the viability and economic feasibility of an existing agricultural operation, accessory agribusiness activities maybe permitted on the same site as an adjunct to agricultural uses. These accessory activities must be compatible with the on-site agricultural operation and surrounding land uses.

The proposed action is consistent with the purpose of the agricultural districts in that it directly contributes to a strong agricultural economic base by offering an outlet for agricultural based products. The accessory retail activity is compatible with the on-site agricultural operation and surrounding land uses and has no significant impact on the resources of Molii Fishpond.

Development and sale of agricultural based products is the framework for the success of diversified agriculture in today's product based market. Under the provisions of this zoning district, agribusiness activities require approval of a Conditional Use Permit from the City and County of Honolulu. The LUO Section 21-5.10A specifies the conditions for agribusiness activities and the retail activities that are permitted in the agricultural districts with an approved Conditional Use Permit (minor): an enclosed retail area (a) or a farmer's market (c), with specific guidelines for each. The proposed operation does not completely satisfy the guidelines for either of the activities described; however, by providing an outlet for locally produced

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agricultural products it satisfies the purpose of the agricultural district and agribusiness activities. As a condition of approval, the owner will dedicate 50 percent (30 acres) or more of the project site in active agricultural use for a minimum of 10 years.

As per Section 21-5.10A(c), one farmer's market for the growers and producers of agricultural products to display and sell agricultural products grown in the City and County of Honolulu shall be permitted on a zoning lot. The majority (76%) of Tropical Farms' dollar value of sales is attributed to major agricultural products including macadamia nuts, coffee, kukui nut oils and creams, noni lotions and juice, chocolates, jams, jellies, syrups, and sauces, fresh fruit and flowers. A total of 57 of 66 vendors (86%) are from the City and County of Honolulu and the remainder from neighbor islands. Other conditions include:

- (1) Markets shall operate only during daylight hours and shall not operate on parcels of less than five (5) acres.
- (2) Structures in the farmer's market may have a wall area, but any wall shall be at least fifty percent open and all structures shall have a rural or rustic appearance.
- (3) The market shall be on a scale appropriate to the size of the lot and surrounding area, and adequate parking and vehicular access shall be provided as determined by the director.

The Tropical Farms operation conforms to the LUO definition of a farmer's market as being a place for growers and producers of agricultural products to display and sell agricultural products, operates only during daylight hours, has a rustic or rural appearance and is contained on a parcel that is not less than 5 acres. The market is also on a scale appropriate to the size of the lot and surrounding area, and adequate parking and vehicular access is provided. The LUO specifies that a farmer's market shall sell products only from Oahu and that the walls of the market shall be 50% open. Tropical Farms sells some agricultural products from the neighbor islands which are not available on Oahu; and, while the store gives the appearance of an open farmers' market, not all of the walls are 50% open. The applicant will submit a Conditional Use Permit application to the Department of Planning and Permitting containing a detailed discussion of how Tropical Farms' agribusiness activity satisfies the Land Use Ordinance and zoning development standards for the AG-2 zoning district. In addition, an application will be made requesting a variance from the standards for an agribusiness associated with the building layout and products offered.

5.2.4 Special Management Area

Special Management Area Guidelines (Section 25-3.3, Revised Ordinances of Honolulu)

The City and County of Honolulu has adopted boundaries which identify the SMA and rules and regulations that are consistent with Chapter 205A, HRS that control development within the SMA. Proposed development within the SMA is subject to review to ensure adequate access to recreational areas and minimal adverse impacts to water resources and scenic and recreational amenities.

The Tropical Farms 1.12 acre project site is located within the SMA. A Minor Special Management Area Use Permit (SMP) is required for any development valued at under \$125,000 and which has no substantial adverse environmental or ecological effect. The estimated cost of construction for the addition to Building A - the original flower packing building - and the construction of Building B – the “Island Lady” building – is estimated to be approximately \$122,175 (**Appendix E**). Tropical Farms will submit an application for a Special Management Area Use Permit.

This section addresses Tropical Farms’ continued agribusiness activities in relationship to the Special Management Area Minor guidelines (Section 25-3.2 ROH)

Sec. 25-3.2 Review Guidelines

(a) All development in the special management area shall be subject to reasonable terms and conditions set by the council to ensure that:

(1) Adequate access, by dedication or other means, to publicly owned or used beaches, recreation areas and natural reserves is provided to the extent consistent with sound conservation principles;

Discussion: Tropical Farms is not located on the beach and does not block access to any beach or the Moliie Fishpond, which is privately owned by Kualoa Ranch.

(2) Adequate and properly located public recreation areas and wildlife preserves are reserved;

Discussion: Not applicable. The property on which Tropical Farms is located is not a public recreation area and it does not include any wildlife preserves. The Moliie Fishpond is a separate and distinct parcel that is privately owned by Kualoa Ranch.

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(3) Provisions are made for solid and liquid waste treatment, disposition and management which will minimize adverse effects upon special management area resources; and

Discussion: Tropical Farms solid waste is taken off-site by a private trash collection company and disposed of at a permitted landfill. Tropical Farms is serviced by a private septic tank system in accordance with the mandate from the Federal EPA regarding large capacity cesspools.

(4) Alterations to existing land forms and vegetation; except crops, and construction of structures shall cause minimum adverse effect to water resources and scenic and recreational amenities and minimum danger of floods, landslides, erosion, siltation or failure in the event of earthquake.

Discussion: Any grading that was done in the past for the agricultural use of the property, including construction of and additions to the farm structures and parking area that is now used by the Tropical Farms' operation, was minimal and has been existence for more than 20 years. It is not anticipated that continuation of the agricultural activities on the property will impact water resources and scenic and recreational amenities. No new ground disturbing or construction activities are proposed which would additionally affect the areas of concern with the SMA.

(b) No development shall be approved unless the council has first found that:

(1) The development will not have any substantial, adverse environmental or ecological effect except as such adverse effect is minimized to the extent practicable and clearly outweighed by public health and safety, or compelling public interest. Such adverse effect shall include, but not be limited to, the potential cumulative impact of individual developments, each one of which taken in itself might not have a substantial adverse effect and the elimination of planning options;

Discussion: The 1.12 acre Tropical Farms site is less than 1% of the land area of the approximately 148 acre Moliie Fishpond "historic site", as defined by the National Register of Historic Places nomination form and historic site boundaries. Tropical Farms' agribusiness activity does not create significant adverse environmental or ecological effects. No cumulative effect is anticipated.

(2) The development is consistent with the objectives and policies set forth in Section 25-3.1 and area guidelines contained in HRS Section 205A-26;

Discussion: Tropical Farms is consistent with the objectives and policies set forth in Section 25-3.1 and area guidelines contained in HRS Section 205A-26;

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(3) The development is consistent with the county general plan, development plans and zoning. Such a finding of consistency does not preclude concurrent processing where a development plan amendment or zone change may also be required.

Discussion: Tropical Farms is generally consistent with the County General Plan, the Koolaupoko Sustainable Communities Plan and the property's zoning designation. Tropical Farms is pursuing the appropriate current and after-the-fact permits from the relevant agencies.

(c) The council shall seek to minimize, where reasonable:

(1) Dredging, filling or otherwise altering any bay, estuary, salt marsh, river mouth, slough or lagoon;

Discussion: The Tropical Farms project site does not abut any waterways or coastline or Moli'i Fishpond.

(2) Any development which would reduce the size of any beach or other area usable for public recreation;

Discussion: Tropical Farms is not located on or adjacent to any beach or other public recreation area.

(3) Any development which would reduce or impose restrictions upon public access to tidal and submerged lands, beaches, portions of rivers and streams within the special management area and the mean high tide line where there is no beach;

Discussion: There are no public access routes through the property.

(4) Any development which would substantially interfere with or detract from the line of sight toward the sea from the state highway nearest the coast; and

Discussion: The views of the project site are characterized by the natural vegetation as stated in the City's Coastal View Study report. There are no significant effects on the visual setting. There are no impacts to views cited in the Coastal View Study because the site is not readily visible from Kamehameha Highway due to vegetation and change in slope.

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(5) Any development which would adversely affect water quality, existing areas of open water free of visible structures, existing and potential fisheries and fishing grounds, wildlife habitats, or potential or existing agricultural uses of land.

Discussion: Tropical Farms does not abut any open water or fishing grounds or Moli Fishpond. Although neither a faunal or flora survey has been conducted, the property has been previously disturbed and in cultivation for over 60 years. No rare or endangered species or plants are known to exist on the property or within the 1.12 acre project site.

Summary Discussion: Allowing Tropical Farms to continue its agribusiness activity on the 1.12 acre site is consistent with the Coastal Zone Management Area objectives and policies. Tropical Farms occupies two buildings and a coral paved parking area that are located over 400 feet away and upland from the shoreline of the historic Moli Fishpond. Dense vegetation and tall mature trees serve as a buffer between Tropical Farms' buildings and Moli Fishpond. In terms of economic uses, Tropical Farms is not a coastal-dependent development. The original flower packing and storage building, which was expanded and is now occupied by Tropical Farms, was granted an approved Special Management Area Permit (minor) (85/SMA-107) when the building was originally constructed. Tropical Farms will seek an SMA permit for the improvements and use not covered by the original permit.

5.3 Neighborhood Board Presentation

On May 14, 2003 a presentation was made to the Kahaluu Neighborhood Board No. 29 regarding the project and necessary permits. The applicant and agent reviewed the Land Use Ordinance regulations and explained that a variance will be required to allow Tropical Farms to sell fewer products from Oahu than specified by the LUO. The applicant introduced some of the employees and described their intention to provide a business environment which will provide an opportunity for local farmers and "cottage industries" in the area to sell their products. The owners of Tropical Farms also shared their commitment to helping those in the community who have had difficulties with finding employment in the past as part of their community-based philosophy to business. The Board voted in favor to support Tropical Farms by 7 yes, 1 no, 0 abstained. However, a quorum was not present and the motion did not pass.

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6. FINDINGS AND REASONS SUPPORTING THE ANTICIPATED DETERMINATION

6.1 Anticipated Determination

Chapter 200 of Title 11, Administrative Rules of the State Department of Health establishes criteria for determining whether an action may have a significant impact on the environment (11-220-12). The Rules establish “significance criteria” for making the determination. The relationship of the proposed project to the thirteen criteria is provided below.

6.2 Significance Criteria

1. Involves an irrevocable commitment to loss or destruction of any natural or cultural resource;

There is no record of whether any archeological resources were discovered at the time that the previous agricultural activities and construction were done. No natural or cultural resources will be lost or destroyed due to Tropical Farms’ continued agribusiness use. No new construction is proposed. No impacts to Moli Fishpond are expected. According to the Cultural Impact Assessment study, when asked if proposed construction would affect or alter any place or access to any place of cultural or traditional importance, two of the three the kupuna expressed no objections and agreed that the facilities at Tropical Farms create an atmosphere which allows visitors to experience the real beauty, culture and history of Hawaii. The third kupuna had no objections to the existing operations and supports construction (although no construction is proposed) as a means to facilitate the further sharing of the beauty and culture of Hawaii with locals and visitors alike. He also noted that the one-story buildings match the environment and therefore does not destroy or take away from the natural landscape.

2. Curtails the range of beneficial uses of the environment;

The existing agribusiness activity provides a means of realizing the beneficial uses of the site’s natural environment. The revenues generated from Tropical Farms contribute

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toward the economic viability of Kualoa Ranch which owns and maintains Moliie Fishpond.

- 3. Conflicts with the state's long-term environmental policies or goals and guidelines as expressed in chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders;**

Continuance of the existing agribusiness activity does not conflict with long-term environmental policies or goals or guidelines of the State of Hawaii. Section 5 of this Environmental Assessment reviews in detail existing state and county land use policies. Tropical Farms' agribusiness activity is compatible with those policies and objectives.

- 4. Substantially affects the economic welfare, social welfare, and cultural practices of the community or State;**

Tropical Farms creates jobs for local area residents and small agriculture-related businesses. Tropical Farms' agribusiness activity makes a positive impact on the economic viability of Kualoa Ranch. While the scale of Tropical Farms' operations may not be defined as "substantial" in comparison with other state businesses, Tropical Farms makes an important positive contribution to the welfare of area residents.

- 5. Substantially affects public health;**

There are no public health concerns relating to the existing agribusiness activity and its relationship to Moliie Fishpond.

- 6. Involves substantial secondary impacts, such as population changes or effects on public facilities;**

The scale of Tropical Farms' operations does not involve a "substantial" secondary impact so as to effect population changes or public facilities in the Koolaupoko area.

- 7. Involves a substantial degradation of environmental quality;**

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The existing agribusiness activity and structures occupied by Tropical Farms blend in with the rural setting and lush vegetation that is characteristic along this coast. The structures and the agribusiness activity do not involve a substantial degradation of environmental quality. Tropical Farms contributes toward the economic viability of Kualoa Ranch.

8. Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions;

No new construction is proposed and the continuation of Tropical Farms' agribusiness activities does not involve a commitment for larger actions. The existing operations do not have a considerable effect upon the environment. At less than 4,000 total square feet, the agribusiness activity is a relatively small operation and represents less than 0.16% of the land area of the 58.6 acre parcel.

9. Substantially affects a rare, threatened, or endangered species, or its habitat;

There are no endangered species associated with the property and the project site has been previously disturbed, developed and used for agribusiness activities for the past 60 years. Tropical Farms occupies two buildings that were already constructed on the site before Tropical Farms leased the buildings.

10. Detrimentially affects air or water quality or ambient noise levels;

The existing agribusiness buildings and operations do not detrimentally affect air or water quality or ambient noise levels. The effects on air and water quality are relatively minor and indirect. Ambient noise levels are related to the traffic that stops at Tropical Farms, which is typically traffic that continues on to other destinations such as the Polynesian Cultural Center or other circle island tour destinations. The amount of traffic that stops at Tropical Farms is about one percent (1%) of the total number of vehicles traveling along that portion of Kamehameha Highway over a 24-hour period.

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- 11. Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters;**

The existing site is located in Flood Hazard Zone X, areas determined to be outside the 500 year flood plain. Moli Pond, the nearest environmentally sensitive area, is not included in the Tropical Farms agricultural activity and is approximately 400 feet from the project site.

- 12. Substantially affects scenic vistas and view planes identified in county or state plans or studies; or**

The portion of Kamehameha Highway fronting Tropical Farms is designated as having “intermittent makai views” (City’s 1987 Coastal View Study). The study also states that the area’s natural vegetation and agricultural crops are the primary elements that characterize the viewing experience. Tropical Farms blends in with these primary elements and the buildings are not readily visible from Kamehameha Highway due to the dense, lush natural vegetation. The buildings do not block views of the Moli Fishpond or the ocean. The project site, and the area in general, is thick with mature trees, vegetation and landscaping.

- 13. Requires substantial energy consumption.**

Tropical Farms does not consume substantial amounts of energy, which is typically electricity for lighting.

6.3 Reasons Supporting the Anticipated Determination

The significance criteria of Title 11 Chapter 200-12 HAR have been applied and it is determined that the proposed action will not have a significant impact on the immediate or surrounding environment and that an Environmental Impact Statement will not be required. Based upon this Environmental Assessment document and the evaluation of the determination, it is recommended that to a Finding of No Significant Impact (FONSI) be issued for the proposed action.

7. REQUIRED APPROVALS, AGENCY AND PUBLIC CONSULTATION AND REVIEW

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Tropical Farms, 49-227A Kamehameha Highway, Koolaupoko, Hawaii (TMK: 4-9-003: por. 001)

7.1 Required Approvals

The project will require the following governmental approvals:

- State Special Use Permit
- Conditional Use Permit for Agribusiness
- Variance from the Land Use Ordinance Requirements for Agribusiness
- After-the-fact Building Permit

7.2 Agency Review

The following agencies were consulted during preparation of the Environmental Assessment .

- Kahaluu Neighborhood Board No. 29
- City & County of Honolulu, Department of Planning & Permitting
- City and County of Honolulu Fire Department
- City and County of Honolulu Board of Water Supply
- City and County of Honolulu Department of Parks and Recreation
- City and County of Honolulu Police Department
- City and County of Honolulu Department of Environmental Services
- State of Hawaii, Department of Agriculture
- State of Hawaii, Department of Land & Natural Resources
- State Historic Preservation Division
- State of Hawaii, Office of Environmental Quality Control
- State of Hawaii Department of Health
- State of Hawaii Office of Hawaiian Affairs
- State of Hawaii Department of Transportation
- United States Department of Fish & Wildlife Service
- United States Department of the Interior

7.3 Comments and Responses on the Draft Environmental Assessment

The Final EA contains the following comment and response letters on the Draft Environmental Assessment.

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
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MUFI HAINEMANN
MAYOR

HENRY ENG, FAJPC
DIRECTOR

DAVID K. TANIGUE
DEPUTY DIRECTOR

2007/ED-18(sn)

January 22, 2008

Mr. Don Clegg
Analytical Planning Consultants, Inc.
928 Nuuanu Avenue, Suite 502
Honolulu, Hawaii 96817

Dear Mr. Clegg:

Subject: Chapter 343, HRS, Draft Environmental Assessment
Tropical Farms
49-227A Kamehameha Highway - Hakipuu
Tax Map Key 4-9-3: Portion of 1

Transmitted for your response and incorporation into the Final Environmental Assessment (EA) are comments on the Draft EA received, thus far, by the Department of Planning and Permitting (DPP). In accordance with the provisions of Chapter 343, Hawaii Revised Statutes, you must respond, in writing, to these and any other comments that were submitted during the 30-day comment period (which began with the publication of a notice of availability of the Draft EA in The Environmental Notice on December 23, 2007). The Final EA must include these comments and responses, as well as the revised text, where needed.

Also, the following are the DPP comments on the Draft EA.

1. Section 2.0 – Location and General Description of the Proposed Action
 - a. Clarify the location of the project site. Based on a preliminary review of the project site in relation to an aerial photo of the area, the structures appear to be located east of the identified project boundaries.
 - b. Clarify the distance between the existing buildings and Kamehameha Highway. The project description indicates the buildings are set back over 200 feet from the highway while the site plan shows a distance of about 160 feet.
 - c. Does the access driveway and parking area serve other uses on the property?
2. Section 3.0 – Description of the Affected Environment, Impacts and Mitigation Measures
 - a. Geology and Topography. Identify the difference in elevation between Kamehameha Highway and the project site.

Mr. Don Clegg
January 22, 2008
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b. Roadways and Traffic.

- (1) Expand the discussion to include the impacts of left-turn movements into and out of the project site, since Kamehameha Highway is only two (2) travel lanes with unpaved shoulders.
 - (2) Consult the State Department of Transportation (DOT) on the need for a traffic impact report and the need for mitigation measures, if any. Correspondence letters from the DOT and the applicant's response letters must be incorporated into the Final EA.
- c. Wastewater. Provide written documentation that the septic tank and soil absorption bed complies with the State Department of Health standards for wastewater systems.
- d. Drainage. Although the Draft EA describes past grading work as "minimal", more information is required. The Draft EA should state the nature of the grading work that was completed (cut and fill quantities, size of the graded area, etc.) as well as state the estimated time frame when the grading occurred. The applicant should be advised that based on their response, an after-the-fact grading permit may be required.
- e. The DPP transmitted a copy of the Draft EA to the State Historic Preservation Division (SHPD) but has yet to receive their comments. The applicant is responsible for ensuring that all comments and/or concerns of the SHPD are identified and fully addressed in the Final EA. Correspondence letters from the SHPD and the applicant's response letters must be incorporated into the Final EA.

3. Section 4.0 – Alternatives to the Proposed Action

Discuss several alternatives including returning the use to the original condition before the after-the-fact improvements; conversion to a roadside stand or farmer's market consistent with the State Land Use Agricultural District and the AG-2 General Agricultural District permitted uses; or, revising its retail operations by minimizing the sale of non-agricultural related products to reduce the general retail nature of the project and be more compatible with the farming/rural character of the neighborhood.

4. Section 5.0 – Relationship to Public Policies and Controls

- a. Land Use Ordinance (LUO). Provide additional details on how the operation will comply with the purpose and intent of the agribusiness activities in the agricultural district, and the definition of and the development and design standards for agribusiness activities, including:
 - (1) The standards relating to the maximum size of the structure and the limitations on the type and ratio of agricultural products that may be sold.



May 2, 2008

- (2) Clarification on whether a farmer's market will be provided, and compliance with those standards relating to the market.
- (3) Identify the area (should be 50% or more of the project site) which Kualoa Ranch intends to dedicate for a minimum of 10 years to active agricultural use.
- (4) Agribusiness activities are defined as accessory uses conducted on the same site where agricultural products are cultivated or raised. Identify the principal agricultural use and the products cultivated or raised on the same site.

The applicant's proposal to apply for a zoning variance from the agribusiness standards will be further evaluated during the processing of subsequent land use permit applications.

- b. Special Management Area (SMA), as established by Chapter 25, Revised Ordinances of Honolulu (ROH). The estimated cost of the development, as defined by Chapter 25, will be further evaluated as subsequent land use permits are processed. The Appendix E, referred to in the text for the estimated costs, is missing.

A SMA Minor Permit can be processed if the total cost of those improvements located within the SMA is less than \$125,000 and has no substantial adverse environmental or ecological effects. A Special Management Area Use Permit (SMP) will be required for those improvements which exceed the scope of the Minor permit. We note that the Draft EA was also prepared pursuant to the requirements of Chapter 25, Revised Ordinances of Honolulu.

4. Figures and Plans. Provide a graphic scale for the site and floor plans.

Should you have any questions, please contact Sharon Nishiura of our staff at 768-8031.

Very truly yours,


Henry Eng, FAICP, Director
Department of Planning and Permitting

HE:pl
Enclosures

Doc. 591971

Mr. Henry Eng, FAICP, Director
City & County of Honolulu
Department of Planning and Permitting
650 South King Street, 7th Floor
Honolulu, HI 96813

ATTN: Sharon Nishiura

Subject: Draft Environmental Assessment (DEA) No. 2007/ED-18 (sn)
Tropical Farms
49-227A Kamehameha Highway – Kualoa
Tax Map Key 4-9-3: portion 001

Dear Mr. Eng:

This letter is in response to your office's January 22, 2008 comment letter regarding the Draft Environmental Assessment (EA) for the subject activity and the property on which it is located. The following responses are offered in answer to your comments and have been incorporated into the Final Environmental Assessment (FEA) as necessary:

- 1a The survey showing the location of the project site has been revised by licensed surveyor Patrick Cummins.
- 1b The nearest structure to Kamehameha Highway is the main Tropical Farms Store Building A. It measures 225 feet from Kamehameha Highway as measured on the full-size site plan. No text has been changed in the FEA. Figure 3 Site Plan has been revised.
- 1c The access driveway and parking area are also used by 1-3 ranch vehicles (tractors and trucks) which are associated with farming practices on the parcel.
- 2a The land on which the structures are built is approximately 15 feet lower than the surface elevation of Kamehameha Highway.
- 2b APC has discussed the project with staff of the State Department of Transportation (DOT) several times and has been informed that they can give no estimate of time as to when the project will be reviewed or whether a Traffic Impact Report will be required. Since several land use permits will be necessary to permit the agribusiness activity, APC is requesting that traffic issues and any mitigative measures be addressed during the processing of these permits. This will give the DOT the opportunity to review the project. As stated in the DEA, Tropical Farms is not a destination attraction and traffic along Kamehameha Highway is not generated by Tropical Farms. While concerns have been raised regarding a possible need for a left-hand turn lane from Kamehameha

Highway, whether or not there is a turn lane should have no impact on the Fishpond or the Special Management Area. The applicant has indicated that Tropical Farms will comply with requests from the DOT or terminate the operation.

2c The Department of Health has indicated that they will review the project for compliance with DOH regulations when the after-the-fact building permits are submitted. If it is determined that a large capacity septic system is required for the daily amount of visitors to the site, the applicant may apply for a variance to upgrade the system.

2d Section 3.11 regarding drainage has been expanded to clarify that any grading that was done consisted of leveling and placement of coral for the parking area which has been used for agricultural vehicles for more than 30 years. The 1985 building permit for construction of the flower packing and storage area did not indicate that any grading was required. Should the DPP determine that an after-the-fact grading permit be required the applicant will obtain one concurrent to obtaining the after-the fact permits for the structures.

2e The State Historic Preservation Division in their letter dated 2/11/08 believes that the proposed undertaking will have no adverse effect on Moli'i Fish Pond. Their comment has been included in the FEA.

3. Alternatives

Operation of the current country store has had no impact, positive or negative on the Historic Moli'i Fish Pond. Similarly, continuing the existing operation will also have no impact on the Fishpond. As such, no other alternatives were considered in the DEA because the applicant is seeking after-the-fact approval to retain the existing operation. Ceasing or changing operations is not a viable alternative for the applicant; however, the following alternatives, which have been suggested by the DPP, are discussed in 4.0 of the FEA:

No Country Store

Any agricultural use of the land has the potential for impact on the Fishpond. Returning the land to its original agricultural use, including the growing and packing of flowers by Kualoa Ranch, is an alternative which would deprive more than 66 local producers of agricultural based products a venue for their products. A low-key retail operation, such as Tropical Farms, is vital to the success of diversified agriculture not only on the parcel but for the whole island of Oahu; and, as such, this alternative is not desirable. Furthermore, should the store be removed, the impact of increased agricultural production on the property could potentially have an unforeseen impact on the Fishpond.

Roadside Stand

Both the City and County of Honolulu Land Use Ordinance and Hawaii Revised Statutes Chapter 205-4.5 identify roadside stands, for the sale of agricultural products grown on the premises, as a permissible use within agricultural districts. A roadside stand, which is limited to selling products grown on site, is not a viable alternative for the increasing numbers of agricultural based products which are produced in the state and which are best displayed in an agricultural setting,

such as Tropical Farms provides. In addition, this alternative would not be supportive of the reality of the importance of diversified agricultural products as an alternative to small single farmers or large-scale plantation agriculture with single crops and corporate buyers of agricultural products. It is expected that State land use policies will be favorable towards the operation of the "roadside country store" and a State Special Use Permit will be granted to continue the operation.

Revision of Retail Operations

Revision of the specific retail operation of the store is not germane to the EA. Except for the number of visitors to the site, operation of the country market has no impact on the Fishpond or the shoreline area. Tropical Farms was conceived and is operated as a quaint country market for diversified agricultural products. It is rural in character and provides an atmosphere for visitors which is not found anywhere else on Oahu while offering products which are unique and desirable. Approximately 70% of the products sold are agriculturally based with the majority supporting small cottage industries. Revision of the retail operations would not serve either Tropical Farms nor the producers who are dependent on this venue for their economic viability

4. The following information (which will be contained in more detail in the application for a Conditional Use Permit and variance from specific requirements for agribusiness activities) has been included in the FEA in Section 5.2.3 – Relationship to Public Policies and Controls - as it pertains to impacts on the Moli'i Fishpond.

4a(1) The proposed action is consistent with the purpose of the agricultural districts in that it directly contributes to a strong agricultural economic base by offering an outlet for agricultural based products. The accessory retail activity is compatible with the on-site agricultural operation and surrounding land uses and has no significant impact on the resources of Moli'i Fishpond.

Development and sale of agricultural based products is the framework for the success of diversified agriculture in today's product based market. The LUO describes three types of retail activities that are permitted in the agricultural districts: a roadside stand, an enclosed retail area, a farmer's market, with specific guidelines for each. The proposed operation does not completely satisfy the guidelines for any of the activities described; however, by providing an outlet for locally produced agricultural products it satisfies the purpose of the agricultural district and agribusiness activities.

