

JOHN WAIHEE
GOVERNOR OF HAWAII



KEITH W. AHUE, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
TULU
DEPARTMENT 5
JOHN P. KEPPELER, II
DONA L. HANA'IKE

RECEIVED

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STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

P. O. BOX 621
HONOLULU, HAWAII 96809

(IFC. 01)
REF:OCEA:SKK

AQUACULTURE DEVELOPMENT
PROGRAM
AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
CONSERVATION AND
ENVIRONMENTAL AFFAIRS
CONSERVATION AND
RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

FEB 24 1994

FILE NO.: HA-1447A
I.D. NO.: 3756

MEMORANDUM

TO: Mr. Bruce Anderson, Acting Director
Office of Environmental Quality Control

FROM: Keith W. Ahue, Chairperson *KAH*
Department of Land and Natural Resources

Subject: Negative Declaration for After-the-fact and Proposed
Site Improvements at the Hawaii Tropical Botanical Garden,
South Hilo, Hawaii, (TMK: 2-7-9: 2)

The Department of Land and Natural Resources has reviewed the comments received during the 30-day public comment period which began on March 8, 1993. We have determined that this project will not have significant environmental effect based on the significance criteria pursuant to Title II-200-12, HAR and have issued a negative declaration. Please publish this notice in the OEQC Bulletin as soon as possible.

We have enclosed a completed OEQC Bulletin Publication Form and four copies of the final EA. Please contact Cathy Tilton of our Office of Conservation and Environmental Affairs at 587-0377, if you have any questions.

Enclosure

1994-03-08-HI- FEA- Hawaii Tropical
Botanical Garden Improvements

MAR - 8 1994

FINAL
ENVIRONMENTAL ASSESSMENT
PROPOSED SITE IMPROVEMENTS
HAWAII TROPICAL BOTANICAL GARDEN

Prepared for:

Hawaii Tropical Botanical Garden
248 Kahoa Road
Hilo, Hawaii 96720
808-935-4703

DLMR
OCEA

1993 AUG 30 PM 3:23

RECEIVED

Prepared by:

James Pedersen
Planning Consultant
P. O. Box 22
Volcano, Hawaii 96785
Phone and Fax: 808-967-7619