4a(2) The Tropical Farms operation conforms to the LUO definition of a farmer's market as being a place for growers and producers of agricultural products to display and sell agricultural products, operates only during daylight hours, has a rustic or rural appearance and is contained on a parcel that is not less than 5 acres. The market is also on a scale appropriate to the size of the lot and surrounding area, and adequate parking and vehicular access is provided. The LUO specifies that a farmer's market shall sell products only from Oahu and that the walls of the market shall be 50% open. Tropical Farms sells some agricultural products from the neighbor islands which are not available on Oahu and not all of the walls are 50% open. An application will be made requesting a

variance from the standards for an agribusiness associated with the building layout and products offered.

4a(3) Land Use Ordinance Section 21-5.10A (d), which defines agribusiness activities, requires as a condition of approval, dedication of 50 percent or more of the project site in active agricultural use, as the director determines is necessary, to preserve the purpose and intent of the agricultural districts, for a minimum of 10 years. Technically, the project site is the 1.12 acre used by Tropical Farms; however, approximately 26 acres of the 58.613 acre parcel is currently under active agricultural use. Figure 6A, which shows the area of current agricultural use, has been included in the FEA. The area noted is only approximate and Kualoa Ranch will specify at least 50% as required.

4a(4) The active agricultural use of the parcel is the growing of a wide variety of fruits and flowers common to Oahu, many of which are sold by Tropical Farms. Kualoa Ranch also packages and ships flowers. A portion of the area is landscaped as a tropical garden for visitors to view.

4b The cost of the after-the-fact additions to the existing flower packing structure has been included in Appendix F of the FEA.

5. The site and floor plans included in the EA are not to scale as they are for disclosure purposes only. Scaled plans will be included in subsequent applications. Subsequent to Environmental Review of the project, the applicant will submit applications to the Department of Planning and Permitting requesting the following after-the-fact approvals:

- Special Use Permit (SUP)
- Conditional Use Permit (CUP) – Minor
- Zoning Variance
- Special Management Area Permit (SUP)

Thank you for your consideration and review of the Draft Environmental Assessment. We appreciate the time you have given to determining the scope of the project and are requesting the Department of Planning and Permitting to issue a Finding of No Significant Impact (FONSI). If you have any questions or require additional information, please contact myself or Lauri Clegg at 536-5695.

Sincerely,



Donald Clegg
Agent for the Applicant



RECEIVED
 STATE OF HAWAII
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 STATE HISTORIC PRESERVATION DIVISION
 601 KAMOKILA BOULEVARD, ROOM 555
 KAPOLEI, HAWAII 96707
 CITY & COUNTY OF HONOLULU

LAURA H. THIRLEN
 BOARD OF LAND AND NATURAL RESOURCES
 CHAIRPERSON
 RUSSELL L. Y. TOUHI
 DEPUTY CHAIRPERSON
 NIM C. KAWANAKA
 SENIOR DIRECTOR, WATER
 ACQUISITION SERVICES
 DIVISION AND OCEANICIZATION
 COMMUNICATIONS AND INFORMATION
 MANAGEMENT
 CONSTRUCTION AND DISASTER ENFORCEMENT
 PLANNING AND MAINTENANCE
 HAWAIIAN ISLANDS DEVELOPMENT COORDINATOR
 STATE PARKS

PHONE (BUS): (808) 536-5695
 FAX: (808) 599-1553
 ANALYTICAL PLANNING CONSULTANTS, INC.
 928 NUUANU AVENUE, SUITE 502 • HONOLULU, HI 96817



February 11, 2008

Henry Eng, FAJCP, Director
 City & County of Honolulu
 Department of Planning and Permitting
 650 South King Street, 7th Floor
 Honolulu, Hawaii 96813

LOG NO: 2007.4231
 DOC NO: 0802ED15
 Archaeology

Dear Mr. Eng:

**SUBJECT: Chapter 6E-8 Historic Preservation Review –
 Draft Environmental Assessment (DEA) – Tropical Farms
 Ka'a'awa Ahupua'a, Ko'olaupoko District, Island of O'ahu
 TMK: (1) 4-9-003:001**

Thank you for the opportunity to comment on the aforementioned project, which we received on December 12, 2007. The proposed undertaking involves the continuation of Tropical farms' agribusiness activity which has been in operation since 2001. According to the DEA, no additional construction and no new uses are proposed. The applicant (Tropical Farms) is seeking after-the-fact approval to continue their agribusiness activities.

We determine that no historic properties will be affected by this undertaking because:

- Intensive cultivation has altered the land
- Residential development/urbanization has altered the land
- Previous grubbing/grading has altered the land
- An accepted archaeological inventory survey (AIS) found no historic properties
- SHPD previously reviewed this project and mitigation has been completed
- Other: *This is an after-the-fact approval and no ground disturbing activities are proposed. Additionally, we believe that the proposed undertaking will have no adverse effect on Moli'i Fish Pond, which was listed on the National Register of Historic Places in 1972.*

Please contact Teresa Davan at (808) 692-8015 if you have any questions or concerns regarding this letter.

Aloha,

Nancy McMahon

Nancy McMahon, Acting Archaeology Branch Chief
 State Historic Preservation Division

ED

April 29, 2008

Ms. Nancy McMahon, Acting Branch Chief
 State of Hawaii Department of Land and Natural Resources
 State Historic Preservation Division
 601 Kamokila Blvd. Room 555
 Kapolei, Hawaii 96707

Subject: Draft Environmental Assessment (DEA)
 Tropical Farms – TMK: 4-9-003001

Dear Ms. McMahon:

Thank you for your comment letter dated February 11, 2008 addressed to Mr. Henry Eng of the Department of Planning and Permitting. We respectfully offer the following responses:

We acknowledge that the State Historic Preservation Division believes that as no ground disturbing activities are proposed that undertaking will have no adverse effect on Moli'i Fish Pond. Your comments will be included in the FEA.

Thank you again for your comments on the DEA. If you have any questions or require further clarification, please contact myself or Lauri Clegg at 536-5695.

Sincerely,

Donald Clegg

Donald Clegg
 President

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HI 96843



January 22, 2008

MUJI HANNEMANN, Mayor
RANDALL Y. S. CHUNG, Chairman
ALVIN K. KAWA
ALVIN J. PARK
ROBERT K. CUNDIFF
MARC C. TILKER
CRAIG I. NISHIMURA, Ex-Officio
BRENNON T. MORIOKA, Ex-Officio
CLIFFORD P. LUAI
Manager and Chief Engineer
DEAN A. NAKANO
Deputy Manager and Chief Engineer



ANALYTICAL PLANNING CONSULTANTS, INC.
928 NUUANU AVENUE, SUITE 502 • HONOLULU, HI 96817

PHONE (BUS): (808) 536-5695
FAX: (808) 599-1553

April 29, 2008

Mr. Keith Shida, Program Administrator
Board of Water Supply
630 South Beretania Street
Honolulu, Hawaii 96843

Subject: Draft Environmental Assessment
Tropical Farms - TMK: 4-9-003001

Dear Mr. Shida:

Thank you for your comment letter dated January 22, 2008 addressed to Mr. Henry Eng of the Department of Planning and Permitting. We respectfully offer the following responses:

The applicant will comply with all requirements of the Board of Water Supply and the Fire Department at the time that after-the-fact building permits are submitted for approval.

Thank you again for your comments on the DEA. If you have any questions or require further clarification, please contact myself or Lauri Clegg at 536-5695.

Sincerely,

Donald Clegg
President

TO: HENRY ENG, FAICP, DIRECTOR
DEPARTMENT OF PLANNING AND PERMITTING

FROM: KEITH S. SHIDA, PROGRAM ADMINISTRATOR
BOARD OF WATER SUPPLY *K. Shida*

SUBJECT: YOUR LETTER DATED DECEMBER 10, 2007 ON THE DRAFT ENVIRONMENTAL ASSESSMENT, 2007/ED-18(SN), FOR TROPICAL FARMS, TMK: 4-9-3:1

The existing water system is presently adequate to accommodate the proposed development. However, please be advised that this information is based upon current data and, therefore, the Board of Water Supply reserves the right to change any position or information stated herein up until the final approval of your building permit application. The final decision on the availability of water will be confirmed when the building permit application is submitted for approval.

When water is made available, the applicant will be required to pay our Water System Facilities Charges for resource development, transmission and daily storage.

The on-site fire protection requirements should be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department.

If you have any questions, please contact Robert Chun at 748-5443.

cc: Sharon Nishiura, Department of Planning & Permitting

RECEIVED

'08 JAN 22 P12:34

DEPT OF PLANNING AND PERMITTING
CITY & COUNTY OF HONOLULU



LINDA LINGLE
GOVERNOR OF HAWAII

CYNTHIA L. RUMINO, M.D.
DIRECTOR OF HEALTH

PHONE (BUS): (808) 536-5695
FAX: (808) 599-1553



ANALYTICAL PLANNING CONSULTANTS, INC.
928 NUUANU AVENUE, SUITE 502 • HONOLULU, HI 96817

STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. Box 3376
HONOLULU, HAWAII 96801-3376

January 18, 2008

In reply, please refer to:
EPO-07-239

DEPT OF PLANNING
AND PERMITTING
CITY & COUNTY OF HONOLULU

RECEIVED
08 JAN 24 P2:39

Mr. Henry Eng, Director
City and County of Honolulu
Department of Planning and Permitting
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Dear Mr. Eng:

SUBJECT: 2007/ED-18(gn)
Draft Environmental Assessment for Tropical Farms to Allow an Agribusiness
and Associated After-the-fact Improvements.
Koolaupoko, Oahu, Hawaii
TMK: (1) 4-9-003: 001 (portion)

Thank you for allowing us to review and comment on the subject document. The document was routed to the various branches of the Environmental Health Administration. We have no comments at this time. We strongly recommend that you review all of the Standard Comments on our website: www.state.hi.us/health/environmental/env-planning/landuse/html. Any comments specifically applicable to this project should be adhered to.

If there are any questions about these comments please contact Jacai Lia with the Environmental Planning Office at 586-4346.

Sincerely,

KELVIN H. SUNADA, MANAGER
Environmental Planning Office

c: EPO

April 29, 2008

Mr. Kelvin H. Sunada, Manger
Environmental Planning Office
State of Hawaii Department of Health
P.O. Box 3378
Honolulu, Hawaii 96801-3378

Subject: Draft Environmental Assessment
Tropical Farms

Dear Mr. Sunada:

Thank you for your comment letter dated January 18, 2008 addressed to Mr. Henry Eng of the Department of Planning and Permitting. We respectfully offer the following responses:

We have reviewed the Standard Comments at www.state.hi.us/health/environmental/env-planning/landuse/html. The applicant will submit engineering plans to the DOH for review when the after-the-fact building permits are applied for.

Thank you again for your comments on the DEA. If you have any questions or require further clarification, please contact myself or Lauri Clegg at 536-5695.

Sincerely,

Donald Clegg
President

2008/01/09-112

HONOLULU FIRE DEPARTMENT
CITY AND COUNTY OF HONOLULU

636 South Street
Honolulu, Hawaii 96813-5007
Phone: 808-723-7130 Fax: 808-723-7111 Internet: www.honolulu.gov/hfd



MUJI HANEMANN
MAJOR

KENNETH G. SILVA
FIRE CHIEF
ALVIN K. TOMITA
DEPUTY FIRE CHIEF

DEPT OF PLANNING
AND PERMITTING
CITY & COUNTY OF HONOLULU

RECEIVED
08 JAN 23 A8 25

January 22, 2008

TO: HENRY ENG, FAICP, DIRECTOR
DEPARTMENT OF PLANNING AND PERMITTING

FROM: KENNETH G. SILVA, FIRE CHIEF

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT
PROJECT: TROPICAL FARMS
LOCATION: 49-227A KAMEHAMEHA HIGHWAY - KUALOA
TAX MAP KEY: 4-9-008: PORTION OF 001

Henry Eng, FAICP, Director
Page 2
January 22, 2008

3. Submit civil and construction drawings to the HFD for review and approval.

Should you have any questions, please call Acting Battalion Chief Jason C. Takara of our Fire Prevention Bureau at 723-7151.

KENNETH G. SILVA
Fire Chief

KGS/SK:bh

In response to your memorandum of December 10, 2007, regarding the above-mentioned subject, the Honolulu Fire Department (HFD) reviewed the materials provided and requires that the following be complied with:

1. Provide a fire apparatus access road for every facility, building, or portion of a building hereafter constructed or moved into or within the jurisdiction when any portion of the facility or any portion of an exterior wall of the first story of the building is located more than 150 feet (45 720 mm) from fire apparatus access as measured by an approved route around the exterior of the building or facility. (1997 Uniform Fire Code, Section 902.2.1.)
 2. Provide a water supply, approved by the county, capable of supplying the required fire flow for fire protection to all premises upon which facilities of buildings, or portions thereof, are hereafter constructed or moved into or within the county.
- On-site fire hydrants and mains capable of supplying the required fire flow shall be provided when any portion of the facility or building is in excess of 150 feet (45 720 mm) from a water supply on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building. (1997 Uniform Fire Code, Section 903.2, as amended.)

PHONE (BUS): (808) 536-5695
FAX: (808) 599-1553



ANALYTICAL PLANNING CONSULTANTS, INC.
928 NUUANU AVENUE, SUITE 502 • HONOLULU, HI 96817

April 29, 2008

Mr. Kenneth G. Silva, Fire Chief
Honolulu Fire Department
636 South Street
Honolulu, Hawaii 96813-5007

Subject: Draft Environmental Assessment
Tropical Farms - TMK: 4-9-003:001

Dear Mr. Silva:

Thank you for your comment letter dated January 22, 2008 addressed to Mr. Henry Eng of the Department of Planning and Permitting. We respectfully offer the following responses:

The applicant will comply with all requirements of the Fire Department at the time that after-the-fact building permits are submitted for approval.

Thank you again for your comments on the DEA. If you have any questions or require further clarification, please contact myself or Lauri Clegg at 536-5695.

Sincerely,

Donald Clegg
President

47-856 Kanehameha Highway
Kane'ohē, HI 96746

January 18, 2008

DEPT OF PLANNING
AND PERMITTING
CITY & COUNTY OF HONOLULU

08 JAN 22 AIO 29

Tropical Farms
49-227A Kanehameha Highway
Kane'ohē, HI 96744

Re: Draft Environmental Assessment for Tropical Farms, TMK 4-9-003; por.
001 (Oct. 2007)

To Whom It May Concern,

I submit these comments in response to the notice in the December 23, 2007 Office of Environmental Quality Control bulletin, which requests input on the draft environmental assessment ("DEA") prepared for Tropical Farms. As discussed in greater detail below, the DEA falls far short of satisfying the minimum requirements of HRS chapter 343 and its implementing regulations. Substantial revisions to the DEA are necessary if it is to comply with the Legislature's intent to "ensure that environmental concerns are given appropriate consideration in decision making" on Tropical Farms' various requests for after-the-fact permit approvals. HRS § 343-1.

One of the DEA's most glaring deficiencies is its complete failure to analyze any alternatives to the preferred alternative: after-the-fact approvals of Tropical Farms' currently unauthorized activities and unpermitted improvements to the subject property. Chapter 343's implementing regulations expressly mandate that, for applicant actions, the approving agency must "analyze alternatives, in addition to the proposed action in the environmental assessment." HAR 11-200-9(c) (emphasis added). Ignoring this command, the DEA refuses to consider any alternatives to Tropical Farms' proposed action on the grounds that, allegedly, "ceasing operations is not a viable alternative." DEA at 26.¹

Without analysis of alternatives, there is no way for either the approving agency or the public at large to consider whether the costs associated with allowing Tropical Farms to continue its currently unauthorized activities outweigh the benefits or to assess whether Tropical Farms could accomplish some or all of its goals in a less environmentally harmful manner. The DEA must be revised to include consideration of the "no action" alternative, which is vital to provide a baseline against which to assess the impacts of Tropical Farms' proposed activities, as well as to determine whether approval of Tropical Farms' request is in the best interests of the community as a whole. In addition, the revised DEA should consider a range of reasonable action alternatives, including, but not limited to, moving Tropical Farms' operations to an alternate location

¹ The DEA provides no analysis or data to back up this bald assertion.

outside the Moli'i Fishpond historic site and special management area, an alternative which would not involve ceasing Tropical Farms' activities altogether. Cf. HAR 11-200-17(f).

Even with respect to the sole alternative the DEA does discuss, the analysis of potential impacts is so cursory as to preclude the informed decision-making that chapter 343 mandates. For example, the DEA lacks any quantification of impacts to air quality or noise associated with continued operation of Tropical Farms' business.² Without such data, there is no way for the approving agency or the public to assess the DEA's claim there would be no significant impacts. Unsupported assertions cannot substitute for meaningful review of the project's potential impacts.

The DEA's analysis of impacts on cultural resources appears inadequate, as it includes interviews with only three informants, all of whom were selected by the applicant. See DEA, app. D at 4. The interview with informant George White reveals that Moli'i Fishpond is used by school groups that visit to learn about Hawaiian cultural practices and that an individual actively conducts traditional aquaculture in the fishpond. *Id.* at 17-18. To get an accurate assessment of potential cultural impacts associated with continuing Tropical Farms' activities, the school teachers and traditional practitioner should have been contacted and interviewed. No reason is given for the failure to do so.

Moreover, it is not clear that the cultural impact assessment ("CIA") included in the DEA – which was conducted four years ago – was actually carried out to evaluate the impacts of Tropical Farms' current proposal. See *id.* at 4. While the DEA repeatedly states no new construction is proposed, the CIA expressly provides conclusions and recommendations regarding "implementation of the proposed construction project," which apparently involved the addition of a new one-story building "within the proximity of existing structures on the subject property." *Id.* at 26 (emphasis added); see also *id.* at 19. Notably, the CIA's community consultations sought input on only whether "the proposed construction [would] physically affect or alter a place of traditional or cultural importance." *Id.* at 17-18, 24.³ The interviews did not focus on the impacts associated with Tropical Farms' current activities. It goes without saying that chapter 343 requires analysis of the activity being proposed, not some other undertaking.

² Even if, as the DEA asserts, "Tropical Farms is not a destination site," there still undoubtedly are measurable air quality and noise impacts associated with four buses and vans entering and exiting the property and starting up their engines after a visit, rather than simply continuing along Kamehameha Highway on their way to the North Shore or Polynesian Cultural Center. DEA at 17. Such impacts can – and, to comply with chapter 343, must – be quantified.

³ The CIA's narrow focus on whether activities would cause physical alteration to cultural resources ignores potentially significant impacts that are not physical, such as disturbance of cultural activities associated with four buses roaring in and out of the property, disgorging tourists.

The DEA inaccurately assesses the visual impacts of Tropical Farms' operations. Its reliance on the 1987 Coastal View Study is misplaced since that document predates Tropical Farms' operations by more than a decade. Moreover, while Tropical Farms' buildings may not be readily visible from Kamehameha Highway, the signs and flags it has arrayed along the highway to attract business are quite prominent and detract from the rural setting. The DEA should evaluate ways to minimize or mitigate these visual impacts.

The DEA's analysis of traffic impacts is flawed. The primary question is not whether Tropical Farms' operations add to the number of vehicles traveling on Kamehameha Highway, which is the only impact the DEA purports to address.⁴ Rather, the question is whether tour buses and other vehicles entering and exiting Tropical Farms' property cause traffic delays or accidents (sight distances along this stretch of the highway appear limited, especially for traffic headed toward the North Shore). The DEA provides no information regarding these potential impacts.

I appreciate the opportunity to provide these comments, which hopefully will assist Tropical Farms in preparing a legally adequate environmental review.

Sincerely,



David Henkin

cc: City and County of Honolulu, Department of Planning and Permitting
Analytical Planning Consultants, Inc.
Office of Environmental Quality Control

⁴ Even with respect to this issue, the DEA fails to quantify the changes in vehicle counts from 2000 (prior to the start of Tropical Farms' operations) to the present or to back up its claim that Tropical Farms is not responsible for any significant increase in traffic.



ANALYTICAL PLANNING CONSULTANTS, INC.
 928 NUUANU AVENUE, SUITE 502 • HONOLULU, HI 96817

May 2, 2008

Mr. David Henkin
 47-856 Kamehameha Highway
 Kaneohe, Hawaii 96744

Subject: Draft Environmental Assessment
 Tropical Farms – TMK: 4-9-003:001

Dear Mr. Henkin:

Thank you for your comment letter dated January 18, 2008 addressed to Mr. Henry Eng of the Department of Planning and Permitting. The Final Environmental Assessment has been revised to incorporate and clarify concerns which were expressed in your letter. We respectfully offer the following responses:

1. Section 4 of the final EA contains alternatives to the proposed action including: no action, no country store, a roadside stand operation, revision of retail operations, and relocation of retail operations.
2. Section 3.1 of the final EA has been expanded to include mention of traffic to the site. In terms of air quality and noise, Tropical Farms's operation is not an industrial or manufacturing-type use. The largest generator of noise or potential air pollutants in the general vicinity would be traffic on Kamehameha Highway or intensive agricultural uses in the area.

Title 11, Chapter 46, of the Hawaii Administrative Rules (HAR 11-46) defines maximum permissible sound levels. It sets maximum permissible sound levels in various zoning districts for excessive noise sources during the day and at night at the property line where the activity occurs, as shown in the following table.

State of Hawaii Maximum Permissible Sound Levels in dBA*

Class	Zoning	Maximum Permissible Sound Level (dBA)	
		Daytime 7:00 am to 10:00 pm	Nighttime 10:00 pm to 7:00 am
A	Residential, conservation, preservation, public space, open space, or similar type	55	45
B	Multi-family dwellings, apartment, business,		

	commercial, hotel, resort, or similar type	60	50
C	Agriculture, country, industrial, or similar type	70	70

*dBA = A-weighted sound level in decibels
 Source: HAR 11-46

According to the State of Hawaii's Administrative Rules, Tropical Farms is located in an area with the greatest maximum permissible sound levels for daytime and nighttime uses. Tropical Farms is located in an area with even greater maximum permissible sound levels than commercial or resort zoned areas such as Waikiki or Ala Moana Shopping Center. No new construction is proposed; therefore construction noise is not an existing or potential noise quality issue.

Generally, air quality in Hawaii is excellent. The relatively constant tradewinds and rain showers together with a lack of concentrated human activity in the area of Tropical Farms would produce air quality that would be expected to be well within State and national Ambient Air Quality Standards (AAQS). Potential sources of air pollutants would be traffic on Kamehameha Highway or area agricultural activities. The heaviest levels of traffic and most intensive agricultural activities on Oahu do not occur in the vicinity of Tropical Farms. No new construction is proposed; therefore construction is not an existing or potential air quality issue.

This information has been included in the final EA as appropriate.

3. As stated in the Abstract, the Cultural Impact Assessment was specifically performed to gather information regarding use of a small portion of the property as a country store within existing structures and concluded that no further archaeological investigations were recommended. The State Historic Preservation Division in their letter dated 2/11/08 concurs that the proposed undertaking will have no adverse effect on Moli'i Fish Pond.
4. The City Department of Planning and Permitting requires that visual impacts be assessed using the City's 1987 Coastal View Study, which is the most recent version of this City report. The Land Use Ordinance (LUO) allows one sign not to exceed 12 square feet in the Agricultural District. Tropical Farms complies with the LUO sign regulations. There are three American flags along the front property boundary to alert drivers of the driveway to the property which are placed during business hours and removed at night.
5. The DOT is continuing to review the project and no Traffic Impact Report has yet been suggested. As stated in the DEA, traffic along Kamehameha Highway is not generated by Tropical Farms; and, while concerns have been raised regarding a possible need for a left-hand turn lane from Kamehameha Highway, whether or

not there is a turn lane should have no impact on the Fishpond or the Special Management Area. The applicant has indicated that Tropical Farms will comply with requests from the DOT or terminate the operation.

Thank you again for your comments on the DEA. If you have any questions or require further clarification, please contact myself or Lauri Clegg at 536-5695.

Sincerely,



Donald Clegg
President

RECEIVED

PHONE (808) 594-1688



'08 JUN 25 12:20

DEPT OF PLANNING
LAND PERMITTING
OFFICE OF HAWAIIAN AFFAIRS
711 KAPIOLANI BOULEVARD, SUITE 500
HONOLULU, HAWAII 96813

FAX (808) 594-1685

LINDA LINGLE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809



DEPT OF PLANNING
AND PERMITTING
CITY & COUNTY OF HONOLU.

RECEIVED
'08 JAN 29 12:57

LINDA S. WILSON
GOVERNOR OF HAWAII

HRD073420

January 23, 2008

Sharon Nishiura
Urban Design Branch
Department of Planning and Permitting
650 South King Street, 7th Floor
Honolulu, HI 96813

RE: Request for comments on the Draft Environmental Assessment Tropical Farms' agribusiness operation at Kualoa Ranch, Ko'olaupoko, TMK: (1) 4-9-003.

Dear Sharon Nishiura,

The Office of Hawaiian Affairs (OHA) is in receipt of the above-referenced request relating to Tropical Farms' retail operations for agriculture-related products grown and made in Hawaii. The applicant's business operates out of two buildings on a 1.12-acre site owned by Kualoa Ranch, located within the Moli'i Fishpond historic site boundary and within the state's Special Management Area. The applicant has prepared this draft EA to receive after-the-fact approval to continue its business operations. Apparently, the facilities the company uses were expanded without receiving the proper permits. Tropical Farms is seeking to obtain the appropriate permits. OHA offers the following comments.

We will rely on the applicant's assurances that the company has no plans for expansion or additional construction.

Thank you for the opportunity to comment. If you have further questions, please contact Sterling Wong (808) 594-0248 or e-mail him at sterlingw@oha.org.

Sincerely,

Clyde W. Nāmu'o

Clyde W. Nāmu'o
Administrator

Department of Planning & Permitting
City & County of Honolulu
650 South King Street 7th Floor
Honolulu, Hawaii 96813

Attention: Ms. Sharon Nishiura

Gentlemen:

Subject: Draft Environmental Assessment for Tropical Farms, Hakipuu, Oahu, Tax Map Key: (1) 4-9-3:portion of 1

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR) has no other comments to offer on the subject matter. Should you have any questions, please feel free to call our office at 587-0433. Thank you.

Sincerely,

Morris M. Atia

Morris M. Atia
Administrator

POLICE DEPARTMENT
CITY AND COUNTY OF HONOLULU
801 SOUTH BERETANIA STREET - HONOLULU, HAWAII 96813
TELEPHONE: (808) 529-3111 • INTERNET: www.honolulu.gov



MUFI HANNEMANN
MAYOR

OUR REFERENCE
BS-KP

December 17, 2007

DEPT OF PLANNING
AND PERMITTING
CITY & COUNTY OF HONOLULU

BOISSE P. CORREA
CHIEF

WILLO PUTZLUND
HAEL D. TREBER
DEPUTY CHIEFS

RECEIVED
DEC 19 10:34

TO: HENRY ENG, FAICP, DIRECTOR
DEPARTMENT OF PLANNING AND PERMITTING

FROM: BOISSE P. CORREA, CHIEF OF POLICE
HONOLULU POLICE DEPARTMENT

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT FOR TROPICAL FARMS,
KUALOA, KOOLAUPOKO, OAHU, TAX MAP KEY: (1) 4-9-3. POR. 1

Thank you for the opportunity to review and comment on the subject project.

This project should have no significant impact on the facilities or operations of the Honolulu Police Department.

If there are any questions, please call Acting Major Nyle Dolera of District 4 at 235-7621 or Mr. Brandon Stone of the Executive Office at 529-3644.

BOISSE P. CORREA
Chief of Police

By *[Signature]*
JOHN P. KERR
Assistant/Chief of Police
Support Services Bureau

DEPARTMENT OF PARKS AND RECREATION
CITY AND COUNTY OF HONOLULU
KAPOLEI HALE, 1000 ULUOHIA STREET, STE. 309 • KAPOLEI, HAWAII 96707
Phone: (808) 768-3003 • FAX: 768-3053 • Internet: www.honolulu.gov



MUFI HANNEMANN
MAYOR

December 28, 2007

DEPT OF PLANNING
AND PERMITTING
CITY & COUNTY OF HONOLULU

LESTER K. C. CHANG
DIRECTOR
MANA L. TAKAHARA-DIAS
DEPUTY DIRECTOR

RECEIVED
DEC 28 P2:42

TO: HENRY ENG, FAICP, DIRECTOR
DEPARTMENT OF PLANNING AND PERMITTING

FROM: LESTER K. C. CHANG, DIRECTOR

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT
TROPICAL FARMS (2007/ED-18(sn))

Thank you for the opportunity to review and comment on the Draft Environmental Assessment relating to Tropical Farms to allow (retain) an agribusness activity and associated after-the-fact improvements.

The Department of Parks and Recreation has no comment and as the proposed project will not impact any program or facility of the department, you are invited to remove us as a consulted party to the balance of the EIS process.

Should you have any questions, please contact Mr. John Reid, Planner, at 768-3017.

[Signature]
LESTER K. C. CHANG
Director

LKCC:mk
(240034)

FINAL ENVIRONMENTAL ASSESSMENT

Tropical Farms, 49-227A Kamehameha Highway, Koolaupoko, Hawaii (TMK: 4-9-003: por. 001)

8. REFERENCES

Archaeological Consultants of the Pacific, Inc. March 2004. A Cultural Impact Assessment for TMK: 4-9-03: 1 Located in the Hakipuu Ahupuaa, Koolaupoko District, Island of Oahu. Prepared for Mr. Steve Paty, Tropical Farms.

Chu, Michael S., and Robert B. Jones for the City and County of Honolulu, Department of Land Utilization, Coastal View Study, 1987.

City and County of Honolulu, Board of Water Supply. October 1998. Draft Environmental Assessment for the Punaluu to Kualoa Park Transmission Pipeline. Prepared by George A.L. Yuen & Associates.

City and County of Honolulu, Department of Design & Construction. December 1999. Centralized Wastewater System at Kualoa Regional Park, Draft Environmental Assessment. Prepared by Group 70 International, Inc.

City and County of Honolulu, Department of Planning & Permitting, Geographic Information Systems on-line database at <http://.gis.hicentral.com> 2004.

U.S. Department of Agriculture, Soil Conservation Service in cooperation with the University of Hawaii Agriculture Experiment Station. Soil Survey of Kauai, Oahu, Maui, Molokai and Lanai, State of Hawaii. August 1972.

Figures

"TROPICAL FARMS"

49-227A Kamehameha Highway, Kaaawa, Hawaii (TMK:4-9-003:001)



1



2

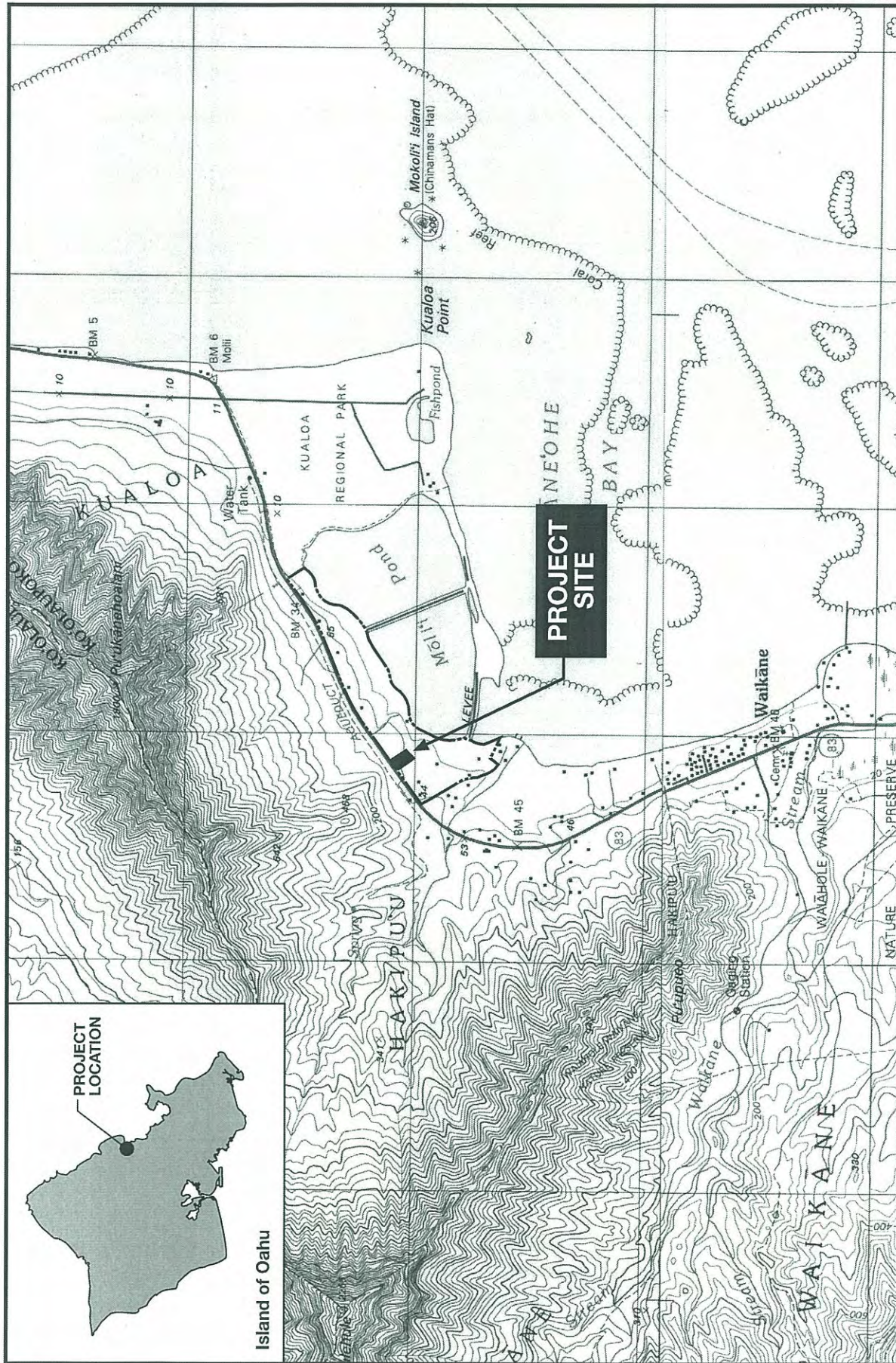


Figure 1
LOCATION MAP
Tropical Farms



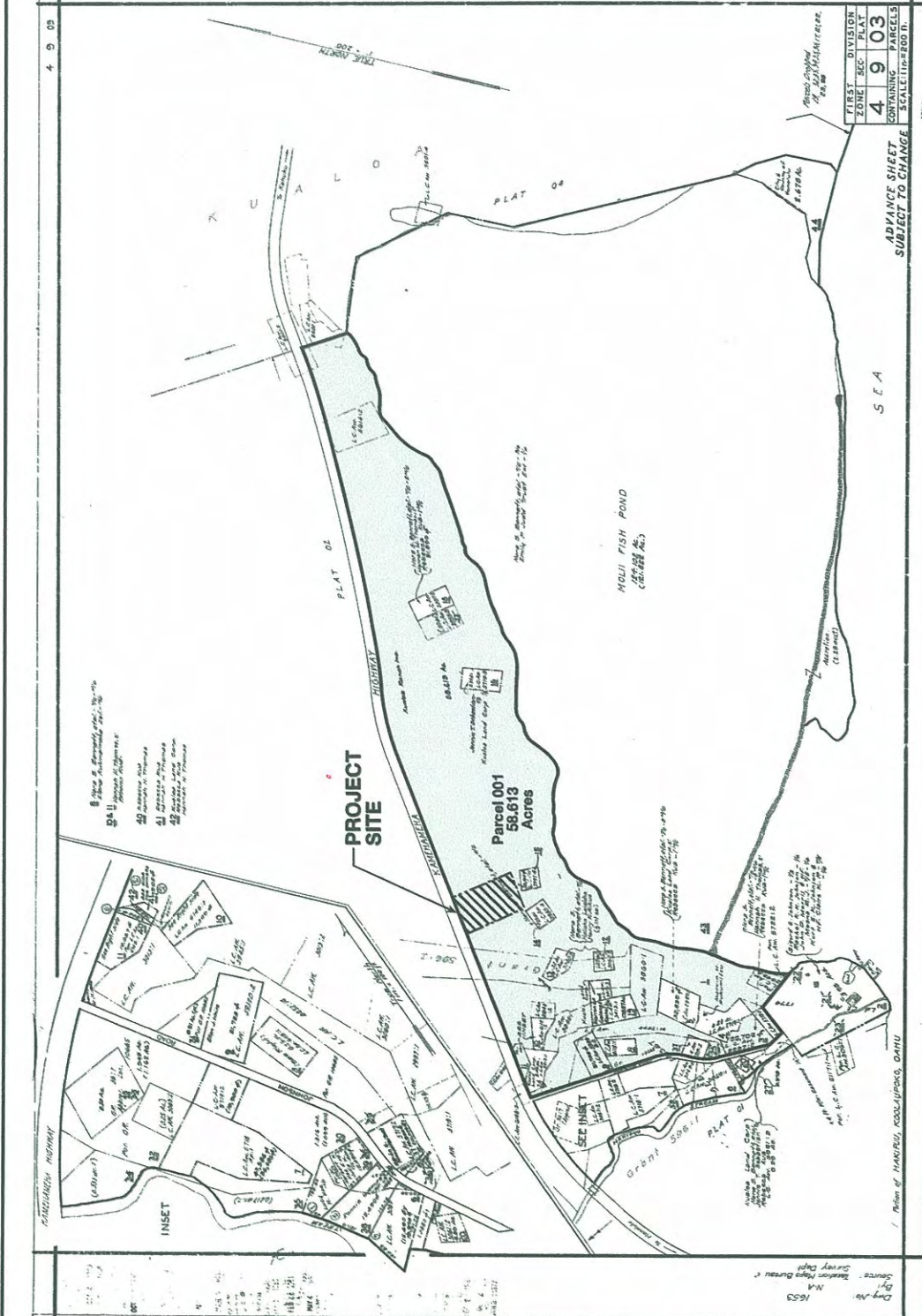


Figure 2
TAX MAP KEY
Tropical Farms

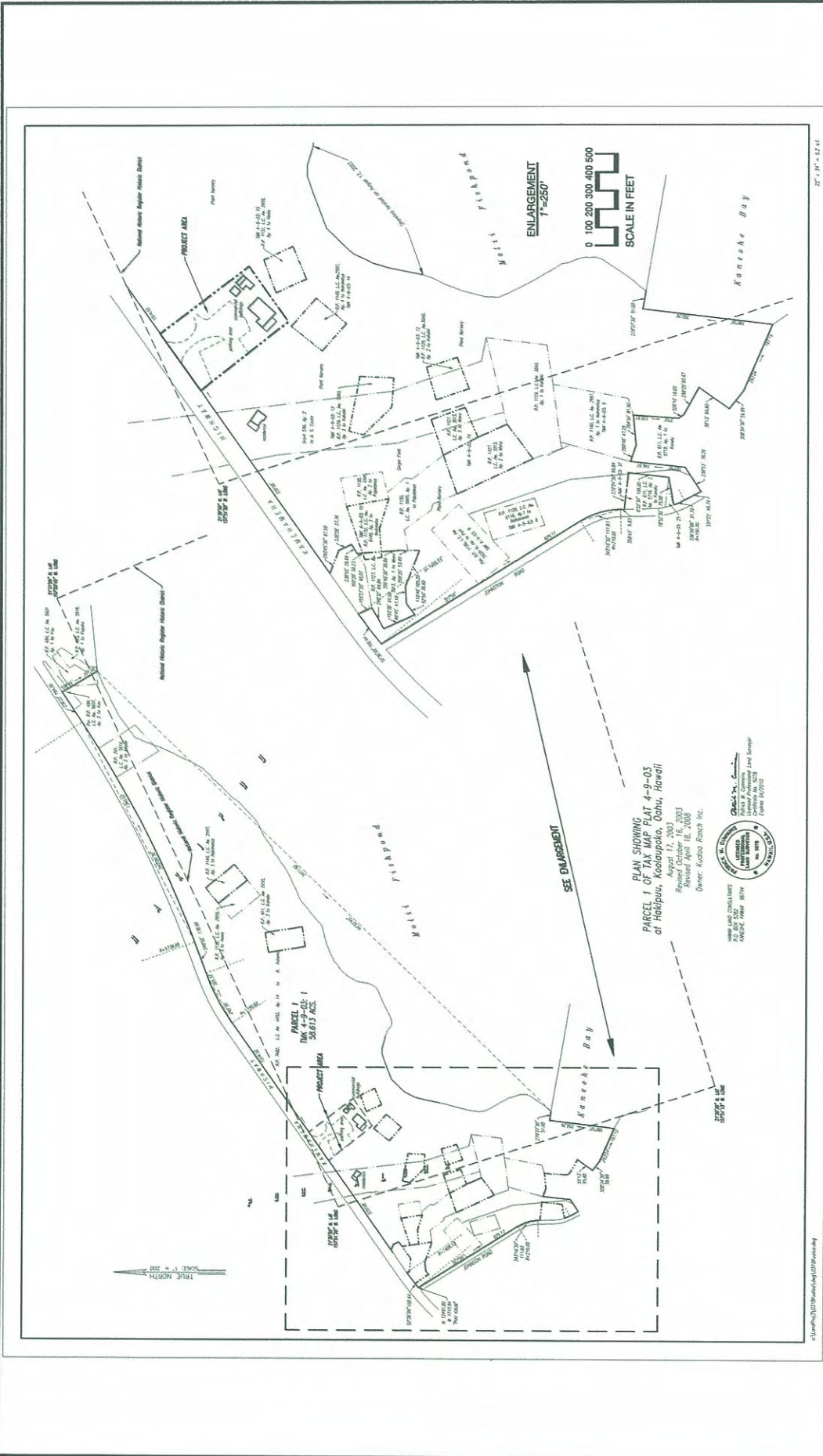
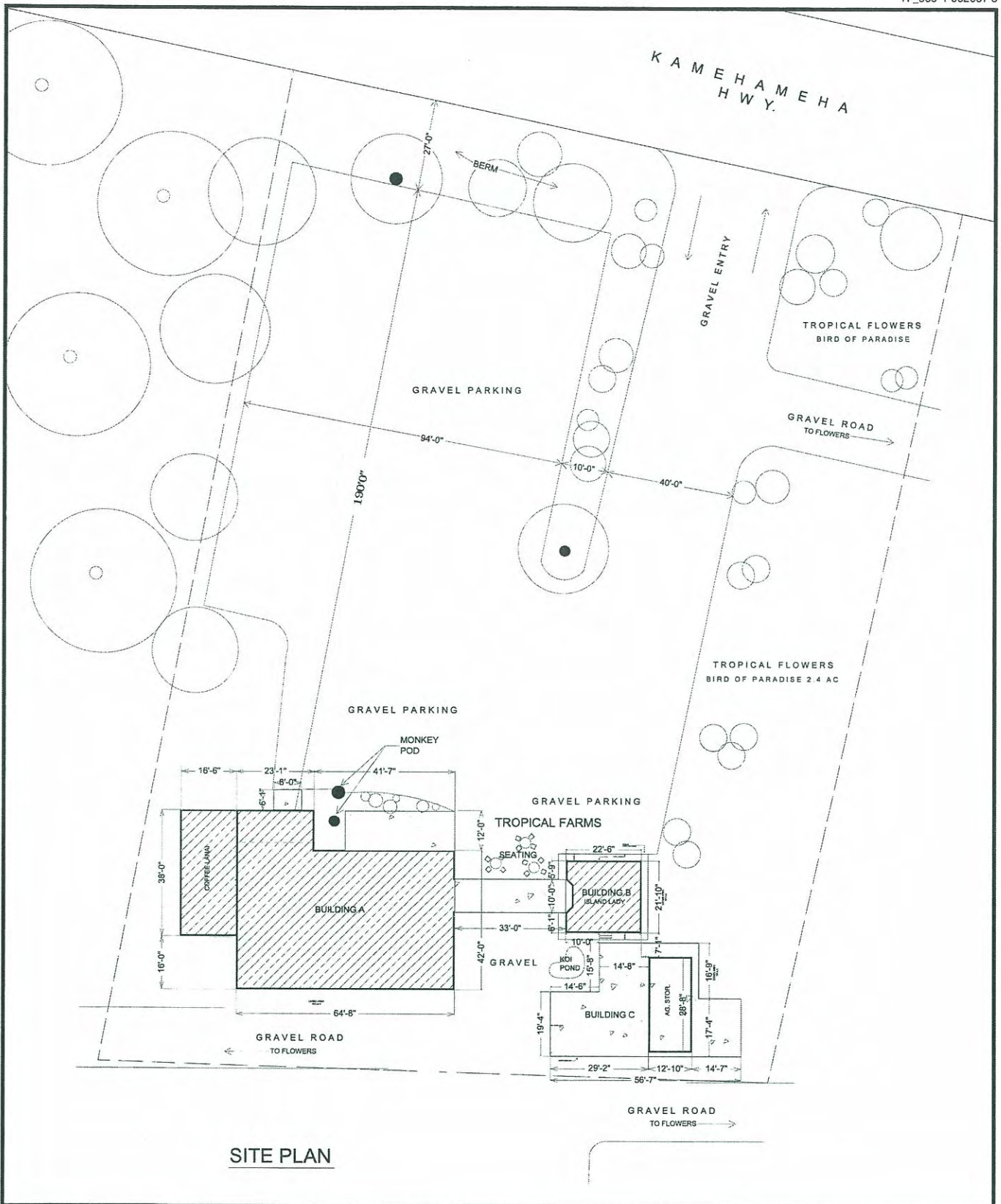


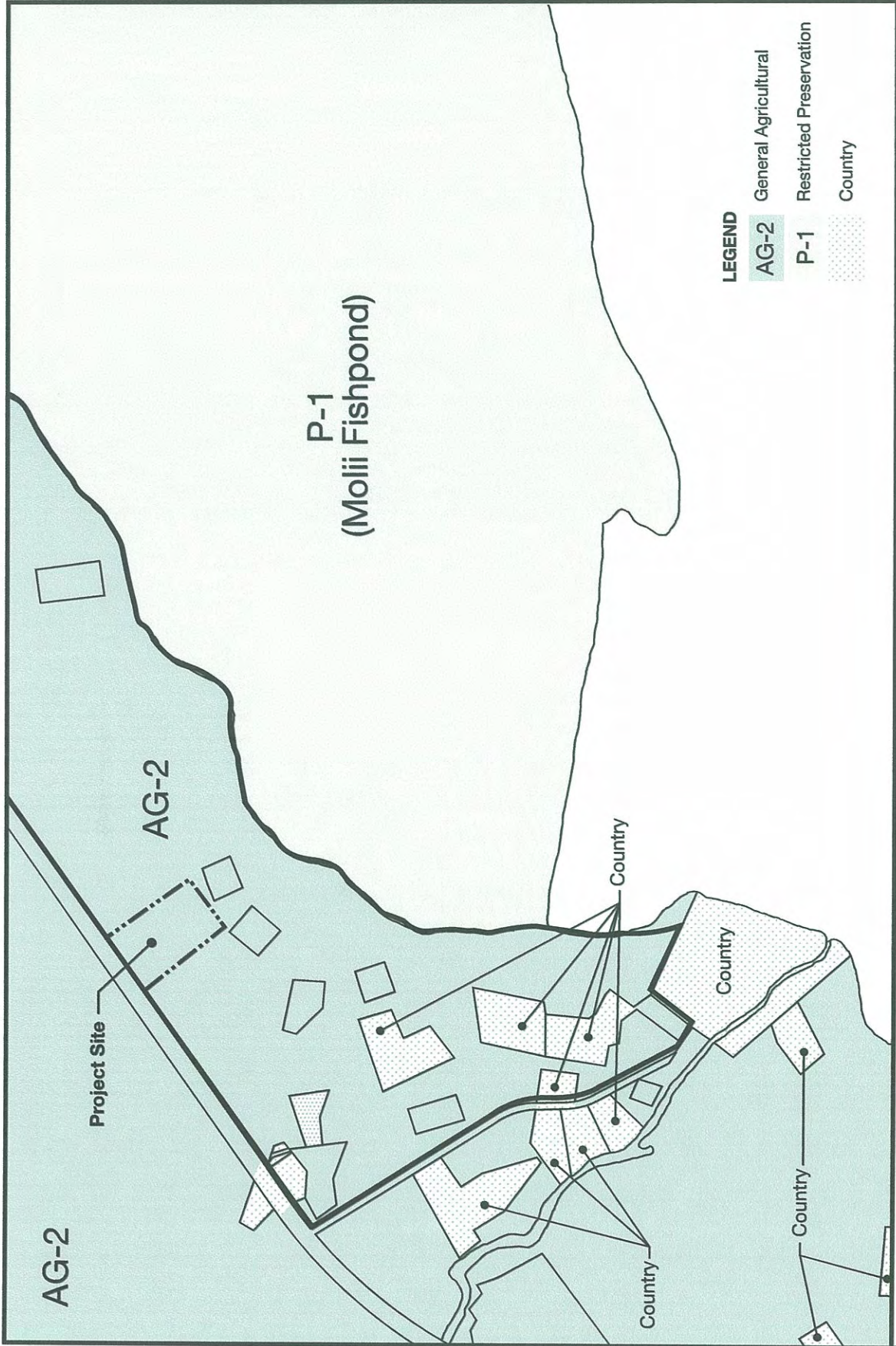
Figure 2A
PROPERTY SURVEY MAP
Tropical Farms