August 24, 1993

HA-1447A

**ENVIRONMENTAL ASSESSMENT
PROPOSED SITE IMPROVEMENTS
HAWAII TROPICAL BOTANICAL GARDEN**

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August 24, 1993

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CHAPTER ONE INTRODUCTION

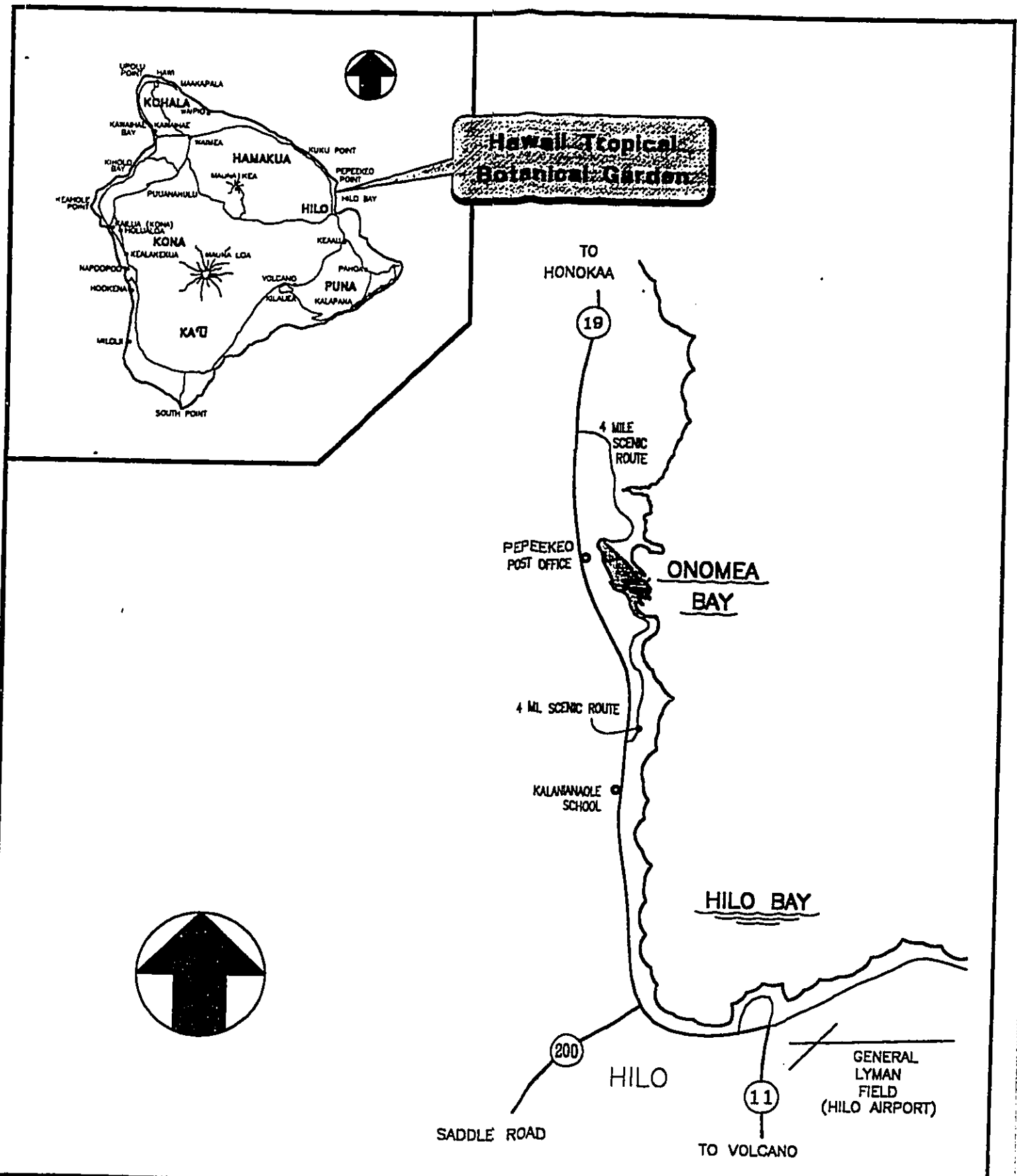
1.1 PURPOSE

The intent of this environmental assessment is to provide the State Board of Land and Natural Resources with supplemental information necessary to review a related conservation district use application (CDUA) proposing to amend CDUP HA-1447, for the construction of a new educational rain shelter, as well as other existing site improvements that will support the existing Hawaii Tropical Botanical Garden operation (Figure 1-1 and Figure 1-2). Correspondence from the chairman of the State Board of Land and Natural Resources, dated March 18, 1992, advised Mr. Dan Lutkenhouse of Hawaii Tropical Botanical Garden that various site alterations and uses were not originally approved or allowed via an existing conservation district use permit (HA-1447) for the arboretum and Garden. Further, Chairman William Paty instructed Mr. Lutkenhouse to file an after-the-fact CDUA for the preceding five items. DLNR staff has also advised that preparation of an environmental assessment for five existing site alterations and an additional proposal for the construction of a new educational rain shelter.

In accordance with Chapter 343 of the Hawaii Revised Statutes and Act 241, SLH 1992, the State Department of Land and Natural Resources (DLNR) has the following review and related procedural responsibilities:

1. If DLNR determines that the proposed project by the Garden will have a significant impact, an environmental impact statement notice is issued; or,
2. If DLNR anticipates the proposed project will not have a significant impact, a summary of the document will be published in the State Office of Environmental Quality Control (OEQC) Bulletin as a draft environmental assessment and undergo a formal 30-day review period beginning on the date of publication in the OEQC Bulletin. Following the end of the 30-day review period, any comments received along with their responses must be incorporated into a final environmental assessment. If appropriate, DLNR should ensure that the text of the environmental assessment is revised by the applicant, Hawaii Tropical Botanical Garden.
3. After the 30-day review period required by Act 241, SLH 1992, DLNR determines that the action will not have a significant impact, a negative declaration will be issued by DLNR. In essence, the notice of determination or negative declaration will indicate whether or not the preparation of a more detailed environmental impact statement (EIS) is required. The notice of determination and environmental assessment will be submitted by the State Department of Land and Natural Resources to the State Office of Environmental Quality Control (OEQC) which will again publish a summary description of the project in its bi-monthly OEQC Bulletin to provide public notice.