SITE PLAN

NOT TO SCALE

Figure 3
SITE PLAN
Tropical Farms



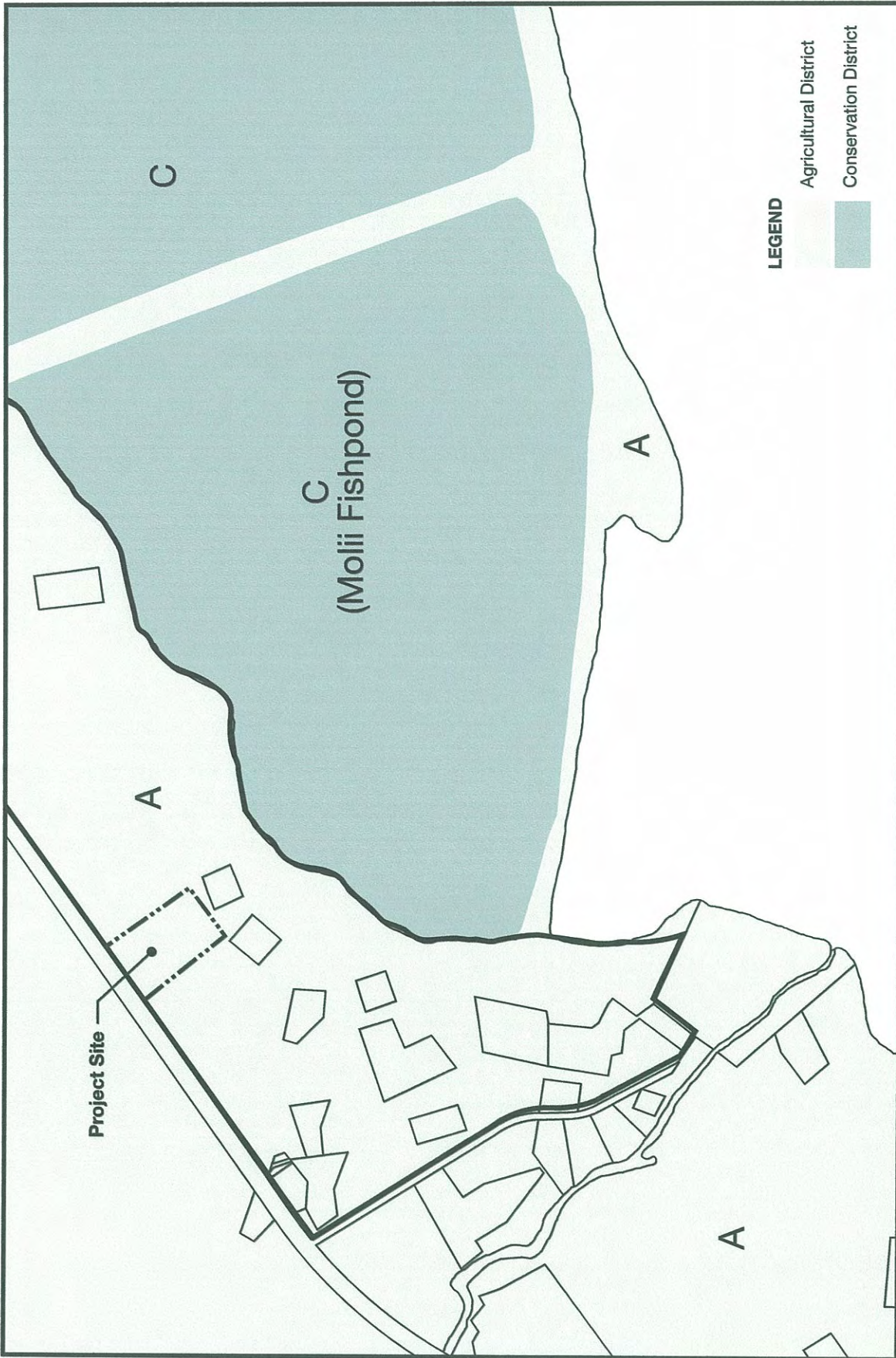
LEGEND

AG-2 General Agricultural

P-1 Restricted Preservation

Country

Figure 4
ZONING DESIGNATIONS
Tropical Farms



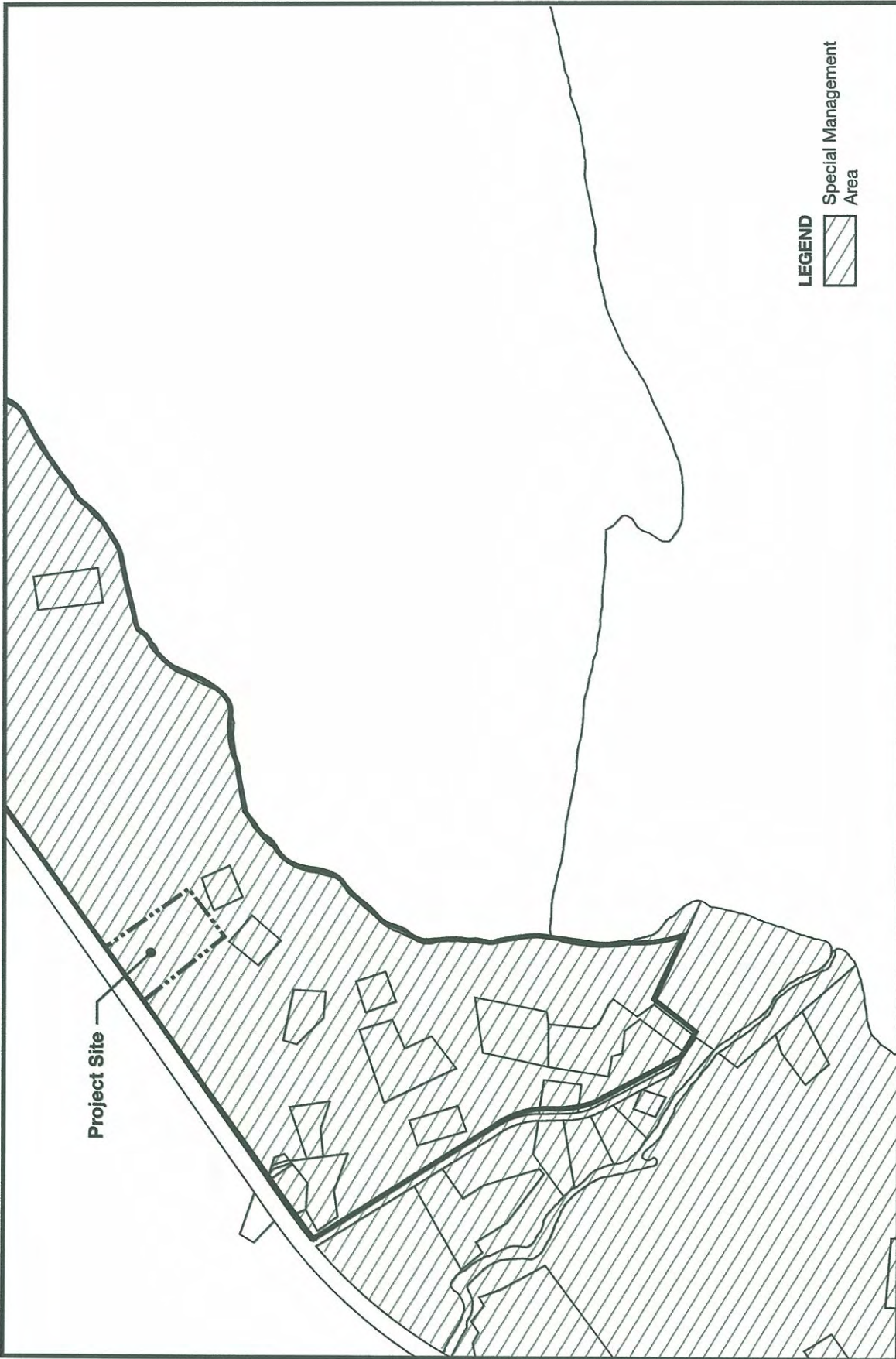
LEGEND

Agricultural District

Conservation District



Figure 5
STATE LAND USE DISTRICTS
Tropical Farms



LEGEND
Special Management Area



Figure 6
SPECIAL MANAGEMENT AREA
Tropical Farms

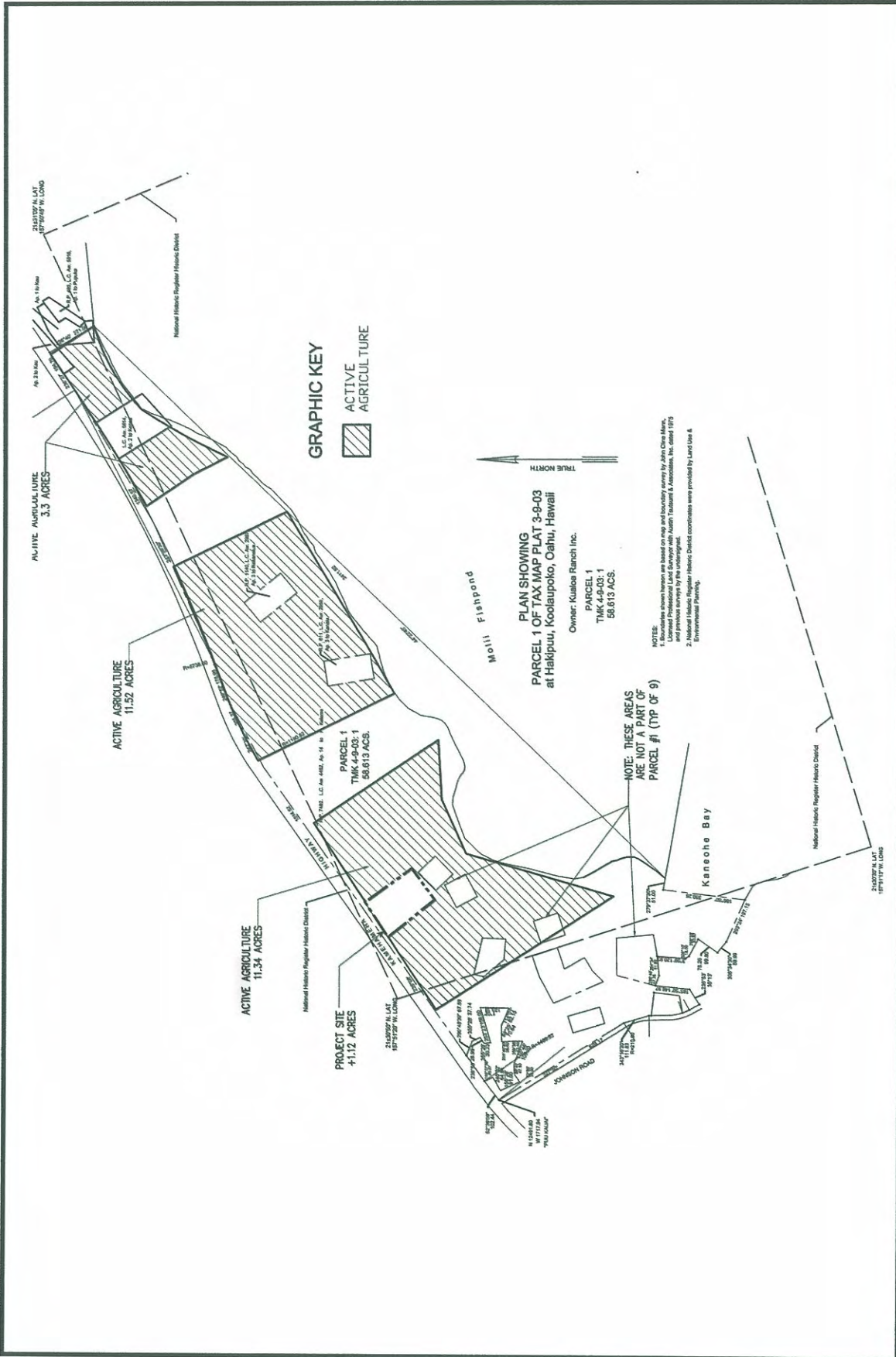
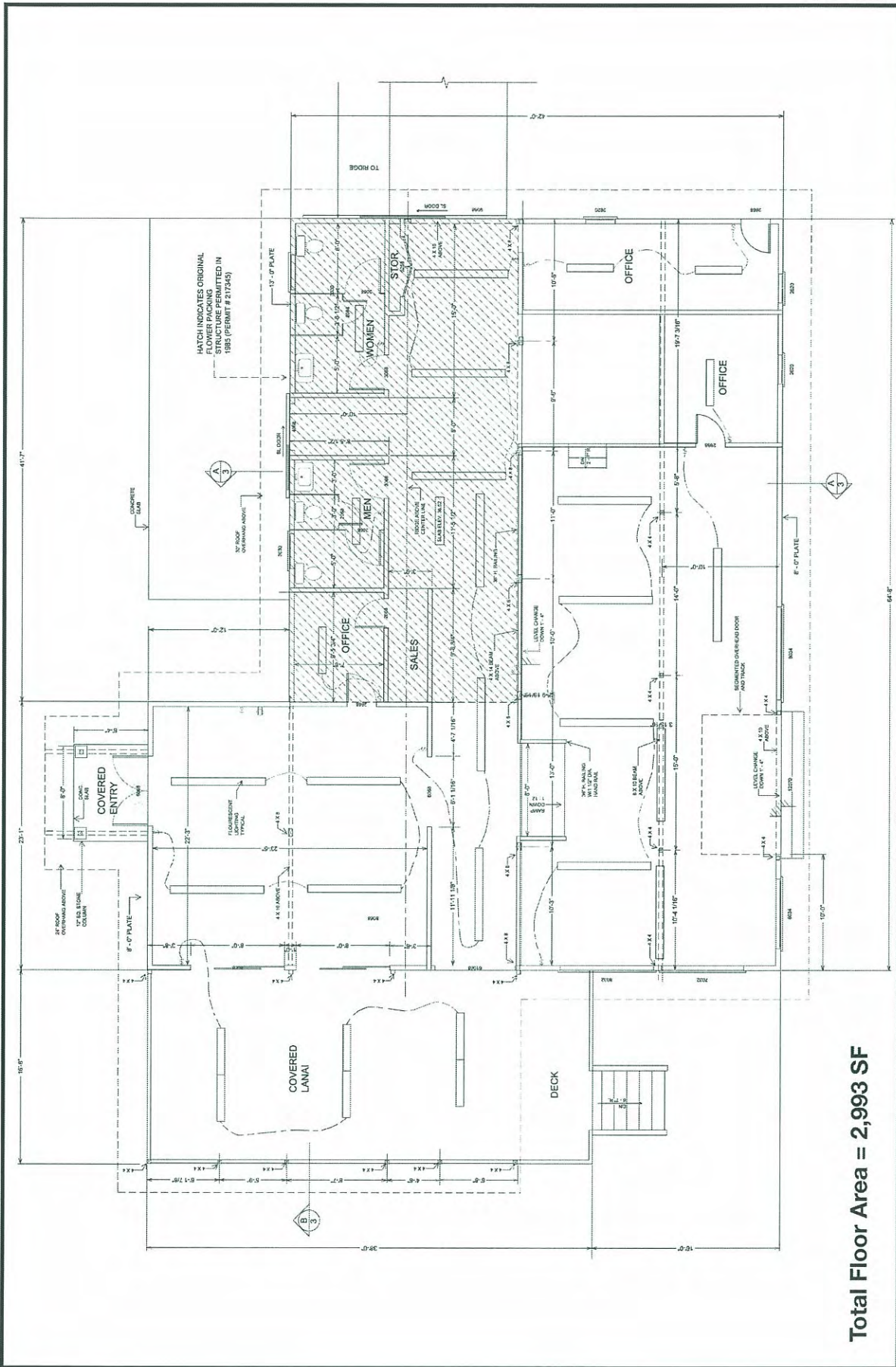


Figure 6A
ACTIVE AGRICULTURE AREAS
Tropical Farms

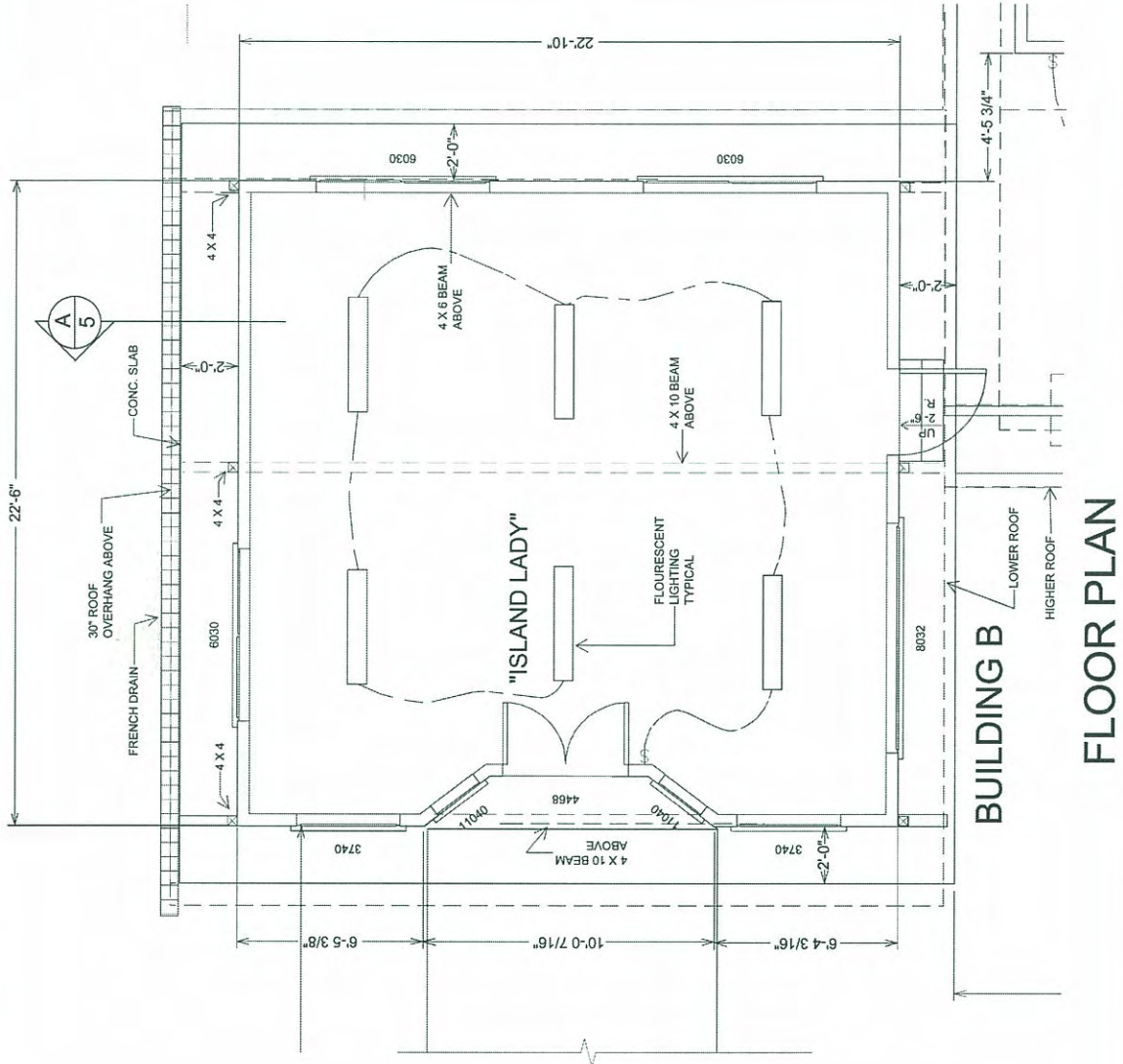
Figure 7
BUILDING A FLOOR PLAN
Tropical Farms



Total Floor Area = 2,993 SF

NOT TO SCALE

Figure 8
BUILDING B FLOOR PLAN
Tropical Farms



Total Floor Area = 472 SF

FLOOR PLAN

BUILDING B

NOT TO SCALE

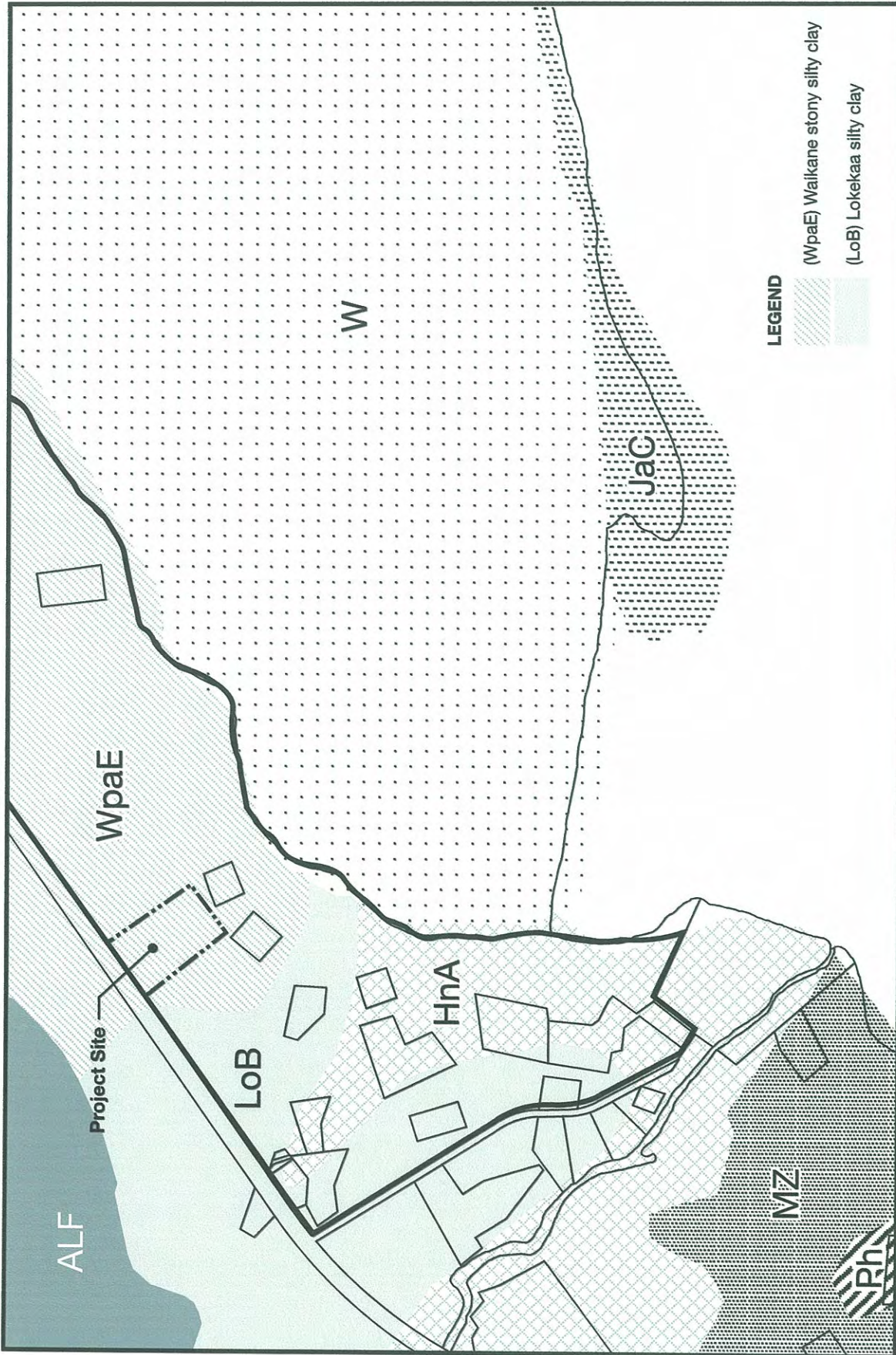
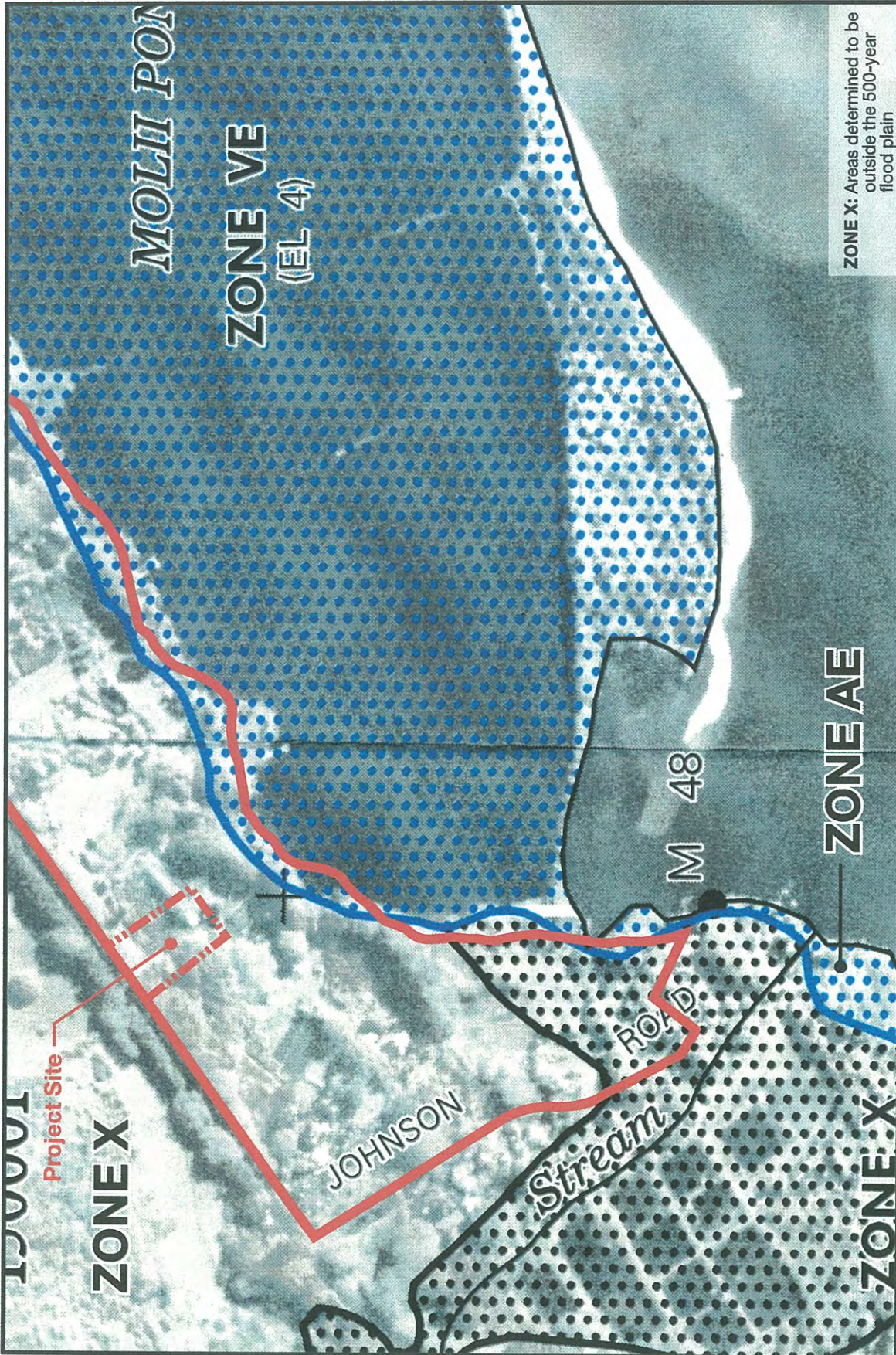


Figure 9
SOIL CONSERVATION
SURVEY SOILS MAP
Tropical Farms



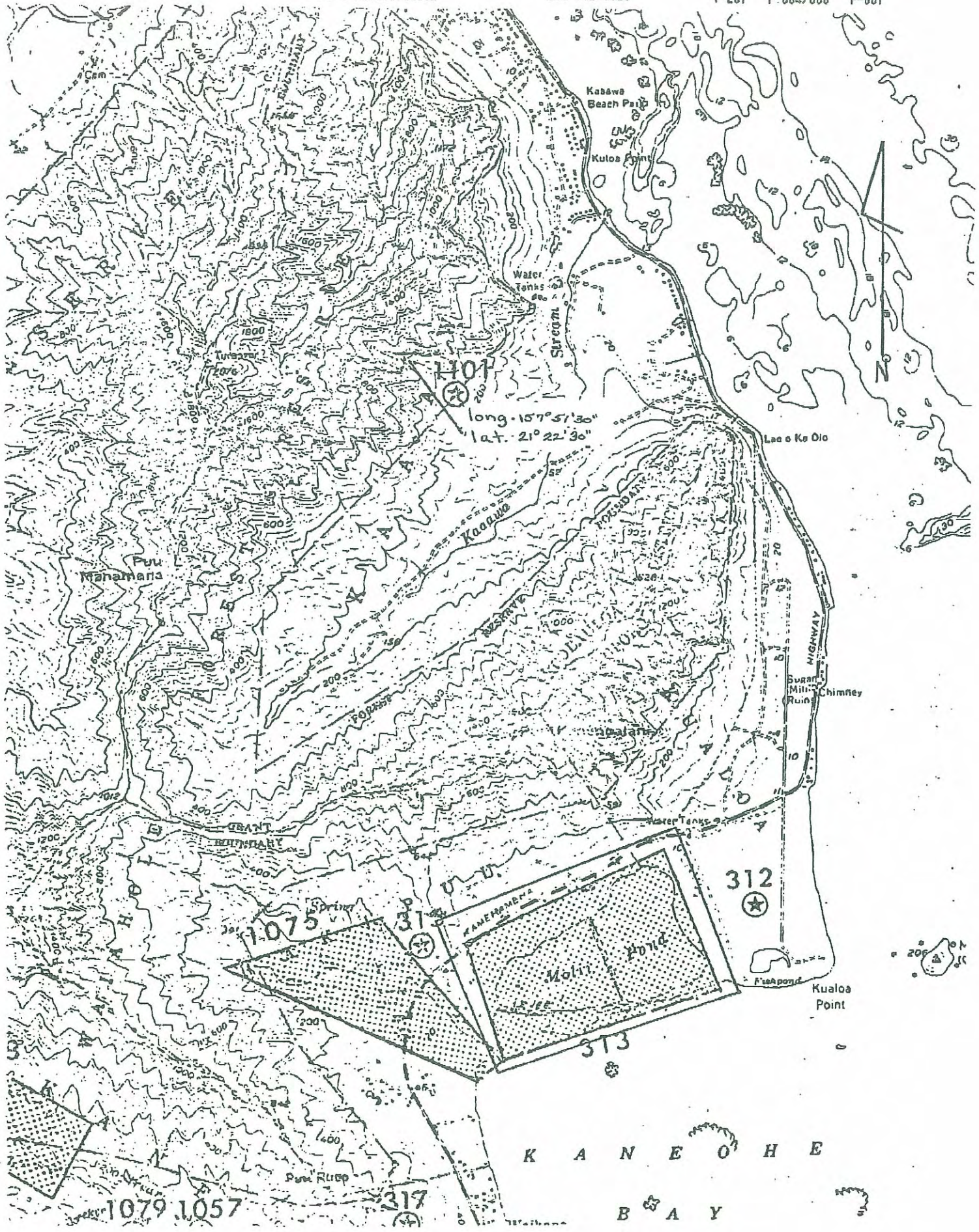
Figure 10
AGRICULTURAL LANDS OF IMPORTANCE
TO THE STATE OF HAWAII (ALISH) MAP
Tropical Farms



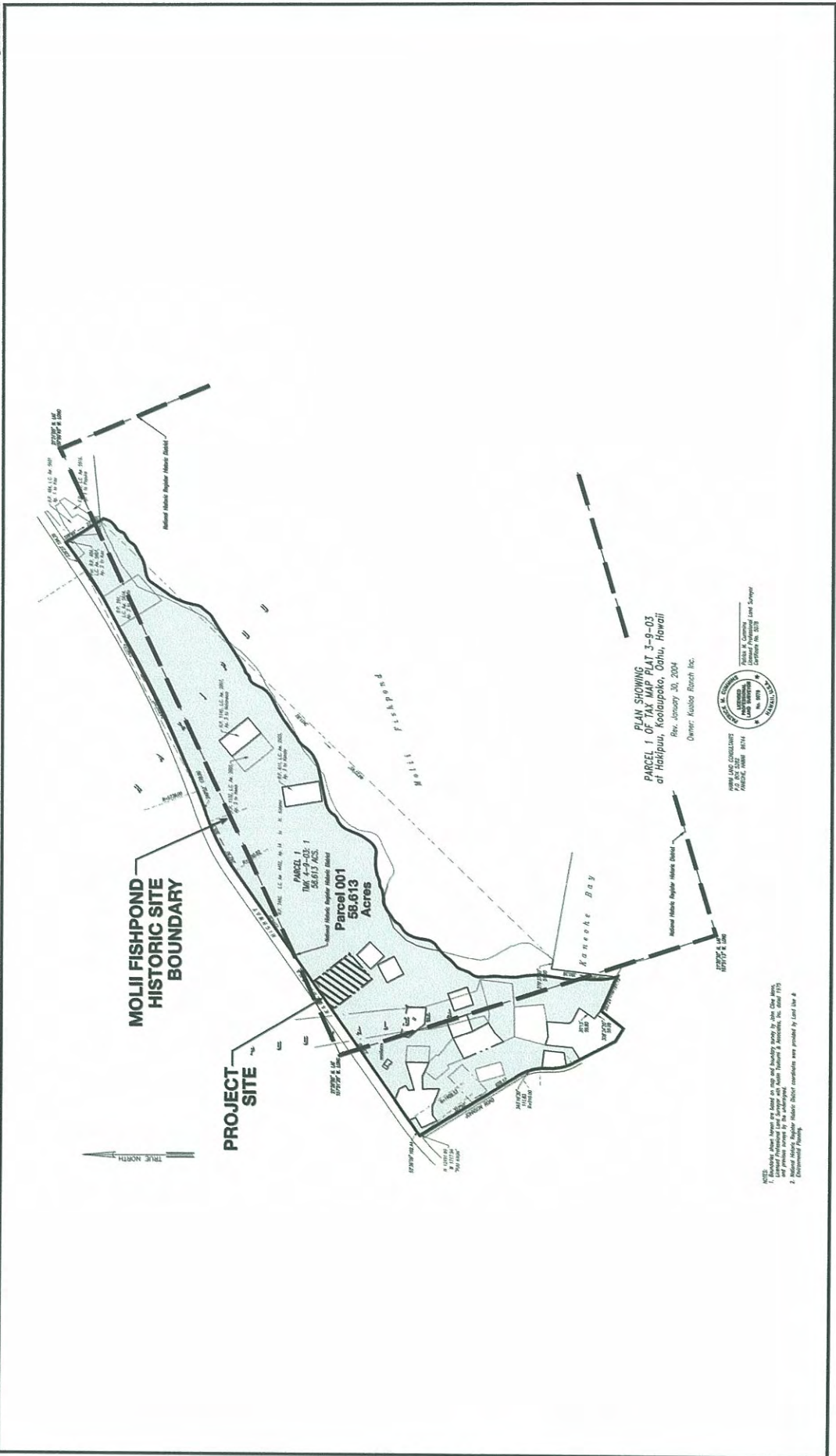
ZONE X: Areas determined to be outside the 500-year flood plain

Figure 11
 FLOOD INSURANCE RATE MAP,
 PANEL NO. 15003C0165F
 Tropical Farms

Appendix A



National Register of Historic Places - Molii Pond



NOTES:
 1. Boundaries shown herein are based on maps and locality shown by John Doe, Inc., and previous owners by the underlying Molii Fishpond Historic Site, dated 1975.
 2. The area shown herein is the historic site boundary.
 3. The area shown herein is the historic site boundary.

FOR THE ENGINEER:
 JAMES J. GARDNER
 LICENSED PROFESSIONAL LAND SURVEYOR
 No. 1079
 EXPIRES 12/31/2024

PLAN SHOWING
 PARCEL 1 OF TAX MAP PLAT 3-9-03
 at Haliipuu, Koolappoko, Oahu, Hawaii
 Rev. January 30, 2004
 Owner: Kulobor Ranch Inc.



MOLII FISHPOND HISTORIC SITE BOUNDARY
 Tropical Farms

NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM

(Type all entries - complete applicable sections)

STATE: Hawaii	
COUNTY: Honolulu	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

1. NAME

COMMON:
Molii Fish Pond

AND/OR HISTORIC:

2. LOCATION

STREET AND NUMBER:
SE of Kamehameha Highway between Kualoa Road and Johnson Road

CITY OR TOWN:
Kaneohe

STATE:
Hawaii

CODE 15	COUNTY: Honolulu	CODE 003
------------	---------------------	-------------

3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP	STATUS	ACCESSIBLE TO THE PUBLIC
<input type="checkbox"/> District <input checked="" type="checkbox"/> Site <input type="checkbox"/> Building <input type="checkbox"/> Structure <input type="checkbox"/> Object	<input type="checkbox"/> Public <input checked="" type="checkbox"/> Private <input type="checkbox"/> Both	<input checked="" type="checkbox"/> Occupied <input type="checkbox"/> Unoccupied <input type="checkbox"/> Preservation work in progress	Yes: <input checked="" type="checkbox"/> Restricted <input type="checkbox"/> Unrestricted <input type="checkbox"/> No
PRESENT USE (Check One or More as Appropriate)			
<input type="checkbox"/> Agricultural <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Educational <input type="checkbox"/> Entertainment	<input type="checkbox"/> Government <input type="checkbox"/> Industrial <input type="checkbox"/> Military <input type="checkbox"/> Museum	<input type="checkbox"/> Park <input type="checkbox"/> Private Residence <input type="checkbox"/> Religious <input type="checkbox"/> Scientific	<input type="checkbox"/> Transportation <input type="checkbox"/> Other (Specify) _____ <input type="checkbox"/> Comments _____

4. OWNER OF PROPERTY

OWNER'S NAME:
Kualoa Ranch

STREET AND NUMBER:
Financial Plaza of the Pacific

CITY OR TOWN:
Honolulu

STATE:
Hawaii

CODE:
15

5. LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC:
Bureau of Conveyances, Department of Land and Natural Resources

STREET AND NUMBER:
465 S. King Street

CITY OR TOWN:
Honolulu

STATE:
Hawaii

CODE:
15

6. REPRESENTATION IN EXISTING SURVEYS

TITLE OF SURVEY:
Statewide Inventory by the Hawaii Register of Historic Places

DATE OF SURVEY: ongoing Federal State County Local

DEPOSITORY FOR SURVEY RECORDS:
Hawaii Register of Historic Places

STREET AND NUMBER:
465 S. King Street

CITY OR TOWN:
Honolulu

STATE:
Hawaii

CODE:
15

SEE INSTRUCTIONS

STATE:

COUNTY:

ENTRY NUMBER

DATE

FOR NPS USE ONLY

McALLISTER, J. GILBERT
 1933 Archaeology of Oahu. Bernice P. Bishop Museum
 Bulletin 104. Honolulu, Hawaii, Published by the Museum.
 1971 New York, Kraus Reprint Co.

10 GEOGRAPHICAL DATA

LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY			O R	LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN TEN ACRES		
CORNER	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE	
	Degrees Minutes Seconds	Degrees Minutes Seconds		Degrees Minutes Seconds	Degrees Minutes Seconds	
NW	21° 30' 50"	157° 51' 20"				
NE	21° 31' 05"	157° 50' 45"				
SE	21° 30' 41"	157° 50' 34"				
SW	21° 30' 30"	157° 51' 13"				

APPROXIMATE ACREAGE OF NOMINATED PROPERTY: 148

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE:	CODE	COUNTY	CODE

11 FORM PREPARED BY

NAME AND TITLE:
 B. Jean Martin, ARchaeologist

ORGANIZATION: Hawaii Register of Historic Places DATE: 10/8/71

STREET AND NUMBER:
 465 S. King Street

CITY OR TOWN: Honolulu STATE: Hawaii CODE: 15

12 STATE LIAISON OFFICER CERTIFICATION NATIONAL REGISTER VERIFICATION

As the designated State Liaison Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service. The recommended level of significance of this nomination is:

National State Local

Name _____

Title _____

Date _____

I hereby certify that this property is included in the National Register.

 Chief, Office of Archeology and Historic Preservation

Date _____

ATTEST:

 Keeper of The National Register

Date _____

SEE INSTRUCTIONS

SEE INSTRUCTIONS

SIGNIFICANCE			
PERIOD (Check One or More as Appropriate)			
<input type="checkbox"/> Pre-Columbian	<input type="checkbox"/> 16th Century	<input checked="" type="checkbox"/> 18th Century	<input type="checkbox"/> 20th Century
<input type="checkbox"/> 15th Century	<input checked="" type="checkbox"/> 17th Century	<input checked="" type="checkbox"/> 19th Century	<input checked="" type="checkbox"/> precontact
SPECIFIC DATE(S) (If Applicable and Known)			
AREAS OF SIGNIFICANCE (Check One or More as Appropriate)			
<input type="checkbox"/> Aboriginal	<input type="checkbox"/> Education	<input type="checkbox"/> Political	<input type="checkbox"/> Urban Planning
<input checked="" type="checkbox"/> Prehistoric	<input type="checkbox"/> Engineering	<input type="checkbox"/> Religion/Philosophy	<input checked="" type="checkbox"/> Other (Specify)
<input checked="" type="checkbox"/> Historic	<input type="checkbox"/> Industry	<input type="checkbox"/> Science	<u>aquaculture</u>
<input type="checkbox"/> Agriculture	<input type="checkbox"/> Invention	<input type="checkbox"/> Sculpture	_____
<input type="checkbox"/> Architecture	<input type="checkbox"/> Landscape Architecture	<input type="checkbox"/> Social/Humanitarian	_____
<input type="checkbox"/> Art	<input type="checkbox"/> Literature	<input type="checkbox"/> Theater	_____
<input type="checkbox"/> Commerce	<input type="checkbox"/> Military	<input type="checkbox"/> Transportation	_____
<input type="checkbox"/> Communications	<input type="checkbox"/> Music		_____
<input checked="" type="checkbox"/> Conservation			_____
STATEMENT OF SIGNIFICANCE			
<p>The Hawaiian fish pond is a unique development of the ancient Hawaiians; it is not found in the rest of Polynesia nor, probably, anywhere in the mainland United States. The fish pond was used in a form of ocean farming, or aquaculture and illustrates the intimate knowledge of sea husbandry, engineering, and conservation that was attained by the ancient Hawaiians.</p> <p>Molii fish pond is one of four such fish ponds remaining on Oahu that are in good condition, accessible to the public, and which lend themselves readily to preservation and possible interpretation. Of these four fish ponds on Oahu, Molii is without doubt the most important for it is in the best condition, the largest, still in operation, and set next to a developing County park. A great deal of historical data exist on pond ownership and operation for Molii, and could be incorporated into an excellent interpretive picture of Hawaiian aquaculture.</p> <p>Molii fish pond is, therefore, the leading example of the Hawaiian fish pond on Oahu, and one that could be preserved to provide later generations with an understanding and appreciation for the important place in Hawaiian subsistence of fish ponds.</p> <p>Plans have been made to incorporate Molii fish pond into the Kualoa Beach Park of the City and County of Honolulu. The highest level of protection should be given Molii to ensure that it is so incorporated, and that the City and County actively and responsibly pursue their stewardship of this important Oahu site.</p>			

7. DESCRIPTION

CONDITION	(Check One)					
	<input type="checkbox"/> Excellent	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Deteriorated	<input type="checkbox"/> Ruins	<input type="checkbox"/> Unexposed
	(Check One)			(Check One)		
	<input checked="" type="checkbox"/> Altered	<input type="checkbox"/> Unaltered	<input type="checkbox"/> Moved	<input checked="" type="checkbox"/> Original Site		

DESCRIBE THE PRESENT AND ORIGINAL (if known) PHYSICAL APPEARANCE

Molii Fish pond lies within the native Hawaiian land division of Hakipuu, immediately adjacent to the very sacred lands called Kualoa. A long wall, some 4,000 feet in length, arcs gracefully from the shores to separate some 125 acres of shallow water from the northern rim of Kaneohe Bay. The wall was built before recorded history and like many other of the famous engineering feats of the ancient Hawaiians, is attributed to the work of the menehunes, a mythical people. Probably less magic than simple hard work by a multitude of workers was involved however, for the wall is superbly constructed of stacked stones on the inner and outer faces, with a packed fill of small rock and coral between. The main wall is generally about ten feet across, but varies considerably over its length. It shows evidence of having been repaired or rebuilt in sections where lengths of stacked stone facings are visible behind the present inner facings.

Today, three makaha (sluice gates) are both in constant use and in good condition. Two additional makaha have been long abandoned to the encroaching sand and silt.

Mullet thrash around these makaha attempting to get out of the pond into the deeper waters of Kaneohe Bay but are prevented by the makaha construction. It is here that the Hawaiians netted fish as needed, and it is here today that Mr. George Uyemura nets them commercially, for Molii is an operating fish pond. Fingerlings are netted along the shallows of Kaneohe Bay and placed in the small holding ponds constructed as low walled divisions along the seaward portion of Molii. A more narrow wall angles across the main part of the fish pond, roughly dividing it into two parts, but has been broken in places by the disease of time.

SEE INSTRUCTIONS

National and State Register of Historic Places

SITE NUMBER	SITE NAME	TAX MAP KEY	HAWAII REGISTER	NATIONAL REGISTER
80-06-293	Hanawao Heiau	5-2-02:01	1/29/81	
80-06-301	Huilua Fishpond	5-2-05:21	2/20/79	12/29/62 1966 NHL
80-06-313	Moli'i Fishpond	4-9-03:01,02, 12,13,14,15, 16,18		12/5/72
80-06-528	Kualoa Ahupuaa Historical District	4-9-04:01, 4-9-05:01, portion of 4-9-06:01		10/16/74
80-06-1003	80-06-1003	5-1-05:01	1/29/81	
80-06-1078	Waikane Taro Flats	4-8-06:01; 4-8-14:04,06		4/11/73 Revised 2/4/85
80-06-1101	Small Heiau	4-9-04, 4-9-05		3/14/73
80-06-9803	The Coral House	4-9-08:12	7/19/97	
80-06-9815	Waikane Store	4-8-03:01 (portion)	7/25/98	

Appendix B

BUILDING DEPARTMENT CITY AND COUNTY OF HONOLULU BUILDING PERMIT APPLICATION

Permit No. 217345

F I T

PLEASE PRINT - USE INK

APPLICANT FILL IN AREA BELOW

Owner: Kualoa Ranch, Inc. John Morgan
 Owner's Address: 49-560 Kam Hwy
 Construction Site Address: 49-255 * KAM HWY
 Plan Maker: Creative Design, Inc. 836-5843
 Address: 2815-F Kilihau St., Hon., Hi 96819
 Contractor: Art's Quality Construction BC-11702
 Address: 356 Auwinala Rd., Kailua, Hi 96734
 Electrical Contractor: LATER
 Plumbing Contractor: LATER
 Address: _____
DESCRIPTION OF WORK TO BE DONE
 New Flower packing and storage unit
 No flowers except those grown on the property will be packed and stored in the new structure.
 Proposed Use: ~~commercial~~ Packing and storage of flowers
 Estimated Value of Work: \$ 17,000.00
NATURE OF WORK
 1 New Bldg. 5 Alteration 9 Retaining Wall
 2 Foundation Only 6 Repair 10 Electrical
 3 Shell Only 7 Demolition 11 Plumbing
 4 Addition 8 Fence 12 Other
SIDEWALK, CURB, AND DROP DRIVEWAY
 Construct Conc. A.C. EXISTING SIDEWALK
 Reconstruct Lava Rock Conc. CURBING
 R.C. A.C. DRIVEWAY
 Please notify this office at least 24 hours before starting work. Phone 523-4276.
SEWAGE DISPOSAL New Existing Not Applicable
METHOD
 1 Public Sewer 2 Aerobic Unit 3 Cesspool
 4 Private Sewage Treatment Plant
 5 Other (Specify) _____
 I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all City and County ordinances and State laws regulating building construction.
 Signature: David E. Kabisch 20 Sept. 85
 IF AGENT, PRINT NAME: David E. Kabisch 836-5843

FOR BUILDING DEPARTMENT USE

ZONE: 4 SEC: 9 FLAT: 3 PARCEL: 1 LOT NO.: 59.113 AC. 825 SQ. FT.
 Occupancy Group: M.I. Storage Shed Flood Hazard Dist. C E
 Accepted Value: \$ 17,000.00 Permit Fee: 140.00
 TYPE OF CONSTRUCTION: MINIMUM: VN ADJ: VN NO. OF STORIES: EXISTING: 0 FINAL: 1 District: Kaimuki
 FLOOR AREA (SQ. FT.): Existing: _____ New: 800 # Total: _____
 REMARKS: Oldy out of Eld. Haz. Dist.
 STRUCTURE CODE: 98 CENSUS TRACT-BLOCK NO.: _____
ZONING AND CZC DATA
 ZONE (Use District): AG-1 SETBACKS: ROAD WIDENING: None
 DP DESIGNATION: B-9 SHORELINE: Yes
 SLU DESIGNATION: B-9 SMA: Yes
 REMARKS: 85/SMA-107
WORK WILL
 RESIDENTIAL UNITS: _____ Total _____ Total _____
 HOTEL ROOMS: _____ Rooms _____ Rooms _____
APPROVAL OF OTHER AGENCIES (ROUTE AS INDICATED)

AGENCY	SIGNATURE	DATE
CITY AND COUNTY		
LAND UTILIZATION	R. Kabanawa	12-2-85
DIV. OF ENGINEERING		
Lot Grading	R. Tuttle	9/23/85
Highway		
Drainage	R. Tuttle	9/23/85
DIV. OF WASTEWATER MGMT.		
FIRE DEPT.		
TRANSPORTATION		
BD. OF WATER SUPPLY	Emi Yuzasa	12/3/85
STATE OF HAWAII		
HEALTH DEPT.	Minna Hiji	7/5/85
HAWAIIAN HOME LANDS		
LAND & NATURAL RESOURCES	Prof. Kahanu	7/2/85
LAND USE COMMISSION		
HIGHWAYS DIVISION		
DIV. OF INDUSTRIAL SAFETY		

 REMARKS: Copy retained

Permission is hereby given to do above work according to conditions hereon and according to approved plans and specifications pertaining thereto, subject to compliance with ordinances and laws of City and County of Honolulu and State of Hawaii.

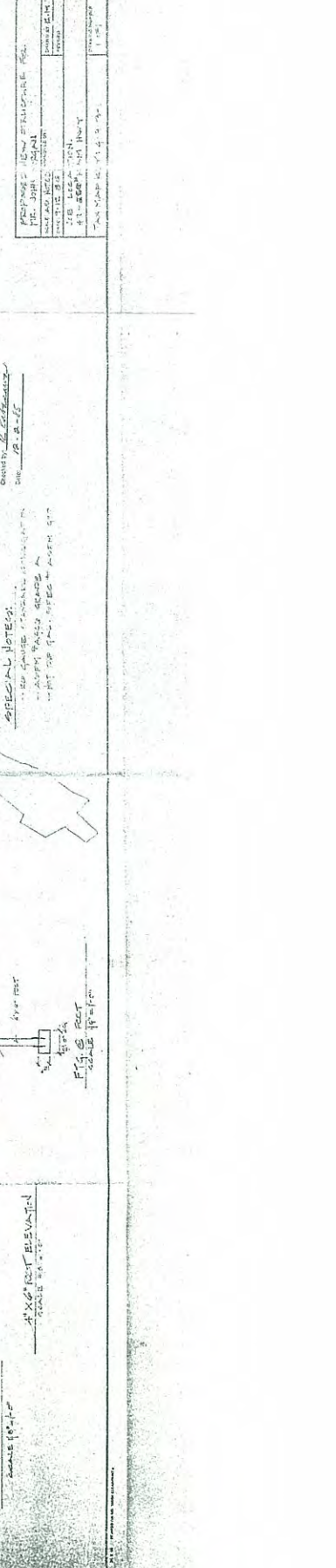
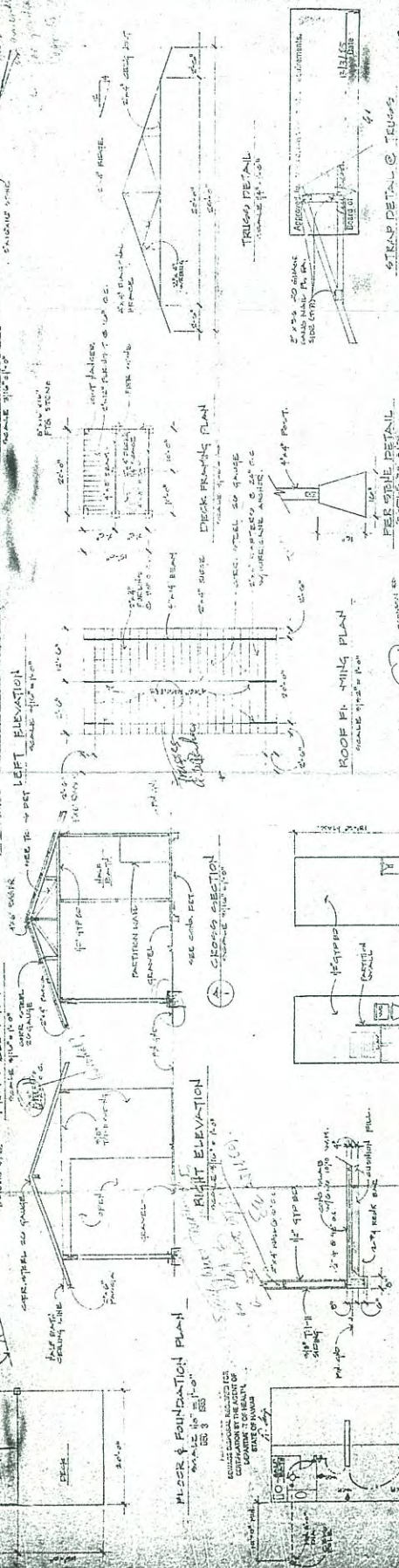
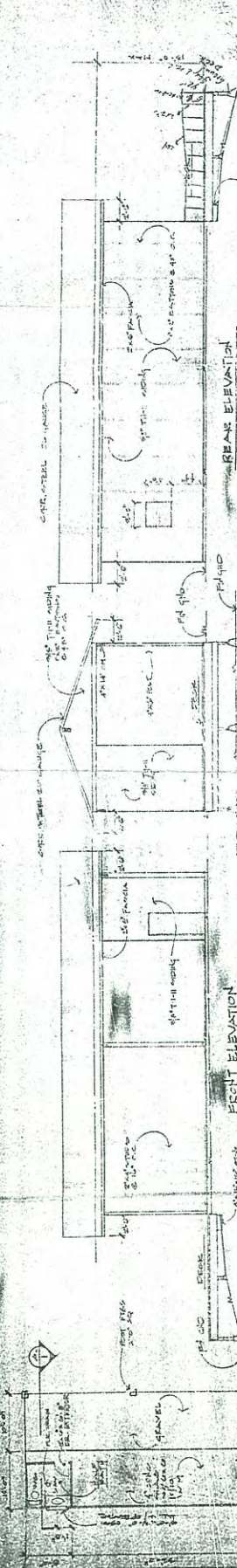
This building shall not be occupied until a certificate of occupancy has been issued.

OFFICE COPY

Director and Building Superintendent: J. Katakura 12-9-85

Form BSD-45 (Rev. 10/83)

Sheilds



DIVISION OF ENGINEERING
BUILDING DEPARTMENT
FILE COPY

PROFESSOR JOHN W. HARRISON
M.E. JOHN HARRISON
M.S. JOHN HARRISON
M.A. JOHN HARRISON

DATE: 1934

SPECIAL NOTES:
- SEE ARCHITECT'S SPECIFICATIONS
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CITY CODE

DATE: 1934

PROJECT: 1000 W. 10th St.
CITY OF DENVER

1	PLAN	1/8" = 1'-0"
2	ELEVATION	1/8" = 1'-0"
3	SECTION	1/8" = 1'-0"
4	DETAIL	1/8" = 1'-0"
5	FOUNDATION	1/8" = 1'-0"
6	ROOFING	1/8" = 1'-0"
7	TRUSS	1/8" = 1'-0"
8	STRIP	1/8" = 1'-0"
9	ELECTRICAL	1/8" = 1'-0"
10	INTERIOR	1/8" = 1'-0"

Appendix C

DEPARTMENT OF LAND UTILIZATION
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET

HONOLULU, HAWAII 96813 • (808) 523-4432

FRANK F. PASI
MAYOR



JOHN P. WHALEN
DIRECTOR

85/SMA-107(LM)

December 2, 1985

Kualoa Ranch, Inc.
49-560 Kam Highway
Kaneohe, Hawaii 96744

Gentlemen:

MINOR PERMIT--ORDINANCE NO. 84-4

Project	:	<u>Construct new flower packing and storage building (\$17,000)</u>
Applicant	:	<u>Kualoa Ranch, Inc.</u>
Location	:	<u>Kualoa, Oahu</u>
Tax Map Key	:	<u>4-9-03: 1</u>

We have reviewed your proposal and find that it lies within the Special Management Area (SMA) established by Ordinance No. 84-4. We find that your proposed development has a valuation of less than \$65,000 and will have no significant effect on the SMA. Therefore, a Minor Permit is hereby issued, subject to the following condition:

If any archaeological artifacts or human remains are discovered during construction of the proposed project, the applicant shall stop work and contact the State Historic Preservation Office.

A copy of this letter should accompany your application(s) for construction permits. If the accepted valuation of the proposed work exceeds \$65,000, the project will be returned to the Department of Land Utilization for further review under Ordinance No. 84-4.

Please contact the Environmental Affairs Branch at 523-4077 if you have any questions.

Very truly yours,


JOHN P. WHALEN
Director of Land Utilization

JPW:s1
2550A

CULTURAL SURVEYS HAWAII
Archaeological Studies

Hallett H. Hammatt, Ph.D.
49 S. Kalanooa Avenue
Kailua, Hawaii 96734
(808) 261-8293

November 25, 1985

Mr. Art Pacheco

Art's Quality Construction

356 Auwinala Road

Kailua, Hawaii 96734

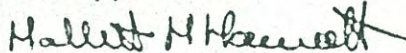
Dear Art:

On Sunday, November 24, 1985, I personally inspected a property at Kualoa to determine the presence or absence of archaeological features and deposits.

The property- TK 4 9 3-1 is on Kualoa Ranch land and is located makai of Kanehameha Highway and mauka of Moli Fishpond. The parcel I inspected is the location of a proposed plant storage shed which will have a 10 by 22 foot concrete floor slab and will measure overall 20 by 45 feet. It is my understanding that the construction will involve filling but not excavation.

The proposed building site is a level, previously graded open area. Only modern construction fill is evident on the surface. The surrounding areas are in present use as a plant nursery. There is no indication of archaeological material on the building site itself or in the surrounding area. In short, the building of the proposed structure will have no impact on archaeological resources.

Sincerely,



Hallett H. Hammatt Ph.D.

Appendix D

**A CULTURAL IMPACT ASSESSMENT FOR
TMK: 4-9-03: 1 LOCATED IN
HAKIPU'U AHUPUA'A, KO'OLAUPOKO DISTRICT,
ISLAND OF O'AHU**

MARCH 2004

**Prepared for: Mr. Steve Paty
Tropical Farms
49-227A Kamehameha Hwy
Kaneohe, Hawaii 96744**

**Prepared by: Archaeological Consultants of the Pacific, Inc.
Amy Bevan, B.A.
Mina Elison, B.A.
Joseph Kennedy, M.A.
59-624 Pupukea Road
Haleiwa, Hawaii 96712**



Inventory Reports * Data Recovery Reports * Research Design Documents * Monitoring * Due Diligence Work * Historical Studies * Cultural Studies * Burial Treatment Plans * Preservation Plans * Interpretive Reconstructions * Restorations * Qualified Expert Witness Testimony

**59-624 Pupukea Road Haleiwa, Hawaii 96712 Phone: 638-7442/Fax: 638-0703
e-mail: archaeologypacific@hawaii.rr.com**

Abstract

A Cultural Impact Assessment has been conducted for TMK: 4-9-03: 1, located in Hakipu'u on the Island of O'ahu. A small portion of the subject property is scheduled for use as a country store within existing structures at 49-227A Kamehameha Highway. The purpose of these investigations was to gather information about cultural practices and cultural features that may be affected by actions subject to Chapter 343, HRS, and to promote responsible decision-making.

The current study took the form of a historic background study and community consultations. The historic background research addresses traditional accounts and land use for the Hakipu'u and Kualoa Ahupua'a. Cultural material and historical information collected and presented in this report includes the area of Kualoa as the subject property is located on the boundary of Hakipu'u and Kualoa Ahupua'a. Community consultations addressed concerns of community members regarding the affect of the existing activity on places of cultural or traditional importance.