Once a determination has been made and submitted, the environmental assessment stands as a negative declaration unless it is legally challenged. The general public has a 30-day period (from the publication date of the notice of determination) to initiate any litigation contesting the determination (State Office of Environmental Quality Control, 1992).



Hawaii Tropical Botanical Garden

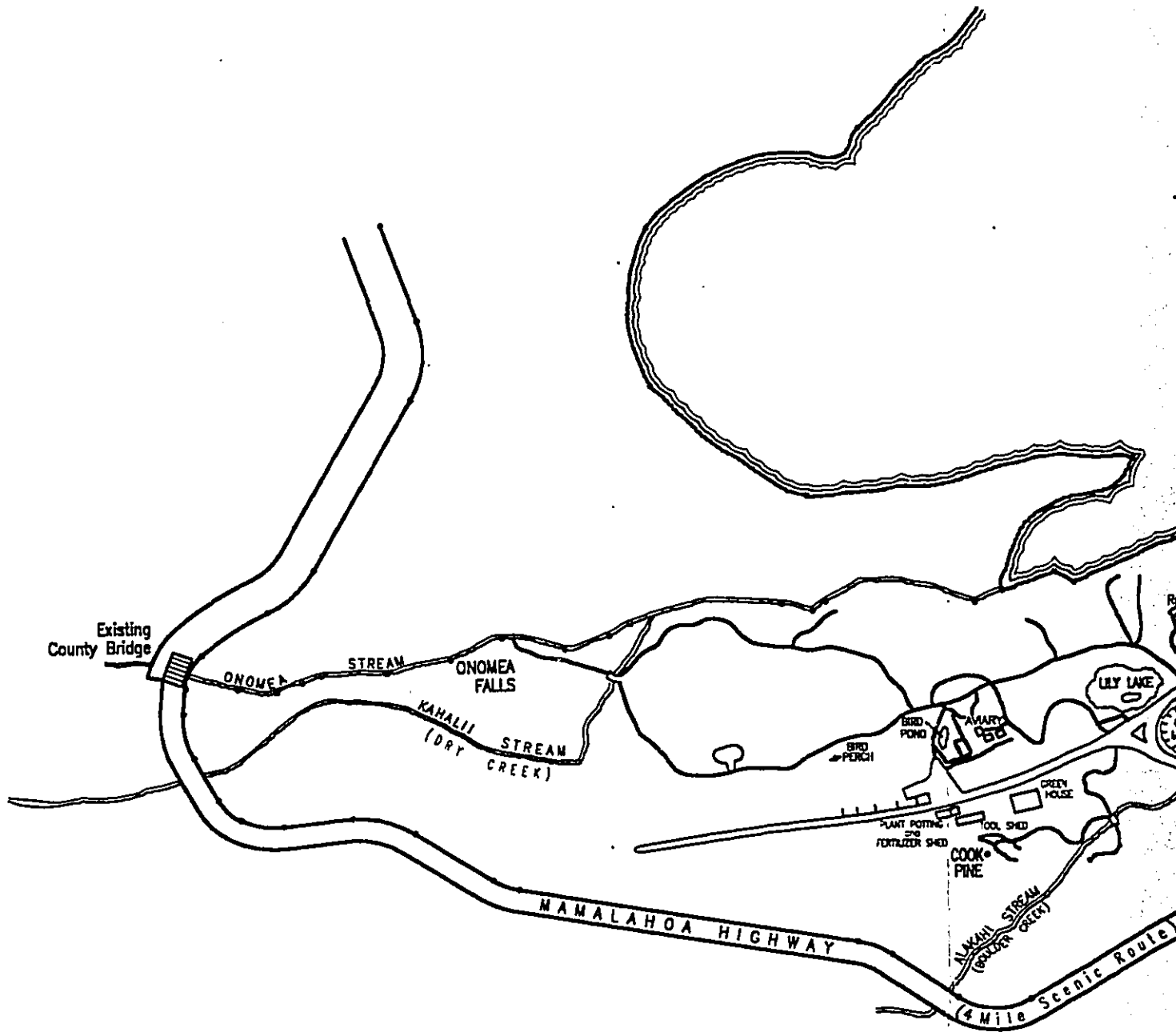
James Pedersen
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Regional Location Map