As a result of the current study, recommendations regarding the present activity on cultural practices and features associated with the project area have been made. Informants express no objections to the use of the area as a country store with regards to any areas of cultural or traditional importance. Because of required archaeological investigations previously conducted in Hakipu'u and Kualoa, support of the present activity by community members, and the fact that boundary of activity would occur within the proximity of existing structures on the subject property, no further archaeological investigations are recommended.

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A Cultural Impact Assessment for TMK: 4-9-03: 1, Located in Hakipu‘u Ahupua‘a, Ko‘olaupoko District, Island of O‘ahu

Section 1: Introduction

At the request of Mr. Steve Paty of Tropical Farms, Archaeological Consultants of the Pacific, Inc. (ACP) has conducted a Cultural Impact Assessment for TMK: 4-9-03: 1 located in the *ahupua‘a* of Hakipu‘u, district of Ko‘olaupoko, Island of O‘ahu (see Figures 1 & 2). The subject property is currently owned by Kualoa Ranch. The subject area is undergoing permitting processes for an existing structure on the *makai* side of the road southwest of the entrance to Kualoa Park.

The purpose of this document is to comply with the requirements of Chapter 343, HRS, as administered by the Office of Environmental Quality Control as part of the Environmental Assessment process which requires that environmental assessments (EA) and impact assessments (EIS) identify and assess the potential effects of “a proposed action on cultural practices and features associated with the project area.” These investigations were conducted in an effort to promote and preserve cultural beliefs, practices, and resources of native Hawaiians and other ethnic groups.

Section 2: Environmental Setting

The subject property (TMK: 4-9-03: 1) is located in Hakipu‘u Ahupua‘a, Ko‘olaupoko District, Island of O‘ahu (Clegg 2003). The project area is comprised of one parcel is located on a coastal plain, southeast of Kamehameha Highway between Kualoa Road and Johnson Road approximately 400 feet *mauka* of Mōli‘i Fishpond. The property is approximately 550m from the coast with an elevation range of 40 to 80 feet above mean sea level. Average annual rainfall is between 50 and 75 inches (Armstrong 1973:56).

Figure 1: Project Location on a Map of O'ahu

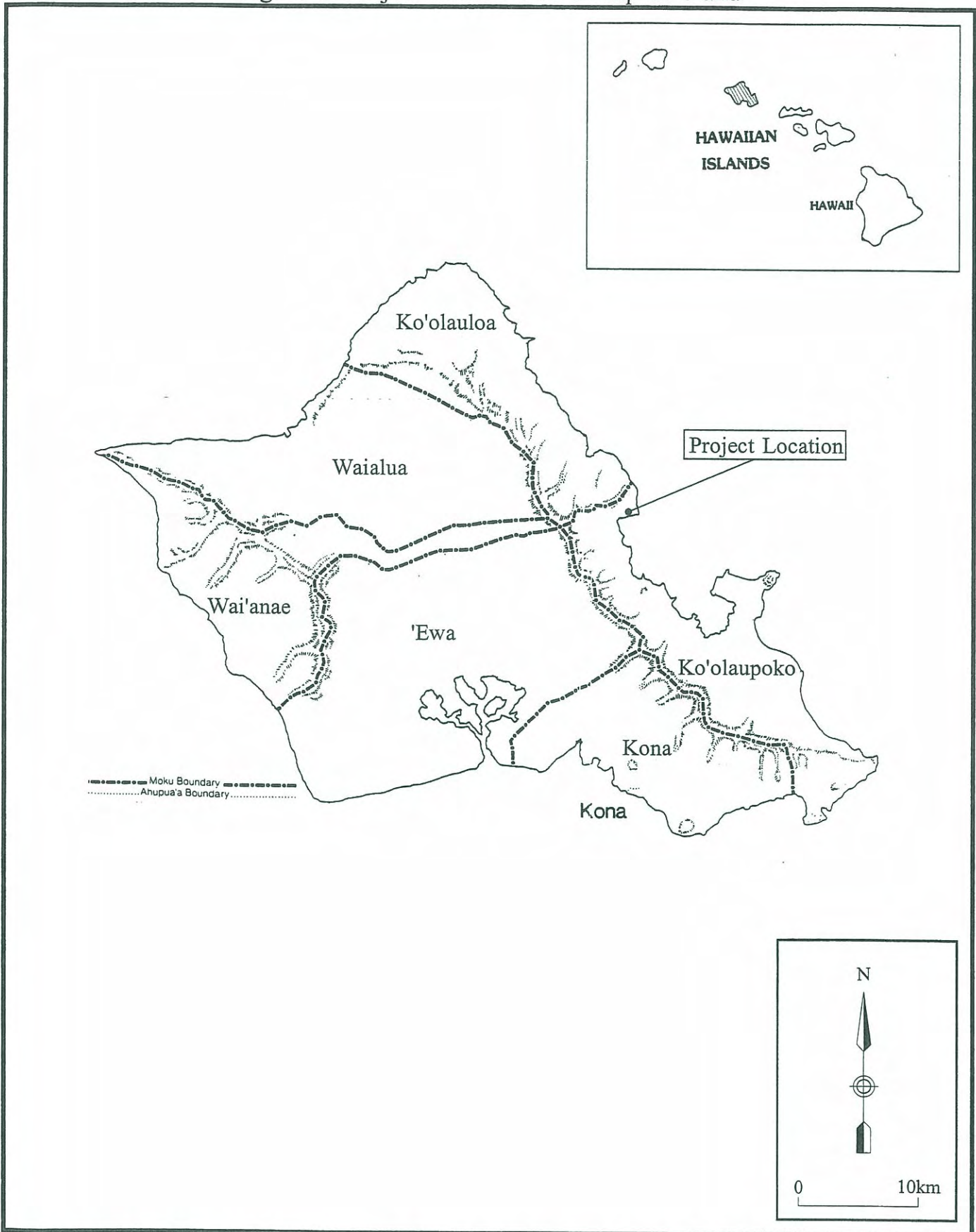
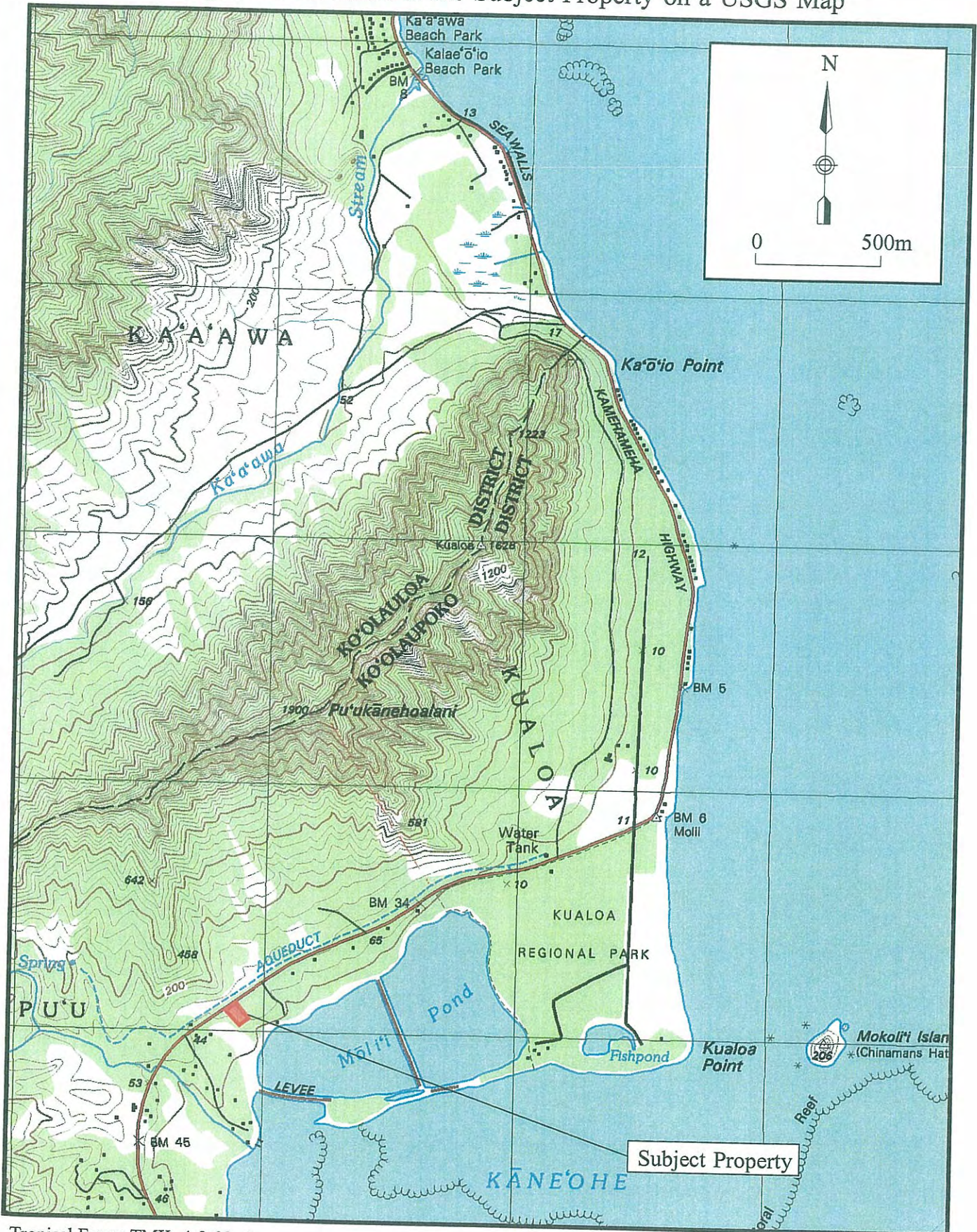


Figure 2: Location of the Subject Property on a USGS Map



Tropical Farms TMK: 4-9-03: 1

source: U.S.G.S. 7.5 Minute Series (Topographic)
Kahana Quadrangle 1992

Section 3: Method of Evaluation

The current assessment was conducted in January of 2004. The project was conducted under the direction of the Principal Investigator, Joseph Kennedy, M.A.. Community consultations were conducted by Mina Elison, B.A.. Report preparation was completed by Amy Bevan, B.A., Mina Elison, B.A., Michelle Elmore, B.A., and Joseph Kennedy, M.A..

Though the project area in question is merely comprised of one parcel, the geographical extent of inquiry for the current study includes the entire *ahupua'a* of Hakipu'u. Research of the historic background of Hakipu'u and Kualoa Ahupua'a was conducted including an examination of traditional accounts, land use from earliest occupation to present day, archaeological investigations and a summary of settlement patterns. This research was conducted by means of researching historical texts and documents, such as (but not limited to) *Sites of O'ahu* (Sterling & Summers 1978), Beckwith's *Hawaiian Mythology* (1970), "Heiau and Heiau Sites Throughout the Hawaiian Islands" (Thrum 1907), Handy's *The Hawaiian Planter* (1940), *Native Planters on Old Hawaii* (Handy & Handy 1972), *Archaeology of O'ahu* (McAllister 1933) and *Place Names of Hawaii* (Pukui, Elbert & Mookini 1974). An examination of Land Commission Awards was completed by researching the Board of Commissioners to Quiet Land Titles (1846-1855) Native and Foreign Registers and Testimonies Award Books at the Archives of Hawai'i in Honolulu. Research relating to previous archaeological investigations was conducted at the Department of Land and Natural Resources, State Historic Preservation Division (DLNR-SHPD) library in Kapolei.

Individuals and organizations with expertise concerning cultural resources, practices and beliefs in Hakipu'u, as well as those knowledgeable of the area potentially affected by the proposed development, were identified and contacted, and willing individuals were consulted. Mr. Steve Paty recommended Mr. Simeon Nae'ole and Mr. and Mrs. George and Ellen White to be interviewed. Mr. Simeon Nae'ole was contacted by telephone and recommended Mr. and Mrs. George and Ellen White to be interviewed. Mr. and Mrs. White were contacted by Steve Paty. Interviews were conducted on January 27, 2004 on the Tropical Farms property.

A list of interview questions was compiled for the cultural consultations. These included the informant's full name, address, birth date, birthplace, ethnicity, historical and geographical associations with the place in question, and finally, how the proposed development would affect or physically alter any place of cultural/traditional importance, or access to any such place. Cultural consultations were conducted in person, and the interviews were recorded by audiocassette. This report provides complete transcriptions of all cultural consultations.

Section 4: Archival Background of Hakipu‘u and Kualoa Ahupua‘a

The subject property is located in the *ahupua‘a* of Hakipu‘u, district of Ko‘olaupoko, Island of O‘ahu. Hakipu‘u Ahupua‘a is bordered on the north by the *ahupua‘a* of Kualoa, to the east by the Pacific Ocean, to the west by Mōli‘i Fishpond and to the south by Waikane Ahupua‘a. Hakipu‘u is literally translated as “broken hill” and is said to be the home of Kaha‘i, a famous navigator who lived in the area and traveled to Samoa to bring back seeds and breadfruit. Kaha‘i was so respected that in 1795, Kamehameha I lowered the sail of his canoe in honor of his memory (Sterling and Summers 1962 in Pukui, Elbert & Mo‘okini 1974).

Kualoa literally translated means “long back” (Pukui, Elbert & Mookini 1974). Ancient Hawaiian also called Kualoa, Paliku meaning “vertical cliff” because of the long ridgeline that ran across the northern boundary of the *ahupua‘a* (*ibid.*).

Now Paliku is the name of one of my ancestors. Paliku, the cliff, is the one that divides Koolaupoko and Koolauloa. It was named for my ancestor, the one that stands at the head of my geneology (Poepoe, J.M. in Sterling and Summers 1978:183).

Section 4.1: Traditional Accounts and Land Use in Hakipu‘u and Kualoa Ahupua‘a

Traditional Accounts

The Hakipu‘u and Kualoa Ahupua‘a are rich in legendary and traditional accounts. In October 1974, the entire Kualoa Ahupua‘a, approximately 540 acres, was placed on the National Register of Historic Places (State site number 50-80-06-528), recognizing its significance in Hawaii’s past (Gunness 1978:4). Kualoa is listed on the National Register as having “valuable” statewide significance (*ibid.*). The Oahu chiefs and priests held the land of Kualoa in high regard because of its symbol of sovereignty and independence for Oahu. Kualoa’s position as a center of political and social importance elevated it to one of the most sacred places on O‘ahu (*ibid.*).

There are numerous additional references to Hakipu‘u and Kualoa in Hawaiian legends, mythology and traditions. Along with holding the sacred drums of Kapahuula and Kaahuulapunawai, Kualoa was home to the story of Ku-mahana. Many were dissatisfied with the rule of Ku-mahana on O‘ahu because of his failure to listen to the sage counsel of others, his tendency to sleep late and lack of generosity (Kamakau 1992:129). The chiefs and leading *kahuna*, Ka-‘opulupulu, planned to bring Ka-hahana over from Maui to rule. Ka-hahana was taken to Maui in his infancy as the foster son of Ka-hekili. As Ka-hahana was leaving for O‘ahu, Ka-hekili turned to him and said:

I permit you to go. Only do me this favor, that when you are firmly established on Oahu you let the land of Kualoa and the ivory that drifts ashore be mine; let these be my property on the island.” (Kamakau 1992:129).

Ka-hahana and his wife, Ke-kua-po‘i, left for O‘ahu accompanied by chiefs and paddlers. The chiefs, counselors, *kahunas*, warriors and commoners all came to greet them as they landed at Kahaloa in Waikiki (*ibid.*). Ka-hahana ruled O‘ahu not by bloodshed or war, but with complete acceptance by all from 1773 to 1781 (*ibid.*:130). After his rule was established, Ka-hahana informed his counselors, chiefs and governors of Ka-hekili’s request for the ivory that came ashore at Kualoa (Kamakau 1992:129). Some men approved and others did not. Ka-‘opulupulu, the lead *kahuna*, was brought in to counsel Ka-hahana. He said:

O Chief! If you give away these things your authority will be lost, and you will cease to be a ruler. To Kualoa belong the water courses of your ancestors, Ka-lumaluma‘i and Ke-kai-hehe‘e; the sacred drums of Ka-pahu-‘ulu, and the spring of Ka-‘ahu-‘ula; the sacred hill of Ka-ua-kahi son of Kaho‘owaha of Kualoa. Without the ivory that drifts ashore you could not offer to the gods the first victim slain in battle; it would be for Ka-hekili to offer it on Maui, and the rule would become his. You would be no longer ruler. Had the country been your by conquest, it might be proper for you to reward your uncle, but your authority was given you by the chiefs because of your uncle Ku-mahana’s mismanagement. Any other requests of Ka-hekili you might have granted, but not this. And be sure not to conceal from me any further secret message that Ka-hekili may send (Kamakau 1992:129).

McAllister brings to life a legend concerning the ridge of Pu‘u Kanehoalani, which overlooks Kualoa (site 309), (McAllister 1933:167).

The names of the rocks have been forgotten and only a portion of the story is remembered. The woman went to the beach to get crabs one evening, but being slow she did not have enough by and on this account she and the children were changed to stone. In the same vicinity is a stone resembling a sheep which is called *hipa*, and at Puu o Mahia, a lion stone, *Puu Liona*, both of which are pointed out and thought by the present Hawaiians to be of legendary significance. As neither sheep nor lions were supposedly known to the Hawaiians before the advent of Europeans, the difficulty of determining how much of one’s information is imaginary, or has recently been concocted, is apparent. Raphaelson (68, p. 33) believes that lion to be Kauhi; Emerson (32, p. 91) located Kauhi at Kaliwaa Valley, though later (32, p.96) he places it at Kahana (McAllister 1933:167).

Haumea and her husband Wakea, the ancestors of the Hawaiian people, made their home at Pali-ku, now known as Kualoa, after being washed to sea by a great tidal wave while engaging the soldiers of Kumuhonua (Sterling & Summers 1978:184).

A tidal wave suddenly arose and washed Haumea, Wakea and all of their followers to sea. They swam around until they were almost exhausted. Kamoawa, the kahuna, suggested that Wakea cup his hands together to represent a heiau. He caught a humuhumu-nukunuku-a-puaa and stuck it head first into the cupped hands to represent a pig. Then the followers swam around Wakea in a procession dedicating the “heiau.” As soon as this was finished, the sea washed them ashore on an island outside of Kahaluu called Moku-Kapapa (Synopsis by Mary Pukui in Sterling & Summers 1978:184).

After her experience with the tidal wave, a high shrine was built to Lono, the god of storm, who saved Wakea and Haumea from the flood (Clark *et al.* 1991:5).

Fornander (Polynesian Race, Vol. 2:278), in Sterling and Summers (1978:178), confirms the sacred nature of Kualoa,

During his youth Kualii was brought up sometimes at Kailua, at other times at Kualoa. One of the special tabus attached to Kualoa, whenever the chief resided there, was that all canoes, when passing by the land of Kualoa, on arriving at Makawai, should lower their masts and keep them down until they had passed the sea off Kualoa and got into that of Kaaawa. I note the tabu and the custom, but I am not certain of the underlying motive. It may have been a religious observance on account of the sacred character of the "Pali o Kualoa." Or a conventional mode of deference to the high chief residing there. It was strictly observed, however, and woe to the infractor of the tabu.

Although Fornander was uncertain of the motive, Handy and Handy proposed that all followed the custom of lowering sails when passing Kualoa because it was the site of the shrine and priestly order of Lono (Handy & Handy 1972:447).

It is said that Hi'iaka, sister of Pele, had slain a dragon, or *mo'o*, who was trying to prevent her passage as she headed *mauka* from Hakipu'u. The island of Mokoli'i was formed as she threw his flukes out to sea (Fornander in Sterling & Summers 1978:182).

Sterling & Summers (1978:183) tells the story of Kamapua'a, the half-man/half-pig being, and his connection in the creation of the hole in the mountain at Kualoa.

Pele was chasing Kamapuaa and he dodged in behind the Kanehoalani ridge and hid. She was so mad she didn't see him as she rushed by in her rage and swept on down the coast (Rosamond S. Morgan, 1964 Informant in Sterling and Summers 1978:183).

The holes in the mountain were made by Kamapuaa while he was fleeing from Pele. After hiding in the hollow in Kualoa on the Swanzy place, he got up and went through the mountain (Bernice Judd, 1953 in Sterling and Summers 1978:183).

Gunness (1991:6), describes a story in which a young shark demi-god made his home in a pond at the end of Kualoa Point. The local people fed and took care of the young demi-god and in return he protected the people from other sharks when they went to collect food out on the reef (*ibid.*). One day, a new *konohiki* arrived wanting to keep all the fish in the pond for himself. He refused to let the people feed the shark god and soon the shark god began to wither away. The shark god's father came by one day to check on his son and noticed his terrible state. When the father discovered that this was the doing of the new *konohiki*, he washed him away and destroyed the pond with a tidal wave. Since then, the people must be watchful for sharks when they enter onto the reef at Kualoa.

One other story relating to sharks is talked of in Kamakau (Kamakau 1964:73-74 in Gunness 1991:6). It is said that a shark inhabited the waters off Mokoli'i, at Hakipu'u and Kualoa. The shark nipped his only tooth to warn swimmers of the presence of other, more dangerous sharks.

The entire Kualoa Ahupua'a was said to be a place of refuge, or *pu'uhonua*, by Thrum (1911:152) and Kamakau (1964:18) (Gunness 1991:7).

The place of refuge in ancient times was a piece cut off from a district, and Kualoa, which was a very sacred place of refuge where a man condemned to die was saved if he entered it (Kamakau in Sterling & Summers 1978:178).

Ralphaelson, in Sterling & Summers (1978:178), gives testament to the training of young chiefs on the grounds of Kualoa.

Always this has been sacred soil. To the base of the hills, the newborn children of chiefs were brought. Here they lived with their foster-parents. They were trained in the arts of war and the ancient traditions of Hawaiian chiefs.

Kalaeoka'o'io, the dividing point between Kualoa and Ka'a'awa, was where the wealth from the *makahiki*, an ancient festival lasting four months from mid-October, was distributed and processions ended (Clark *et al.* 1991:7).

Land Use

According to Mr. George Roberts, the narrow *ahupua'a* was unsuitable for taro but was a famous place for growing *wauke* (Handy 1940:94). Handy places Koholālele Fishpond just east of Mōli'i Fishpond on flatland named 'Āpua, near the south end of Kualoa (*ibid.*). Mr. A. F. Judd told Handy that "his father, Dr. G.P. Judd, told him that he remembered when the pond was excavated and that it had originally been a taro *lo'i*. According to Mr. Judd, there was a striking similarity between the excavation of taro pits with those on islands in central Polynesia (*ibid.*).

Dr. Gerritt P. Judd, minister and head of the Land Commission for Kamehameha III, bought 627 acres at Kualoa for \$1,300 in 1850. With Kualoa being so far from his home in Honolulu, Judd entrusted the land to Mr. Rowe. Judd practiced diversified agriculture, growing arrowroot, melons, figs, grapes, peanuts, mangos, corn and sweet potatoes. There was a portion of land set aside for his saddle and carriage horses to graze. In 1855, Rowe departed for California. In mid-1855, Judd leased the farm to 88 Hawaiians who eventually let the land deteriorate into a state of disarray. Judd returned in 1857 and noted: "Desolation runs riot. Not much is left of its former glory" (House of Judd 1930:64 in Gunness 1987:24). Frustrated with his farming venture, Judd deeded the land to Charles H. Judd, his son, and his son-in-law, Samuel G. Wilder in 1860 (Gunness 1987:29).

Sugarcane arrived in Kualoa circa 1860 with a sugar mill erected north of the Kualoa Peninsula (Goodman 1991:7). Tragedy struck for the Wilder family when their son died after falling into a boiling vat of syrup (*ibid.*). Low sugar prices, poor cane quality and the death of their son drove Judd to close the sugar mill in 1871 (Gunness 1987:29). Then in 1871, Charles H. Judd turned Kualoa into a ranch under his control. Since that time, most of the Kualoa Ranch has been used for the grazing of cattle and horses (Gunness 1987:29).

Gunness' analysis of LCA's indicated that fourteen of the twenty-five Land Commission Awards (LCA's) located within the park, were listed as being former house sites. Six houses were on the northern section of the east beach, along with 8 houses and 8 taro patches in the northwestern corner of the park (*ibid.*). Other scattered LCA's, registered to the same individuals, were listed as having sweet potatoes and paper mulberry under cultivation (*ibid.*).

In the 1930's, a piggery was located just east of Mōli'i Fishpond and ran into the 1950's (*ibid.*). An emergency landing strip was constructed in 1930 along the east beach of the Kualoa Peninsula (Gunness 1987:30). With the onset of World War II, the U.S. Army took over Kualoa Ranch. After the attack on Pearl Harbor in 1941, the landing strip was extended to 6,000 feet long with a steel landing mat and grass runway. In 1951, the airstrip was used to train pilots but was eventually closed because traffic on Kamehameha Highway had to be stopped each time a plane needed to land or take off (*ibid.*) Pillboxes were constructed during World War II along Mōli'i Fishpond and the coast. A motorpool, paved with coral, and a masked plane parking area also existed on the Kualoa land (*ibid.*).

In 1957, upon the return of the land to Kualoa Ranch, the southeast corner of Mōli'i Fishpond became the site of a house built by the Morgan family (descendants of the Judd family) (Gunness 1987:31). From 1966 until 1974, the City and County of Honolulu worked to turn 154 acres at Kualoa Point into a City and County park (*ibid.*). The Morgan home now serves as the home to the Kualoa Park offices. North of the central pond is a tree nursery which was previously planted in corn (*ibid.*).

The population trend of Ko'olaupoko District should be mentioned. The District followed the same population trend that occurred on all the Hawaiian Islands in the mid-19th century (Devaney, Kelly, Jae Lee & Motteler 1982). The area held a relatively dense population, approximately 4,987 people at the time of the 1831 census, despite its lack of political power (*ibid.*). By the time of the 1835 census, the population of the district dropped to a total of 4,636 people. The years 1848 to 1849 was disastrous as the measles, the whopping cough, diarrhea and influenza claimed nearly half of the population of the district (*ibid.*). As the years passed, the population began to steadily increase. By 1910, the population had reached 3,251 people and continued to gradually climb until 1940. The years between 1940 and 1950 saw rapid urbanization, which caused the population of the district to skyrocket from 9,006 people to some 20,779 people (*ibid.*).

Section 4.2: Previous Archaeological Work

A number of archaeological investigations have been conducted within Kualoa Ahupua'a. J. Gilbert McAllister (1933) was the first to conduct a formal survey of seven sites in the Kualoa area, Sites 307-313, which consisted of a cave of legendary fame, an artificially faced terrace, three rock forms, Niuolaa *Heiau*, Mokolii Island, Koholālele Fishpond and Molii Fishpond. Immediately adjacent to and west of Kualoa Regional Park is the first site, Mōli'i Fishpond (Site 313). In 1974, Mōli'i Fishpond, as well as the entire *ahupua'a* of Kualoa, was placed on the National Register of Historic Places due to its excellent preservation and potential for interpretation (Gunness 1991:10).

Formed by inclosing a bay-like area covering 124 acres. The eastern portion of the wall is now a rather wide sand embankment, with stone facings in narrow portions. The southwestern portion of the wall is narrower and of stone construction. The entire wall approximates 4000 feet in length. Just to the east is a smaller pond, now not used. The walls here are a sand embankment with a stone wall on the sea side (McAllister 1933:168).

'Āpua Fishpond, not assigned a site number by McAllister, lies just east of Mōli'i Fishpond, near the end of the drive that leads into Kualoa Regional Park. 'Āpua Fishpond is sometimes confused with the nearby Koholālele Fishpond, which is farther inland and described as "a long ditch filled with brackish water." (James 1991:58) A.F. Judd, in McAllister's text (McAllister 1933:167-168) mentions the following on Site 312, Koholālele Fishpond, otherwise called 'Āpua Fishpond by James. Van James states that 'Āpua Fishpond, along with Mōli'i Fishpond were constructed by *menehune* in prehistoric times. Koholālele Fishpond was also said to have been constructed by *menehune*, according to A.F. Judd (McAllister 1933:168).

Archaeological investigations have brought to light several monuments of which the Hawaiians have always disclaimed the making. The pond in the land of Apua at Kualoa on the Island of Oahu is a notable example (Judd 1903).

McAllister gives life to the dialogue between he, Mrs. F. M. Swanzy and Mr. A. F. Judd with regards to determining the location of 'Āpua and Koholalele Fishponds.

When one considers the crude tools with which the Hawaiians had to work, this is a remarkable undertaking, for many tons of dirt were removed. This, of course, assumes that the Hawaiians built the pond, a fact which will probably never be known. The purpose for which it was made is also not known. It seems incredible that it was built primarily as a fishpond, for it was easier to inclose a small area along the shore as the Hawaiians usually did when making their fishponds.

Mrs. F. M. Swanzy tells me that in the journals of G.P. Judd mention is made of a ditch being dug in Apua, which was not completed. Koholalele is probably this ditch, though Mrs. Swanzy is inclined to believe that it is still older.

The name of the pond was given to me by Mr. Judd. (McAllister 1933:168).

‘Āpua Fishpond may have been used as a holding pond for Mōli‘i Fishpond until World War II. During WWII, ‘Āpua Fishpond fell into disuse and today it is a habitat for endangered species of water birds (Gunness 1978:9).

Koholālele Fishpond (Site 312), was situated in the center of the present day Kualoa Regional Park (Gunness 1991:9).

Relatively long and narrow, 885 feet long and 30 feet wide on the northeast end. The southwest third (248 feet) is considerably wider, measuring 85 feet. This gives the appearance of a long, narrow neck to the third that bulges out. The pond has been artificially excavated, and the water stands about 4 feet lower than the surrounding plain. The earth which was apparently dug from the site is mounded up to approximately 4 feet above the plain on three sides of the pond, the northeast side being open, with the appearance of a slight depression running toward the sea. The water, therefore, is about 8 feet below the top of the surrounding embankment. It is brackish in taste and stood 1 to 2 feet deep (McAllister 1933:167-168).

Niuolaa Heiau (Site 310) was located in the northwestern corner of the park. A local informant pointed the site out to McAllister, although nothing remained at the time of his survey in 1933 (Gunness 1991: 9). From McAllister’s text:

Niuolaa heiau, near the Mormon Church in Kualoa, near the Hakipuu boundary. Nothing remains of this site (McAllister 1933:167).

One site not recorded by McAllister was the *heiau* of Pahulu (Gunness 1991:9-10). It was said to be located “on the Kaneohe side of the Judd place about six hundred feet away from the old sugar mill at Hakipu‘u and out in the water towards Mokuli‘i.” (*ibid.*)

As a result of Kualoa’s placement on the National Register of Historic Places, an archaeological survey was required for Kualoa Park. It was in 1974 that William Barrera Jr. conducted a reconnaissance survey with subsurface testing on areas along the beach that had already been developed (Gunness 1991:10). He discovered a discontinuous cultural layer containing one human burial, post molds, fire pits and pits. From the many artifacts that were found, volcanic glass yielded three dates of A.D. 1639, 1646 and 1668 (*ibid.*). It was this discovery, along with the presence of many artifacts such as, fishing equipment, game stones (*‘ulu maika*), basalt flakes, hammerstones, choppers, adzes and adze fragments, that led Barrera to recommend more archaeological work be done in Kualoa (*ibid.*).

Barrera’s recommendation led to the development of the Kualoa Archaeological Research Project (KARP) in December of 1974 (*ibid.*). The project was funded by the Comprehensive Employment Training Act (CETA) and under the co-direction of Stephan D. Clark and Robert D. Connolly III (*ibid.*). From 1975 to 1979, the park underwent significant archaeological work (*ibid.*). Subsurface test excavations were conducted in five areas that were scheduled for development. During the development, archaeological monitoring was also conducted. By 1979, nearly all of Kualoa had been surface surveyed (*ibid.*).

Near the end of 1979, the KARP project had run out of CETA funding and was terminated. Unfortunately, no reports containing the detailed work of the KARP project exist. According to Gunness (1991:11), a number of brief reports were sent to the City and County of Honolulu, Department of Parks and Recreation and the U.S. Army Corps of Engineers (*ibid.*:11).

From the time the KARP project ended in 1979 to 1985, one part-time archaeologist was present in the park (*ibid.*). In 1985, the archaeologist position was made full-time but on a limited-term contract. Some of the jobs of the on-site archaeologist was to monitor eroding beach burials, beach erosion and all bulldozing activity on the property, as well as, conduct extensive field testing for any new developments made within Kualoa Regional Park (*ibid.*).

Follow-up summer field schools from the University of Hawaii (Mānoa) were conducted in the park in 1983 and 1984 (*ibid.*). Jo Lynn Gunness provided an excellent report (her thesis to the University of Hawaii) in 1987 documenting all archaeological investigations from 1975 through 1985. In 1980, Hawaii Marine Research conducted limited subsurface testing along “two access roads and a 40ft.-wide easement along the east beach for the U. S. Army Corps of Engineers (*ibid.*). The purpose of the testing was to validate the presence of cultural materials in that area.

Section 5: Community Consultations

Several individuals were consulted regarding their knowledge and concerns about the affect of the existing activities on cultural practices and features associated with the project area. Interviews with these individuals were conducted in person. Interviews were conducted on-site and were preceded by a short, guided tour of the Tropical Farms property by Mr. Simeon Nae'ole. Information gathered from each individual along with his or her concerns is discussed below.

Section 5.1: Mr. and Mrs. George and Ellen White

Mr. and Mrs. White expressed their knowledge and association with the project area and Hakipu'u and Kualoa Ahupua'a. Mr. and Mrs. White currently live adjacent to the Tropical Farms property.

Of Hawaiian and Chinese descent, Mrs. White belongs to the Haili family which previously owned portions of the Tropical Farms property and Mōli'i fishpond. The land was given to Mrs. White's great-grandparents who worked for the King and received it as a Royal Patent. Although many family records were destroyed in a fire, Mrs. White stated that many of the properties owned by her family were divided and allocated to various heirs and family members. Mrs. White explained that a previous land-locked portion of the current Tropical Farms property and the fishpond were exchanged for an adjacent lot on Johnson Road, where their daughter, Ku'uipo McCarty currently lives.

Mr. George White became familiar with subject area after working on the premises harvesting bananas and performing various jobs in the 1950's. He was able to discuss previous structures such as a well and pump house which existed on the current subject property. He was also able to discuss former land use on the property that included the cultivation of banana, sorghum and corn.

For a short duration of the interview, Ku'uipo McCarty, daughter of Mr. and Mrs. White, was present and shared her experience taking Hanalei Ka'awa, a knowledgeable community member, to the back corner of her lot to see if any cultural sites existed before she built her house. Mrs. McCarty, who was the first person to ferry guests of the Ranch to "Secret Island", is currently working in the Education Department at Kualoa Ranch.

When asked if the existing operation would affect or alter any place or access to any place of cultural or traditional importance, Mr. and Mrs. White express no objections and agree that the facilities at Tropical Farms create an atmosphere which allows visitors to experience the real beauty, culture and history of Hawai'i.

Interview with Ellen and George White

Name: Ellen Jane Kuikalono White and George D. White

Address: 49-207 Kamehameha Hwy.

Birthdate: June 30, 1938 and March 21, 1938

Birthplace: Honolulu and Scottsdale, Arizona

Ethnicity: Hawaiian/Chinese and Caucasian

Ellen White [EW]: “All I know it that my mother or my grandmother inherited the land from her parents and then she gave the land to my mother, which is Hannah and then, um, I’m not sure if my grandmother lived here on the property. They died and then someone else came ... but we had many land and of course we did some exchanging, I don’t know this land is because it was a land-lock and we exchanged properties on Johnson Road, where my daughter lives. And as for the history, all I know, I remember my mom says that the land we got was a King’s Grant, because my grandparents worked for the King and those days the King gave his workers pieces of property and that’s how we got the property, and that’s all I know (laughs).”

ME: “*That’s a lot!*”

EW: “We had other pieces, but because we have so many heirs there that you have to give up, you know, ‘I’ll give you this share if you stay out of this other one, so then we came back down ... So where I live, and that’s one piece and where my daughter lives it was exchanged for this piece right here ... It was from my grandmother when she got the piece of land from her parents and then it went from my mom to me, that’s all I know—“

George White [GW]: “Where the coconut tree up here is, it used to be all bananas and then, down between these two ‘*ohai* trees, there was a well that was, uh, freshwater and sometimes brackish-water depending on the tides, and ... we used to harvest all the bananas off of this property from uh the first house we put up over here was in 1957, ok, but from 1957 until we exchanged the property with the Ranch, we used to come in here and harvest the banana, but since this piece of property was a *kuleana* and for some reason, when this piece of property became without an access, no right of way to it, and for some reason, the law pertaining to that piece of property during that period of time, the Ranch didn’t have to give us a right of way to the property, so we had the property there, but we had no right-of-way to it. So, it, it in reality was useless to us, so they, the Ranch wanted the piece of property so they approached us about it, and, and they said they had a piece of property on Johnson Road which is where we are now, so we just exchanged the two pieces of property—”

EW: “--and then there was an whole house right there, and my grandparents used to fish, they live on the fish from this pond, and then the house burned down, lost all the records that my great-grandparents had ...”

ME: “*So you grew up as a child here?*”

EW: “No, I grew up in La‘ie, I actually grew up in La‘ie, and then in ‘55 I think when my mom moved here ...”

GW: “In ‘57 was when they put the house up, the first house—”

EW: “Yeah, ‘57, the first house, but then she moved, was it ‘57 or ‘56?”

GW: “‘57—‘56 they were down here but they were coming everyday when they cleared all the ‘ohai trees and stuff but, ‘57 was when the house came because that’s when I started going with you and I was working in the house, um, re-doing the bathroom—”

EW: “My grandmother was probably born here, you know, but she never talked too much about it, ‘cause she was just brought here in ‘50, I mean ... I’m sure in the ‘50’s, early ‘50’s, she came back here because she found out that she had owned land and that was because when her other sister got hold of the deed, and didn’t tell this other sister about the land ... Hawaiians are so strange when they have dealings with each other, and so my grandmother went and fought with her to get the deed back, she wanted to see where the land was and I thought my mother moved here with my grandmother and they lived on the land in the ‘50’s, but otherwise, during that time, you know, this other sister knew about the land here you know, but my grandmother couldn’t remember she, she thought she had lived here, but, you know she was young at that time, you know and she just didn’t remember, and she was old already—”

GW: “She was in her eighties, yeah? In the 50’s when we moved back over here, she came down here to stay with her family and she—”

EW: “—she remembered her father no, she didn’t remember her father because she was, I guess one or two years old and her father passed away, and that’s about all of the oral history I know...”

ME: “*It’s interesting...*”

EW: “I wished I was raised here, you know ‘cause it’s such a nice place.”

ME: “*Did you ever come to the area as a kid to play around?*”

EW: “No, I never ... I went to Kamehameha School, so I came here, I think ‘56 I came here the first time, otherwise I was in La‘ie, my mom is the one that came here, my grandmother.”

ME: “*So, could you describe how you obtained knowledge about this place?*”

EW: “My mother, she got the knowledge from my grandmother. My grandmother, I don’t know, I guess she, she got it from her parents, but she was one or two years old when her father passed away, but then the people that lived in the house here, told my grandmother that, you know, her father is from Hakipu‘u, from Hakipu‘u and the wife from Maui. That’s about all I know. No workers because the workers [*tractor noises*]

Now the Ka‘awa’s, the house that went straight up here, their parents said that they lived at my grandparents house and the Ka‘awa’s—[tractor noises] the parents are dead but they have children there.”

GW: “They live across from Coral Kingdom in those three homes over there—”

EW: “—those are the Ka‘awa’s.”

GW: “That’s the Ka‘awa’s, his father ... uh, Calvin, yeah, Calvin Ka‘awa’s father was the one that knew all you now, historically about this property—”

EW: “—and the mother and the sister--”

GW: “—because when we got ready to build where Ku‘uipo is, we wanted to make sure there were no graves in there, you know, so he was the one that told us where and what you know, where people were buried and what ever you know so we wouldn’t run across any problems when we built over there.”

ME: “Over where?”

GW: “Over on Johnson Road—“

EW: “—on Johnson Road and where our house is. Their thoughts ... you know, there’d be bones over there, you know, we didn’t cross any, you know we dug around there.”

Ku‘uipo McCarty [KM]: “And us to, Hanalei came and before we went on the land we exchanged for, before we did anything, I went to see Hanalei Ka‘awa and I got him in my old Volkswagen and took him all the way to the back corner and said, ‘no baby you are fine here, but you look at that monkey pod tree, I mean, that mango tree, everything behind there you have to be careful because there are burials,’ I said ‘well uncle, how do I know?’ he goes, um, after the glass bottles came, they would take the glass bottles and put it upside down on the grave, so if you find plenty upside down glass bottles, that was just a marker that they had used, that’s what he explained to me, but before we touched anything on the land, he did that and then we had a blessing, so anything there was good and that’s on our piece over on that side, and we passed Hawaiian Preservation already (*laughs*).”

ME: [to Mr. White] “Do you know of any other structures in the area?”

GW: “The only things that were here before was the house up here, where, the house that’s up here that is part of the macadamia nut guys are using up in the front at one time, there was an Okinawan in there and this whole area was all bananas, he raised all bananas in here and he got the water out of this well that was over here, and, um, there was a small house that had the pump in it, by the well so the water could be pumped out to do the bananas, and um, when he, he got sick and I guess couldn’t raise bananas anymore and then the house sat there for quite a while, and then, the house, I guess belonged to the Ranch all that time then Joe King Souza moved into

the house and the house at that time had outside plumbing, the shower and everything was outside—it had running water and sink in the house, but everything else was outside, the toilet and the shower were in that small house and he had a shed up here where he worked his bananas, but other than that , there was no buildings whatsoever on the property until the Ranch put in a small shed over here, and then my daughter, Liahona worked there, and they sold flowers and, um, they had a little store there, you know, the store was originally down, down here on the, here on the fishpond. They had a store there and then they moved it up in this, the store down here was basically just for the tourists, when they'd come in and go out to this, the little island out here, they had t-shirts and stuff and they had fishing poles so that people could fish in here and whatever, you know, whatever they wanted to do. And then, that store, they moved it from there up on the hill, and the same stuff that they had down here, they had up on the hill. And then, um, when my daughter was there when these guys came from Kahuku down here, and set up their business in here, and this has been going well for all I know, I mean it's nice, you know, the land is being kept up better than it ever was before because all the tourists are coming through and they want the place to look nice, you know, and it looks nice, it's no eyesore for us to look out and see it you know, and the only noise you hear are these guys down here doing their fire dances or whatever, you know, which is no big thing, it kind of echoes out through all over you know, it's really nice, you know. 'Cause I remember when we first moved down here, this whole field down here was all sorghum and they'd cut the sorghum and let it lay there, you know, or, and if it wasn't sorghum, they were growing corn in there to feed the cattle and stuff, which you know, I mean, it was just . . . it wasn't nice like it is now with all of the flowers and, you know, and they keep it up real well, you know, Simeon and Ramone keep the place nice and clean, you know, it always looks nice."

ME: "Do you know of any particular legends or history?"

GW: "My daughter could tell you, not me. She teaches the handicapped riding for the Ranch and she's in the Education Department for the Ranch, so she brings the kids over and teaches the kids how to throw net down here in the fishpond and catch the 'opae, she was the first one that started using the fishpond here to ferry people out to the island, she's been around here for a long time."

ME: "What is that island called?"

GW: " . . . 'Secret Island' . . .this is Chinaman's Hat out here . . . "

ME: "Would the proposed construction physically affect or alter a place of traditional or cultural importance?"

GW: "I don't think so, everything that has been done around here has been done to better the place, you know, so more people can enjoy it, I don't know of anything that has been done to . . . desecrate, to me, I think it's really neat, that they've made the place a lot better than before and lots of people can enjoy it. I know the school-kids come down, they've got *lo 'i* up here and they show them how taro grows and they take them down to the fishpond and they show'em all about shrimp and, you know, those are the things the Hawaiians did before, you know, they raised their

own food and ponds like this, fishponds like this, I think it is making it much better myself, but ...”

ME: “*Would the construction affect an access to a place of cultural or traditional importance?*”

GW: “Doesn’t seem like it has, I don’t know, I mean they lock the place up at night so people can’t come in but as far as I know, anybody can come in as far as the macadamia nut factory and they, people walk all over the place all the time, I sit up in my living room all the time and watch them, I don’t see where they’re restricting anything from anybody, you know, they don’t want you in the fish in the fishpond, but that’s because some guy’s harvesting the fish out of there for his own livelihood, you know, I mean, (*laughs*), so then basically that’s stealing from him, you know, because they can’t, you know, they don’t have enough people to take care of it, so they’ve got one man that takes care of the fishpond, you know, but ... I guess at one time, this, all this in here belonged to my wife’s family, the fishpond and all, but over the years, it belongs to somebody else now.”

ME: [*to Ellen White*]: “*Do you think the proposed construction would physically affect or alter a place of cultural or traditional importance?*”

EW: “No, I don’t think so, no.”

ME: “*Would it affect the access to a place of importance?*”

EW: “I think what they are doing is wonderful, it brings the tourists out, if you don’t have that, they won’t come out to see the beauty and the culture, I don’t see how it would, you know harm the, whatever.”

Section 5.2: Mr. Simeon Nae‘ole

Mr. Nae‘ole expressed his knowledge and association with the project area and Kualoa and Hakipu‘u Ahupua‘a. The Kualoa Ranch is host to many school-groups, movie sets, wedding parties and is used for various activities because of it’s natural and preserved landscape and views. He has enjoyed working as a caretaker and guide at the Kualoa Nursery and Gardens for almost thirty years and thrives on sharing his knowledge about Hawaiian history, legends and culture with visitors from around the world.

Various legends of the sacred Kualoa area and landmarks were shared including the story of the *mo‘o* that Hi‘iaka had slain on her way to Kaua‘i—it’s dorsal spine becoming the “long-back” which Kualoa is named for, and it’s tail curling up and becoming Mokoli‘i (Chinaman’s Hat). He also described the story of the *kahuna* who collected whale ivory on the beaches of Kualoa and used it as offerings to the high *ali‘i* which allowed for the *kahuna* to stay in Kualoa. According to Nae‘ole, Kualoa is the designated home-landing for the sailing canoe which came back from the South Pacific, bringing to Hawai‘i the breadfruit as a gift for the king. He mentioned the government’s airstrip which was once located on the Kualoa Peninsula. During a

short tour of the Tropical Farms property, Mr. Nae'ole also pointed out the ridge of Kanehoalani which overlooks the Kualoa Valley and talked briefly of the sacred drums of Kapahu'ula and Ka'ahu'ulapunawai.

Mr. Nae'ole has obtained knowledge of the Hakipu'u and Kualoa Ahupua'a from first-hand experience working on the property, living on the windward side and reading literature gathered by his daughter who has a master's degree in Hawaiian Studies. To the interview, Mr. Nae'ole brought three sources of information which he has used to educate himself and others on the tour of the property. One of the sources was titled, "Guide to the Island of Hawai'i" which was given to him by a friend who conducts tours of O'ahu. The second reference was made up of various sources collected by his daughter including photocopies of the Kualoa section of Sterling and Summer's, *Sites of O'ahu* (1978), *Nā Wahi Pana o Ko'olaupoko: Legendary Places of Ko'olaupoko* by Anne Kapulani Landgraf, and several others. The remaining binder contained photos, illustrations and artistic interpretations of various legends, plants and views of the Kualoa area which he shares with visitors.

When asked if the proposed construction would affect or alter any sites of traditional or cultural importance, Mr. Nae'ole had no objections and supports the construction as a means to facilitate the further sharing of the beauty and culture of Hawaii with locals and visitors alike. He also noted that the proposed one-story building would match the environment and therefore, would not destroy or take away from the natural landscape.

Interview with Mr. Simeon Nae'ole

Name: Simeon Nae'ole
Address: P.O. Box 84, Ka'a'awa, 96730
Birth date: December 3, 1941
Birthplace: Ho'olehua, Moloka'i
Ethnicity: Hawaiian/Chinese

Simeon Nae'ole [SN]: I been with Kualoa Ranch for, between 28-29 years working at this beautiful landscape of Hawaii, that was once belonged to our King called Kamehameha III. It's a special place, as you can see that we have many obligation of our people that comes to Hawaii to visit the island of O'ahu and especially working in this beautiful landscape that was once a very, very sacred place that we can share the history, the culture behind this beautiful landscape. Today, I'm just being honored to share about the place that I'm working in, this nursery here that we call it Kualoa Nursery and Gardens and it is an honor to develop some of the plants and flowers that we can ship out to our customers from the U.S. or someplace else, to our cutting flowers that we send it to our local people that we like to come and purchase some of the flowers out in this area here. This morning to share with you about this beautiful area that I'm in which they called Hakipu'u which is one of the *ahupua'a* of this 4,000 acres of Kualoa. We have three sections of land; the property is divided into three sections of this 4,000 acres which Hakipu'u, Kualoa and Ka'a'awa which located the 4,000 acres of this beautiful landscape behind us.

Working out here in this area here, I never dreamed that I had an opportunity to become part of the caretaker of this beautiful landscape of our ancestors. The Hawaiian ancestors are in this area. The culture that we have, that we need to share among our different people that travels around the island of O‘ahu. I am very blessed in this area here to raised four of my beautiful children. And I like to share about this area here because I see so many people that comes through this area here, that we need to share about our island of O‘ahu that surrounds us about this beautiful landscape. The question that you will probably ask me about the culture and the things that I share with a lot of people, is that I am a Hawaiian—when you greet the people coming from all over the island to visit this place here, you greet them with the beautiful word of aloha, we share the word of aloha because there is a great meaning beside the word of aloha, it is the love that comes from within us that really represents the beautiful landscape. Beauty that comes from around this area here, as you see many flowers that bloom, that the flower that comes up and they develop the beautiful color that comes from where? It has to comes from the inside, and that is why we share the beauty that surrounds us, it comes from the inside that we can talk to people about our ancestors, about our culture about the learning of our things that surrounds here in this beautiful land of Kualoa because it is one of the greatest navigation area to our South Pacific. We built a sailing canoe to educate our young youths, how did our ancestors travel from the South Pacific to Hawaii and back to the South Pacific. I was very fortunate that I have a daughter that been the background, got a Masters in Hawaiian, that’s how I can translate a lot the important parts of this area here of Kualoa—especially Hakipu‘u is one of the things that we had one of our chief, or our kind that took a chance to sail to the canoe, took the canoe down to the South Pacific on his journey coming back home to the island of Wa‘u which our sailing canoe comes to, back to Kualoa which is the designated home landing for our sailing canoe to come back from the South Pacific and the thing is, he brought a gift for the King that came from Samoa, it was the breadfruit tree today the breadfruit tree was planted up in this beautiful valley in the background here that is called Hakipu‘u, and that is where the tree stands today and we do have activities and things that we share with our customers on the tour, on this property here to give them an opportunity to see what’s left of Hawaii. Because if you look at the windward side, it’s so beautiful compared to the leeward side of the island, because you have more houses going up, more highway, congested on that side, that, on this side, so the beautiful part of our living in this area here that I see, that is a value because I can relate with my culture and my background to relate about this beautiful landscape of Kualoa. That’s something to ask ...”

ME: “How did you get to know this area?”

SN: “O.K. Just to share with you, I worked construction for about eighteen-and-a-half years. Construction slowed down in 1975 they were not too much work at that time, so I was kind of like, laid off for about three months, so I was at home being a ... housekeeper, a father that took care of dinner and cleaned the house and all of those assorted things and yet to help my wife and my children when they come back from school and from work and then finally my wife took interest and one day said, because, you know I was the bread winner, but at that time I’m not because at that time, there wasn’t enough work, so what happened my wife set aside a time said she reconsidered trying for at least a month that we could do something, either pray or we could talk or share to bond ourselves so hopefully we have something that we can—so I believe that we did and I said yes to my wife and we did this, and we did a monthly meditation, which the 30th

day was on a Saturday and the 31st was on the Sunday. What happened is that the night, my wife had a beautiful dream for me that something was going to happen with—but I couldn't know what was going to be happen but she just said she had a beautiful dream because she woke up the next morning and she shared with me—she told me like this, 'there is something going to happen and it's beautiful that I can't tell you about it' and what happened is that I told her O.K. then we went to church with my family to give thanks and praise to the Lord. We came home and then my children went to bed. We all went woke up the next morning—that was Monday, it's the new month of the ... this person at seven o'clock in the morning came over and knock on my door and ask me if I would like to work for Kualoa Ranch. To this day here that I had an opportunity in July 19 to working for Kualoa Ranch to today I am still here yet at Kualoa Ranch in 2004. It's a blessing, it's a gift that I never dreamed that I had the opportunity because every Sunday when we drive home from church, when we bypass this area here, I always tell my family that someday I would like to work for these people. And this day came on July 19, 1975—1976 that I had an opportunity to work for Kualoa Ranch and to be, going to work for Kualoa Ranch, never dreamed that they were looking for an operator and I was an equipment operator, and my first day of working for Kualoa Ranch was in the back of my back yard cleaning a bush of trees in the back of this lot here. And the thing about it is that before I started to check the equipment out, everything when the foreman talk to me and I got on the machine and before I started to move the machine, it just so happened I glanced down on top of this air cleaner and there was the beautiful words saying 'God is love. And till today, God put me here for a reason, is to take care of what I see and what we need to share about and like—what we are doing today, hopefully that you will accept our input about doing something like this for the customers that come past this area.'"

ME: "So, what kind of legends do you know of this area, could you tell me about the history you know of the Kualoa area?"