NOT TO SCALE

July 24, 1992

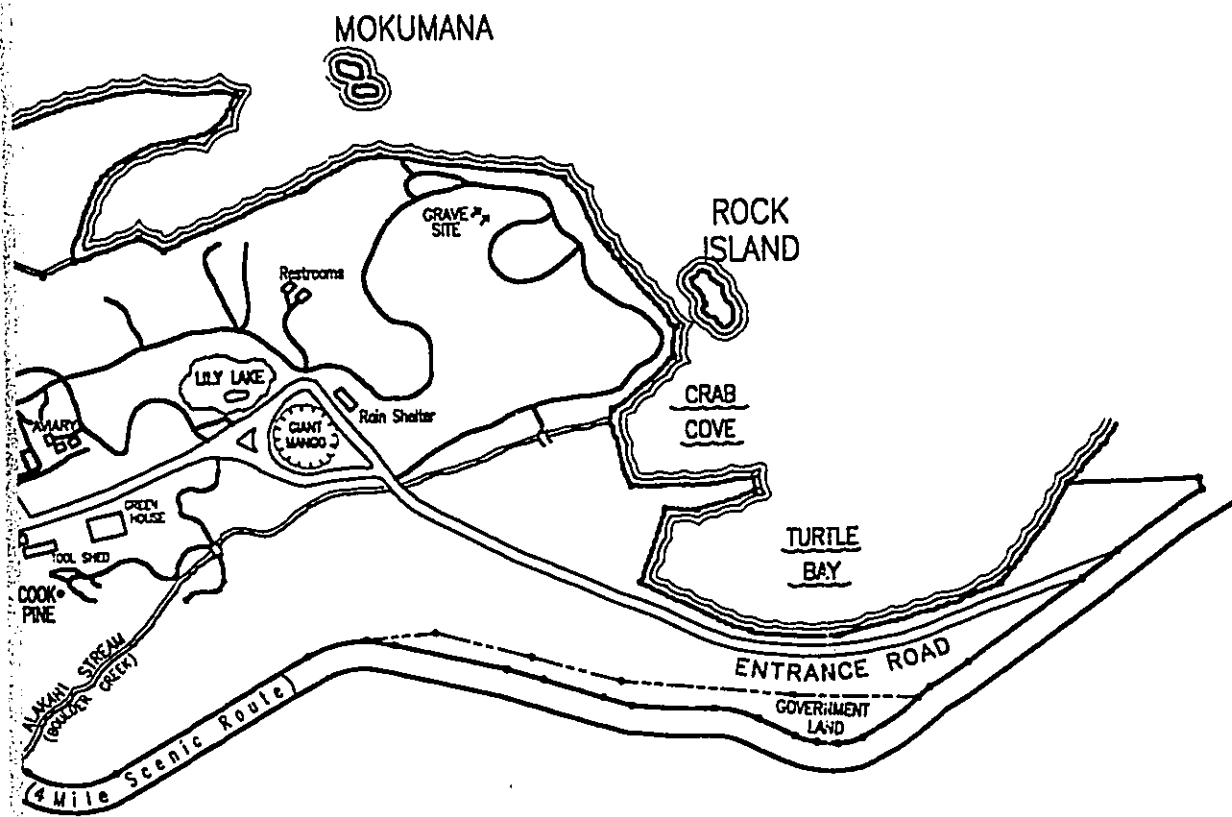
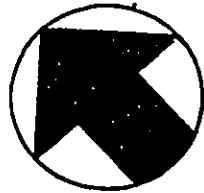
FIGURE
1-1



LEGEND

-  GARDEN TRAILS
-  STREAMS

ONOMEA
BAY



James Pedersen
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Existing Hawaii Tropical
Botanical Gardens

Scale: 1" = 200' January 14, 1993

FIGURE
1-2

1.2 SCOPE OF THE ENVIRONMENTAL ASSESSMENT

State of Hawaii environmental impact statement rules are provided in Title 11, Chapter 200 of the Hawaii Administrative Rules. These administrative rules generally outline the content requirements for environmental assessments, notices of determination and environmental impact statements. In addition, the criteria for determining a significant environmental effect is also identified. This environmental assessment includes information and analyses that conform to the State of Hawaii's content requirements for an environmental assessment which are outlined in Title 11, Chapter 200 of the Hawaii Revised Statutes.