SN: "Well, we talk about many things, about the front-side of Kualoa because Kualoa plays a very important role because of this landscape of this beautiful land here because it was very sacred during the time of our King. As you know, alongside the shoreline here, there was a tooth of a whale that came alongside here that plays very important in gathering that tooth because we have one of our *kahuna*, one of our chief *kahuna* that gathered the *ali'i* or his young warriors on top of this ridge here for a council meeting, so without that gift of the tooth, we wouldn't be able to come and that's why I have this photograph to share with you, this is the *kahuna*, this is the tooth, this is Chinaman's Hat down here which is located right on back here of the mountain, O.K. And further more, it talks about that little island of Chinaman's Hat and how it became upon that island that there's a legend that talks about a beautiful family that grew up in this area here of Kualoa, O.K.. This tall peak as you see the ridge of this tall mountain right here is named after the famous Kanehoalani, is named after Pele's father. Haumea was Pele's mom right, O.K.. The family grew up in this area here and there was a child named, that was born on this area here became very, very special because there was an uncle, I didn't know what his name was, he was the caretaker of this fire pit. He was looking for someone to become the keeper of this particular fire pit today, where it is located now on the island of O'ahu, on the eastside of the island called the Big Island of Hawaii. Her name was—she was chosen that she had to leave the property with her younger sister, Hi'iaka and the brother that built the sailing canoe that they sailed out to the

east. Upon sailing out of the east, upon going out there, she has called back, the echo that comes off this cliff here which the father has says, look for the brightest stars and follow the star that you find a new home. If you come upon this beautiful land of Hawai‘i, which she is now today, she battled that person that was keeping that fire pit, she’s now the caretaker of that fire pit. O.K., Pele gave the power to her sister Hi‘iaka to travel to Kaua‘i to meet a beautiful prince. Pele travels all over the island of O‘ahu, as you can see, some of the story tells about Pele came through Waialua side as she journeyed down the coast line, Pele—I mean Hi‘iaka came across here, as she came across the front section of the beautiful landscape of Kualoa, she met up with this huge *mo‘o*, which she battled the *mo‘o* which she, cuts the tail off, the tail falls into the ocean and coil up and becomes known as this island here which is called Mokoli‘i. The body lies alongside the ridge of Kualoa which is called long-back, long-spine of the huge animal. So today as you look at this ridge here, which I look at it would be, this would be the front section, this would be the one side of her leg and the other part and the tail kind of like the *mo‘o*, O.K. so just to share with you about the knowledge that I just look at it this way—I look and share because this place has so much aloha, so much love that comes from this beautiful land that we need to reach out to our people that comes around this area. Especially you today to giving me the opportunity to share with you about this historic area, because I have a guide that from one of my good friends that talks about the island that he takes the people around, so to him, giving some knowledge of him looking into this area here and talking about the four gods of our ancestors, and then to share with you the different things of what we share, like I do the tour on the property here by talking about Kualoa, talking about the sugar mill, what it was at that time, talk about the government, took over that front section of the property was used as an airstrip, and talk about the history about the whales tooth, yeah. And talk about the breadfruit tree. Talk about how the breadfruit tree came, we share about the canoe that was sailing from the South Pacific to Hawaii that brought the breadfruit. Then we share about the *hau* bush, about the rope and the things that they need to learn, talk about the sugarcane. Our ancestors during that time, how they had taken care, because they never had dentists and doctors to got take care of their teeth or pull their teeth, but they had a great set of teeth. But through the sugar cane that they chew, where the sweet was only a short period of time and it’s like you chew gum, you only taste for a little while but the fiber of that sugarcane that flosses their teeth that makes their gums strong and healthy, so they had a great set of teeth. And then we talk about the plant of our life which is called the *kalo*, it means taro. The taro brings our community and hands to working in this nutritious plant that give us the energy that comes from this plant that plays a very important role to our culture and to our history of our ancestry. Because of the, each plant that buries it’s *keiki* as the shoot comes up, that’s the energy that comes from this plants here. Our ancestors were very knowledgeable in agriculture because they use the moon to plant certain types of crop, mahilani, all these type of different moon for planting bananas, for planting sweet potatoes, planting you, all these different things of crop. So they were educated background of knowing how did, because if you do follow the certain things they had learned, if we can go back and look at it, our lifestyle would be much more easier than our lifestyle that we are in today. Today, we have so much things and today now, you press the button and the thing will tell you this is right and this is wrong. But, you know a lot of things today happen to our culture is the things that we look at the bad stuff that goes around that hurts our young youths today and hurts our community and does, destroys sometimes our tourist industry or people who comes here. But I am very fortunate to sit down and to talk to you and to tell you some of these things here because I look at it real responsible

for the things that surrounds us and we need to take care of the land that was given us and give us the strength and the value of our life.”

ME: *“It’s beautiful, thank you.”*

SN: “That’s why he like me to come.”

ME: *“Do you know what kind of structures used to be in this area?”*

SN: “Not that I know of, of that particular time, you know what I heard, there used to be a *heiau* back up in this area, in Hakipu‘u and ... that *heiau*, I was told that was in the back there, when I was working and I, I, that’s part I know about, just a little part that they said they was a *heiau* that related in this area. O.K., um, this part of the valley here, is still alive, yeah. It still have that *mana*, that strong feeling of being up inside that area. If you do get a chance to go up there, you can feel the power, come from this side here because that’s where they battled to keep Kualoa, up in this area, yeah. And the thing about it is that if we would lose Kualoa, we would lose one of the dye (?), that pink dye (?) that was in this area here, the value of this land, the strength of the power of this property right here, yeah. Because you see, Kahekili, one of the *ali‘is* from Maui, yeah, that’s why it takes interest to me to look inside this book here because it tells a lot of, you know, what it was at the time. It talks all about all of the area and the stuff like that and that is why I get my information through the things my daughter put together, you know the sites, and what’s the other part right here ... [looks through binder, shows different sources of information].”

ME: *“So how did you obtain knowledge of the area here?”*

SN: “Just by working in the area, you know. Just by doing a lot of things that my boss tells me, we clear the land for pasture, we try to clear the area because we used to cattle ranch. And, um, we were very fortunate to be very blessed that they diversified into something that we can share with people that come to the island like horseback riding, ATV, movie set tour, things that we need to look at it. It’s not only—and also preserving the land that should be preserved the right way to keep it as it is. Because today, Kualoa will always remain with this beautiful family that I work for and I have a great opportunity to work for them and to take care of what’s left of this beautiful surrounding of ours in Hawaii and Kualoa is one of the, um, historic areas that you can share the beauty, the culture, the love that comes from this area here and that’s more that I can—that’s how I feel that I can share it, and that what comes from the inside, you know, and yet when you have things you can talk to people you can share the things and show them something that they will look at it and they will feel what you are saying to them. And they will believe and like I said, you know, I never dream that I talk to people that came from all over the world that never know me at that time, but why do they walk away and they hug me after I get through talking to them. I mean it’s because they felt it, they felt that I was sharing that, that need that they need to know about our life, because they are all no different from who we are, you know. I said to them, you are our family from far away. You came to visit your family over here. And we represent this family that we need to talk about because God created all of us and yet we are one in his name and his blood and that is the greatest gift that I have and that’s why I wake up in the

morning and I always look at it this way, I am thankful that I can walk out the door and I can tell people, this is my office, this is where I work. And a lot of people say, 'is there any openings,' you see. And that is why I have people, you know, I can talk story and I can share because I know how they feeling because they feel great that we talk about this. Where can you find something like this? Where you can find the land that was given to this person that had the chance to become an advisor to the King and yet had an opportunity to purchase this beautiful landscape for the amount of money because it was cost a lot, but today, the value of this land here, money can never buy and never can be replaced again. But I just be thankful for the people who taking care of this land who will always remain as it is. Because this is what's left and this will never change until the young generation or what so ever might become upon to have this decided upon their family and their children so that the people are owning this here, it is a great pleasure and blessing for me to become the proper caretaker of this beautiful landscape. That should be your job and that's how I met some friends that we talk about a lot of ... you know, and the thing is that is why I got a chance to be that's why I go the opportunity to work in this environment. That's why I believe that my dad taught me something, that when you do something, you do it right. When you walk away, you clean up behind you and you leave it for the next person comes in that will do something besides you. That's what I learned, but I did not spend a lot of time with him because I was too busy doing other things ... But I've been blessed by this gift of being in this beautiful land here in Kualoa."

ME: "Do you think that the proposed construction would physically alter or affect a place of cultural or traditional importance?"

SN: "No."

ME: "Would it affect access to any kind of place of cultural or traditional importance?"

SN: "What I think it is, is that we need to create something that when our visitors come through Hawaii, they have a beautiful place to come to and to share about the area that we are in and they need to know about some of the things that we have that we are responsible to give them when they leave, because they will be our, how do you say it ... they will go back and they will go and share it among their friends and people that will advertise for us, the advertising part comes from sharing what I share with you, you will take it back and share it among your group of people because that's what you came here to look in to ask and that's why we are here to share the things--things that surrounds us in this particular area." [tape stops] "I hope that whatever needs to take to get something like this and to persevere and hopefully that things will work and accept what we try to share about this place here. And I hope that upon that things that I just share with you this morning, hopefully they realize that we not destroying and we are keeping the environment as it is and we are not changing it to become ... um, what you call, like a regular, I don't know how would you say it but, its—leave it how it is and leave it as natural as possible that you can share the *mana'o* and the culture about the surroundings here, this building, this here ... I mean, if you look out here in Kualoa and you supposed to look at someplace else that, down the road, that would not match it, the environment when you build a concrete structure, it doesn't fit in this environment. But you need to look around and build something that where it is ties in to the country life of our environment and that's, you got to look at it, accept it how it is. But

when you go in trying to build two-story concrete structures, then you destroying the beauty that surrounds us. But here, if you can do it, and yet keep it as an into the environment that we look at the surroundings then we must do it as the way we should do it—not change the environment, you know, we must keep it as it is. Keep it as, you can see those preserves for a reason, and yet not to develop into something that amazing (?) that way you destroying the beauty that was—that’s why you look at today as you drive around, you can tell, this is what’s left, and we tell people, from this, from Kane‘ohe, from Waimanalo, Kane‘ohe out to Hau‘ula, La‘ie, all that side is preserved, and yet, why is it that way ... yeah, and you don’t want to see too many things building. And that’s why you look at the leeward side, they can develop because what was once a industry of agriculture, took away lot of our agriculture land, took away things for working of our people. Because why, you look at it because of the cost of labor, that’s why a lot of good things been shut down—like shutting the mill down, shutting your plantation down, shutting a lot of the island sugar mills and stuff like that, yeah, so we, where are we going to go next? So we have to look at it at our tourists that comes to Hawaii that we have to take care, because they are the ones that comes to visit, so we responsible for the things that surrounds us in our environment, so we must take of the land that was given us today and keep it as it is. Do the best we can, share the beauty and yet protect it. Like they said, *mālama* the da kine, you know, *mālama* the land (laughs).”

Section 6: Summary and Recommendations

Summary

From the traditional accounts of Hakipu‘u and Kualoa, it can be seen that the area was a focal point in Hawaiian mythology. The placement of Kualoa and Mōli‘i Fishpond on the National Register of Historic Places in 1974, further signifies the importance of the area from a cultural perspective. A diverse agricultural history occurred in the Hakipu‘u/Kualoa area, beginning with the earliest use of littoral resources, to the use of the fishponds and the cultivation of *wauke*, arrowroot, melons, figs, grapes, peanuts, mangos, corn, sweet potatoes and *lo‘i*. With the beginning of World War II came several changes to the landscape through the U.S. Army’s addition of a landing strip, plane parking area, pillboxes and a motorpool to the Kualoa Ranch land. Though archaeological investigations in Kualoa have been few, they have identified subsurface cultural deposits in addition to burials, as well as agricultural features.

During the course of the ethnographic consultations, information regarding areas of cultural and traditional importance in the vicinity of the project area and in Kualoa Ahupua‘a was obtained from three *kupuna* from the Hakipu‘u area. Mr. and Mrs. White’s discourse related primarily to their recollections of subject property history and land-use, particularly because portions of the subject property along with Mōli‘i fishpond were owned by Mrs. White’s great-grandparents. Mr. and Mrs. White live on a parcel adjacent to the Tropical Farms property and consider the work that has been done on the property as beneficial improvements. When asked if the proposed construction would affect or alter any place or access to any place of cultural or traditional importance, Mr. and Mrs. White expressed no objections and agree that the facilities at Tropical Farms create an atmosphere which allows visitors to experience the real beauty, culture and history of Hawai‘i.

Mr. Nae‘ole conveyed his association with the Hakipu‘u/Kualoa area as well as his knowledge of legends and myths. When asked if the proposed construction would affect or alter any sites of traditional or cultural importance, Mr. Nae‘ole had no objections and supports the construction as a means to facilitate the further sharing of the beauty and culture of Hawaii with locals and visitors alike. He also noted that the proposed one-story building would match the environment and therefore, would not destroy or take away from the natural landscape.

Recommendations

As a result of the current study, recommendations regarding the proposed development on cultural practices and features associated with the project area have been made. Informants expressed no objections to the implementation of the proposed construction project are present with regards to any areas of cultural or traditional importance. Because of required archaeological investigations previously conducted in Hakipu‘u and Kualoa, support of the proposed construction by community members, and the fact that proposed construction would occur within the proximity of existing structures on the subject property, no further archaeological investigations are recommended.

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Appendix E



HIDA, OKAMOTO & ASSOCIATES, INC.
CONSULTING ENGINEERS

HARVEY K. HIDA, P.E.
ALAN T. OKAMOTO, P.E.

September 4, 2008

Mr. Henry Eng, FAICP, Director
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 8th Floor
Honolulu, Hawaii 96813

Dear Sir,

SUBJECT: Tropical Farms
49-227 Kamehameha Highway
Kualoa, Kaoolaupoko, Oahu
Tax Map Key: 4-9-03:por. 01

Based on my field observation of August 28, 2008 and my professional knowledge, information, and belief, I hereby testify the followings:

DRAINAGE:

The 1.12 acre Project Site, ranges in elevation from about 60 feet mean sea level (MSL) at Kamehameha Highway, to an elevation 35 feet at a southwestern corner, is relatively flat. Generally, the Project Site slopes in southwesterly direction at a 5-7% grade range. Except for the Tropical Farms' buildings, the Project Site primarily covered with pervious surfaces such as crushed coral, grass and landscaping. It appears that historical drainage patterns were maintained. Storm drain water sheet flow is detained and retained at an agricultural area surrounding the Project Site, promoting sediment trapping and velocity reduction. Thus continued operation of Tropical Farms is not anticipated to impact on the Molii Fish Pond, existing drainage nor stormwater quality.

Any grading work that was done in the past for the agricultural use of the property was minimal and appropriate. It appears that the grading work consisted of leveling and placement of coral for the area which has been used for agricultural vehicles parking for more than 30 years. The 1985 Building Permit for construction of the flower packing and storage facilities did not required Grading Permit and did not indicate that any grading work was required. Any additional grading work that would have been done to accommodate the Tropical Farms' use would have been at the edge of the coral parking area and have been less than 50 cubic yards, and thus a grading permit would not have been required. And it appears that the historical drainage patterns were not affected.

Should you have any questions, please contact me at 942-0066 ext. 11.

Very truly yours,

HIDA, OKAMOTO & ASSOCIATES, INC.

Harvey K. Hida, P.E.
President



cc: Mr. Don Clegg, Analytical Planning Consultants

Appendix F

Special Management Area Permit

The entire 58.6 acre Kualoa Ranch property is located within the Special Management Area (SMA). The SMA boundary runs along Kamehameha Highway. In 1985, Kualoa Ranch obtained approval for a Special Management Area Permit (minor) (85/SMA-107) for the original 840 square foot flower packing building. The flower building's construction value was stated on the 1985 building permit as \$17,000, which was less than the \$60,000 threshold at that time for a major Special Management Area (SMA) permit. An approved SMA Minor was issued on November 5, 1985 (**Appendix D**).

Tropical Farms will apply for a Special Management Area Permit for the expansion portion (2,153 SF) of the flower packing building (Building A) and for the 472 square foot "Island Lady" building (Building B). The following cost estimates have been prepared for the construction costs associated with these two improvements

Building A			
Total Building	2,993	SF	
Original permitted area	840	SF	
Expansion area	2,153	SF	
Post & pier construction	1,423		@\$40/SF
Slab on grade	730		@\$40/SF
Covered entry	50		@\$30/SF
Coffee Lanai	627		@\$25/SF
Building A Expansion Area			\$103,295
<u>Building B</u>	<u>472</u>	<u>SF</u>	<u>@40/SF</u>
Building B			\$18,800
TOTAL COST ESTIMATE			\$122,175

Dick Van Horn AIA, AICP
 46-035 Lilipuna Rd, Kanehoe, HI 96744

CONSTRUCTION ESTIMATE

FOR:
 KUALOA RANCH
 TROPICAL FARMS
 49-321 KAMEHAMEHA HWY.
 KA'AAWA, HI 96730

Building - A

TOTAL BUILDING	2993 SF		
ORIGINAL PORTION	840 SF		
NEW PORTION	2153 SF		
POST & PIER	1423 SF	@40 \$/SF	\$ 56,920
Post & pie, 2X8 joists & corrugated metal roofing, 2X4 stud walls with 1/2" sheathing			
SLAB ON GRADE	730 SF	@40 \$/SF	\$ 29,200
Slab on grade, 2X8 joists & corrugated metal roofing, 2X4 stud walls with 1/2" sheathing			
COVERED ENTRY	50 SF	@30 \$/SF	\$ 1,500
COFFEE LANAI	627 SF	@25 \$/SF	\$ 15,675
New Portion of Building - A TOTAL			<u>\$ 103,295</u>

Building - B

TOTAL BUILDING	472 SF	@40 \$/SF	<u>\$ 18,880</u>
			\$ 122,175

Construction costs are based on RSMeans 2006 Cost Data book using low end warehouse SF construction cost for Honolulu.

Appendix G

Tropical Farms' Vendors and Products Offered For Sale

In addition to supporting Kualoa Ranch and the Paty family's Kamananui Macadamia Nut Farm, Tropical Farms provides a crucial marketing opportunity to expose thousands of visitors a year to products made, grown and cultivated in Hawaii. Those products in turn become export crops such as macadamia nuts and candies, coffee, kukui and macadamia nut oils, Noni juice and lotions, health care products, fresh flowers, and Hawaiian salts and cooking products.

Tropical Farms has a significant positive economic impact on small agriculture-related businesses by providing a necessary outlet for numerous local cottage industries, as well as service businesses, on Oahu and throughout the Hawaiian Islands. Tropical Farms conducts business with 85 local vendors:

- Tropical Farms purchases agriculture-based products from 66 businesses. These products are then offered for re-sale to visitors at Tropical Farms.
- Ten (10) businesses sell services to Tropical Farms, such as septic system cleaning, trash pick-up and tree trimming.
- Five (5) local artists and craftsman paint and manufacture on site
- Tropical Farms purchases products from four (4) vendors that are not for re-sale. These are items used in the store such as display cases and paper and office products.

Tropical Farms conducts business with 85 Vendors

Vendors that sell products for re-sale at Tropical Farms	71	83.5%
Vendors that sell services to Tropical Farms	10	11.8%
<u>Vendors that sell products to Tropical Farms, not for re-sale</u>	<u>4</u>	<u>4.7%</u>
Total Vendors	85	100%

All 66 vendors that supply agriculture-based products to Tropical Farms for re-sale are located on Oahu and throughout the Hawaiian Islands. These vendors are relatively small businesses with 65 of the 66 vendors having less than 10 employees.

Location of Vendors

- | | |
|------------------|----|
| a. Windward Oahu | 12 |
| b. North Shore | 5 |

c. <u>Central Oahu / Honolulu</u>	40	
Oahu Sub-Total	57	
d. Kauai	3	
e. Hawaii	2	
f. Maui	3	
g. <u>Molokai</u>	1	
Neighbor Islands Sub-Total	9	
TOTAL	66	All Hawaii-Based Ag Vendors

Size of Business – Number of Employees of Agriculture-Based Vendors

65 of the 66 vendors have less than 10 employees

Tropical Farms offers for sale agriculture-based products, thereby directly supporting agriculture-based small businesses throughout Hawaii. More than seventy-five percent of Tropical Farms' dollar value of sales is attributed to major agriculture products.

MAJOR Agriculture Products as a Percentage of Dollar Value of Sale

<u>Product</u>	<u>Produced</u>	<u>% of Dollar Value of Sales</u>
Macadamia Nuts	Oahu/Hawaii	44.7%
Coffee	Oahu/Hawaii	9.0
Kukui nut oils and creams	Oahu	4.8
Noni lotions and Juice	Oahu/Kauai	6.9
Chocolates	Oahu	6.7
Jams, Jellies, Syrups, Sauces	Oahu, Kauai, Molokai, Maui	3.6
<u>Fresh Fruit</u>	<u>Oahu (Kualoa)</u>	<u>0.6</u>
Total		75.76% of Dollar Value of Sales

APPENDIX H

October 13, 2008

Mr. Paul Gruwell P.E.
4224 Waialae Ave.
Box 648
Honolulu, HI. 96816-5330

Dear Mr. Gruwell:

Subject: Individual Wastewater System (IWS) Plans for
Hanaloa Enterprise Inc. dba Tropical Farms / Kualoā Ranch
Project Site: 49-227 Kam. Hwy. Kaneohe., Oahu
TMK: (1) 4-9-003: 001
File #: 40572 (Septic System) E-filed

IWS plans for the above site have been reviewed by the Wastewater Branch for conformance to applicable provisions of Hawaii Administrative Rules, Title 11, Chapter 62, entitled "Wastewater Systems." The IWS plan conforms to applicable provisions of Chapter 11-62.

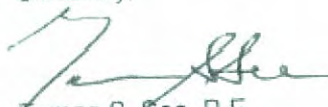
However, Department of Health recommends that the use of the soil absorption area should be restricted to the activities which will not contribute to the compaction of soil with consequent reduction in soil aeration. Concrete slab, drive-way or parking lot are not compatible use of the area above soil absorption field. The reduction of soil aeration and constant moisture underneath the slab may cause premature failure of the wastewater system or the drive way.

The Department of Health will sign an applicable county building permit application provided that all information submitted as part of the IWS plan and county building permit application are consistent with each other and meet applicable provisions of Chapter 11-62 at the time of permit signature.

As the professional engineer responsible for the design of the above wastewater plan, it is your responsibility to inform the owner/lessee of the property that a) the IWS plans must be attached to each set of permit construction plans, b) **the IWS must be installed by a licensed contractor holding A, C-9, C-37, C-37a or C-43 license.** c) inspected by the engineer, and d) authorized in writing by the Department before use.

Should you have any questions, please feel free to contact Johnny Ong of the Wastewater Branch at 586-4294.

Sincerely,



Tomas S. See, P.E.
Chief, Wastewater Branch

1. LOCATION
NO PASS ZONE (NO) (YES)

"GIFT SHOP"
OF CUSTOMERS = $165 \times 5 \text{ GPD} = 825 \text{ GPD}$
 $8 \times 20 \text{ GPD} = 160 \text{ GPD}$
985 GPD

2. PROJECTED FLOW
NUMBER OF EMPLOYEES.....
TOTAL DAILY FLOW, GPD.....

3. SEPTIC TANK (HAWAII ADMINISTRATIVE RULES, TITLE II,
CHAPTER 62, SECTION 33.1(A)(2))
TOTAL GALLONS.....

11,500 GAL

4. DISPOSAL SYSTEM

PERCOLATION RATE (OBSERVED)(ESTIMATE)..... 22 MIN.
(TIME FOR WATER TO FALL ONE INCH):
REQUIRED ABSORPTION AREA, SQ. FT..... 1,100 FT²
(TABLE I, MANUAL OF SEPTIC TANK PRACTICES):
REQUIRED LENGTH OF LEACH LINE TRENCH 2 FT. WIDE..... N/A
OR
REQUIRED DEPTH OF ___ FT. DIAMETER SEEPAGE PIT..... N/A
(BELOW INLET PIPE)

5. ABSORPTION AREA PROVIDED.....

$$A = \frac{W \times L}{1,140 \text{ FT}^2}$$

6. SOIL CONDITIONS:

0-5 FT. REDDISH-BROWN SILTY CLAY.
PERMEABILITY IS MODERATE, RUN-OFF IS
SLOW, EROSION HAZARD IS SLIGHT.

APPENDIX I



Tropical Farms
Kam Highway Access Photo Key

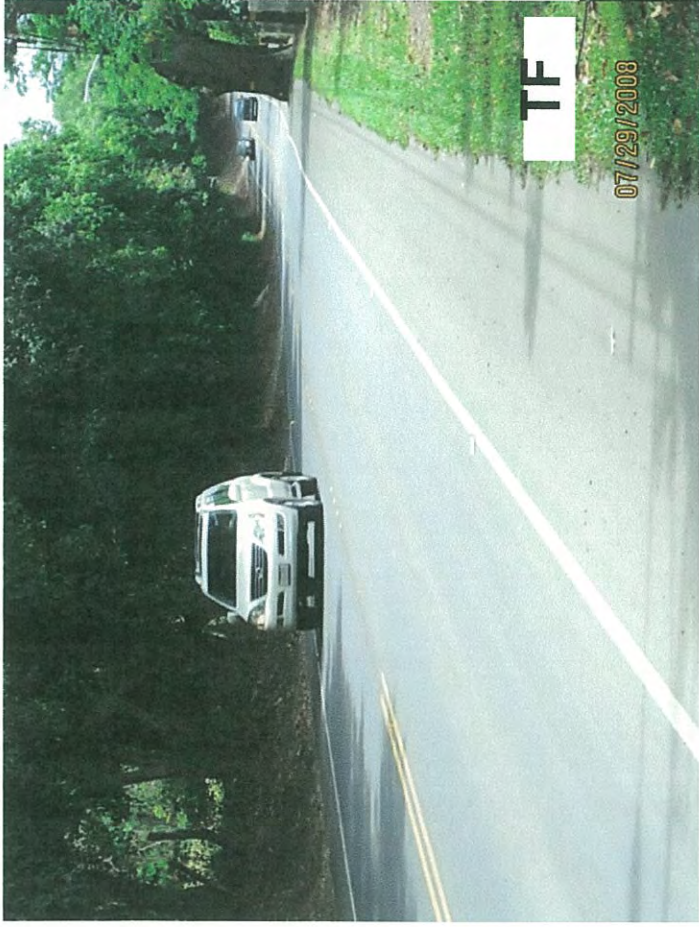


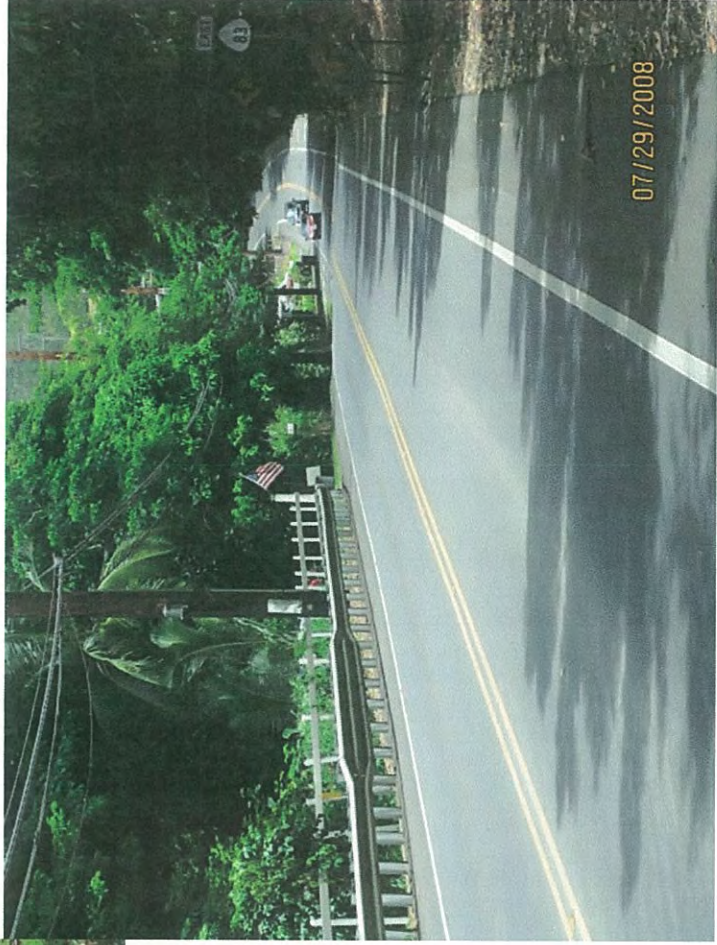
Photo taken 7/29/08 across from the driveway of Tropical Farms looking towards Johnson Road.

This would be the site line for those vehicles coming from Kualoa and making a left hand turn From Kam Highway into the Tropical Farms driveway.



Photo taken 7/29/08 from the driveway of Tropical Farms looking towards Kualoa Ranch.

This would be the site line for those vehicles heading to Kaneohe and making a left hand turn onto Kam Highway from the Tropical Farms driveway.



Tropical Farms



Entrance to Tropical Farms from
Kam Highway coming from Kualoa

Driveway to Tropical Farms from Kam
Highway



Entrance to Tropical Farms from
Kam Highway coming from
Johnson Road