State content requirements for an environmental assessment include the following information:

1. identification of the applicant;
2. identification of the approving agency, if applicable;
3. identification of the agencies consulted in preparing the assessment;
4. general description of the proposed project's technical, economic, social, and environmental characteristics;
5. summary description of the affected environment, including location and site maps;
6. identification and summary of major impacts and alternatives considered, if any;
7. proposed mitigation measures, if any;
8. an approving agency determination and reasons supporting the determination; and
9. agencies that should be consulted if a more detailed environmental impact statement is required.

Information is also provided that addresses the permit application requirements for a conservation district use application which are described in Title 13, Chapter 2, of the Hawaii Revised Statutes.

1.3 REPORT ORGANIZATION

The environmental assessment document is organized in the following manner.

Chapter One describes the purpose of this environmental assessment, the intended use of the information presented, general content requirements, and the relationship of the environmental assessment to the applicant's request for an amendment to State conservation district use permit No. HA-1447.

Chapter Two presents the proposal of the applicant.

Chapter Three evaluates the significant characteristics and uses of the project site, the Onomea Bay shoreline, and properties in the vicinity of the Hawaii Tropical Botanical Garden.

Chapter Four analyzes the anticipated environmental consequences of the proposed educational rain shelter, existing zoological resource exhibits, and the continued use of other onsite improvements within the Garden.

1.4 METHODOLOGY

A combination of quantitative and qualitative analyses were used in the preparation of this environmental assessment. These evaluations relied primarily upon available information from Garden representatives and selected public agencies. Available information consisted primarily of existing technical reports and maps describing physical characteristics of the project site and land use designations.

Onsite reconnaissance surveys of the project site were made by James Pedersen, Planning Consultant, on June 30, 1992. Video film and field notes of existing conditions were taken by James Pedersen, Planning Consultant, during these surveys to document existing characteristics of the Garden and evaluate related planning issues.

1.5 AGENCY AND PUBLIC CONSULTATION

The preparation of this environmental assessment included consultation with various public and private organizations. This consultation involved informal conversations with selected agency representatives. In addition, a formal letter was transmitted to various agencies, community organizations, and special interest groups that requested their documentation and submittal of project concerns and recommendations (Appendix A). Documented responses received during the preparation of the draft environmental assessment and following its distribution are also included in Appendix A.

CHAPTER TWO PROJECT DESCRIPTION

2.1 PRIMARY ISSUES INFLUENCING PROPOSED GARDEN IMPROVEMENTS

2.1.1 Historical Development of the Garden

Development of the present Hawaii Tropical Botanical Garden in Onomea, Hawaii began in 1977 following a related land purchase by Mr. Dan J. Lutkenhouse, the original founder and present director of the Garden. The Garden is situated on a 17-acre shoreline property (TMK: 2-7-09:02) that is located south of Onomea Stream and seaward of Mamalahoa Highway (Figure 1-2).

In 1979, Mr. Lutkenhouse established the Dan J. Lutkenhouse Revocable Trust which is the present owner of the Hawaii Tropical Botanical Garden. This arrangement and the general objectives of the Garden prompted the establishment of Hawaii Tropical Botanical Garden as a non-profit, tax exempt corporation.

2.1.2 Regulatory Approvals

State Conservation District Use permit HA-1447, for the establishment of an arboretum and botanical garden, was approved by the State Board of Land and Natural Resources on July 9, 1982. Special Management Area (SMA) Minor Use Permit No. 82-28, also authorizing the development of the arboretum, botanical garden, and related improvements, was issued by the Hawaii County Planning Director on July 2, 1982.

Since the initial authorizations by the State Board of Land and Natural Resources and the Hawaii County Planning Director, Hawaii Tropical Botanical Garden has also secured additional SMA permits for: 1) construction a 12-foot wide access driveway, concrete masonry retaining wall and vehicular parking area in 1985, under SMA Minor Use Permit No. 85-38; and 2) the construction of two small restrooms and a cesspool, in 1988, under SMA Permit No. 88-20. It should be noted that the driveway and parking area were never built, and the SMA permit has expired.

In 1990, the State Commission of Water Resource Management approved a diversion of surface water from Onomea Stream for the hand-watering of plants and the operation of two restrooms.

2.1.3 Significance of the Garden to the Local Visitor Industry and Service Economy

The State of Hawaii is blessed with a combination of natural and man-made attractions to visitors from around the world. Incoming visitors spend an increasing amount of their stay on islands outside of Oahu where a greater number of environmental resource attractions are available and generally more accessible. Environmental resource attractions such as the Garden also provide a growing type of "educational-oriented recreation" where people travel to learn and appreciate more about the world they live in, e.g., tropical rainforests and their ecological value.

The Island of Hawaii contains beautiful beaches and inshore marine environments that are accessible along the Kona coastline. Over 1.7 million people annually view the wondrous display of past and more recent volcanic activity at Volcanoes National Park. Along the Hamakua coast, visitors enjoy local waterfalls visible from Highway 19. While some natural resource attractions are available in the Hilo area, there are none more commanding than the Hawaii Tropical Botanical Garden which was visited by some 43,000 visitors in 1991. Recent statistics from the 1988-1991 period indicate that attendance at the Garden is increasing over 10 percent per year.

Hawaii Tropical Botanical Garden is important to the visitor industry in Hilo which contains several hotels along Banyan Drive, as well as a variety of quaint bed and breakfast accommodations. These facilities and supporting commercial retail service areas are directly dependent upon both resident and visitor expenditures and the visitor length of stay in the Hilo area. It is believed that the Garden's world-class display of over 10,000 tropical plants, representing more than 1,800 species, is a primary visitor attraction that brings many visitors to the Hilo area who, otherwise, might not come or stay overnight in the Hilo area. The Garden encourages local schools to bring their students to the Garden free of charge for educational purposes.

While operating as a non-profit corporation, the Garden generates visitor industry income through the collection of visitor revenues, the employment of 14 full time employees, and the expenditure of remaining revenues for local commercial services, equipment and supplies that support the operation of the Garden. For example, the Garden's gross revenues in 1991 were \$685,830. The annual payroll during the same period was roughly \$260,000. Remaining operation and maintenance expenditures totalling about \$425,830 were made in the local economy. The cumulative economic impact resulting from the operation is an input of approximately \$950,000 into the local economy, primarily in the visitor industry sector.

The \$0.95 million economic contribution to the economy does not include secondary economic expenditures in other aspects of the local service economy which are generated by Garden employment and indirect visitor expenditures. It is estimated that these indirect economic expenditures are in excess of an additional \$0.5 million per year.

2.2 PROJECT ALTERNATIVES

Proposed improvements to the Garden include construction of a new rain shelter and four existing site alterations to the Garden that were constructed following issuance of the Garden's initial CDUA permit in 1982. Since the scope of new construction involved in the applicant's proposal is a new rain shelter (approximately 20 x 30 feet), the consideration and discussion of potential project alternatives is limited to the "no-project" option.

The educational and economic benefits derived from operation of the Hawaii Tropical Botanical Garden are dependent upon: 1) the consistent maintenance of existing botanical exhibits and, 2) the incorporation of new exhibits and facilities that increase, enhance, and support the learning experience of incoming visitors and local residents. Consequently, occasional onsite alterations are necessary to keep the Garden attractive and of continued interest to both island visitors and local residents, e.g., school-aged children. Decreased Garden attendance, learning opportunities, and economic benefits can be ensured without some occasional modifications to the overall visitor experience.

While onsite modifications are essential to sustain long-term visitor interest, it is important to recognize that new onsite exhibits and facilities in the Garden must be complementary to other existing displays in the Garden, extend the understanding of the significance of plants to the local environment, and not detract from the observation of existing exhibits or the general aesthetics of the Garden. Proposed facilities and zoological exhibits would be constructed and continued in the context of these objectives. In the absence of this criteria, additional facilities could diminish the uniqueness of the Garden, the quality of the botanical and zoological exhibits, and the overall learning experience.

2.3 APPLICANT'S PROPOSAL

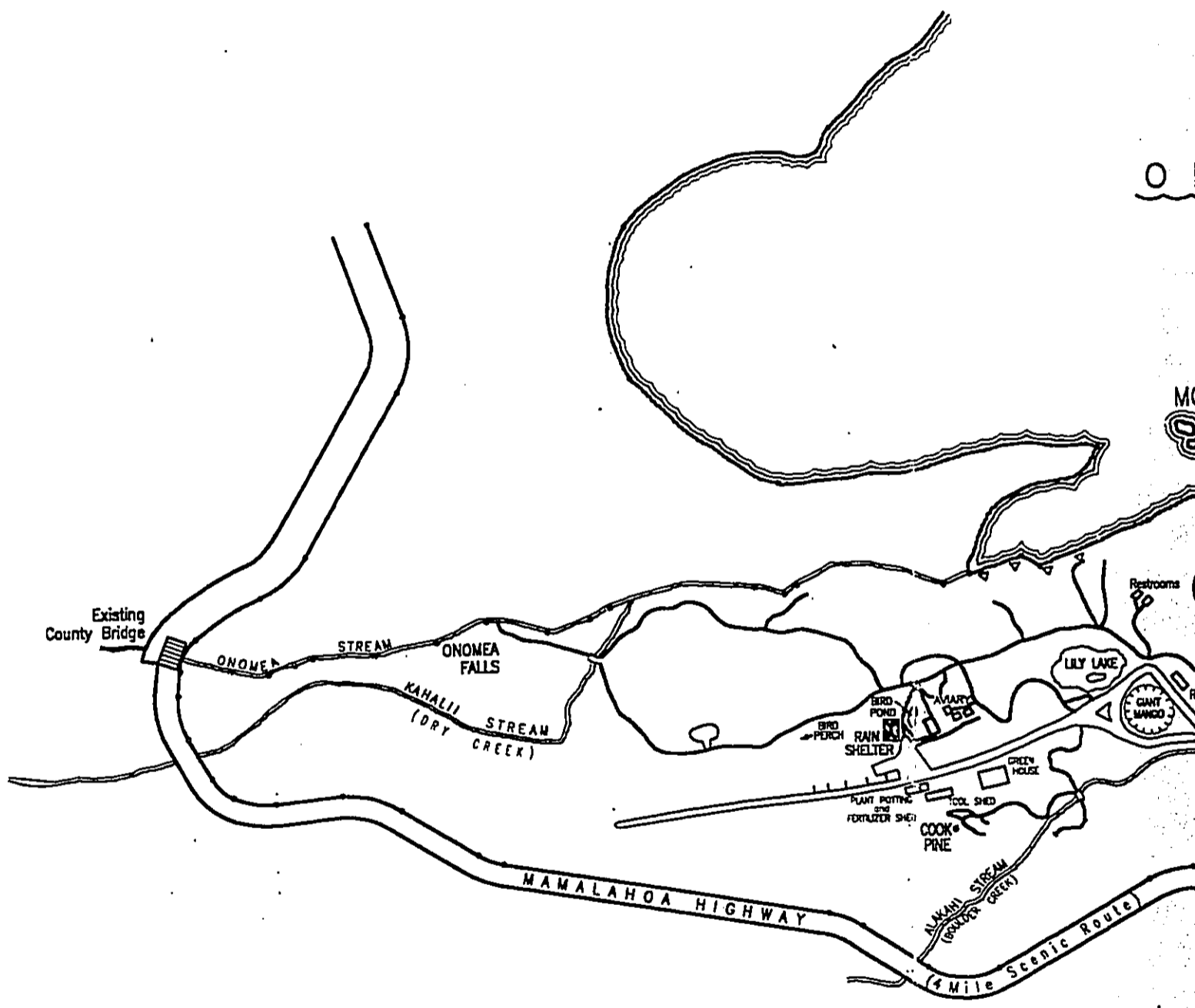
2.3.1 General Scope and Motivation




Hawaii Tropical Botanical Garden intends to construct a new 20 x 30-foot rain shelter that would support educational lectures, particularly school-aged children, in the vicinity of the existing bird pond (Figure 2-1 and Figure 2-2). The remaining portion of the applicant's proposal represents site alterations and uses that have already been built and incorporated into the Garden operation subsequent to the issuance of the Garden's existing CDUA permit. These site alterations and uses include the following:

- a zoological garden presently inhabited by six Macaws, 11 Flamingos, four ducks, a related pond (Figure 2-3) that is approximately 12-feet in diameter and 8-inches deep;
- an aviary consisting of three 8 x 8 x 8-foot bird cages (Figure 2-4) housing six Macaw birds, as well as nearby wooden exhibition stands (Figure 2-5); and
- a small lake, i.e., Lily Lake (Figure 2-6), approximately 50 x 70 feet and 3-feet deep, which contains fresh-water carp and fresh-water plants; and,
- three portable 18-inch x 2-foot signs (Figure 2-7) that advise shoreline visitors not to trespass within the Garden property.

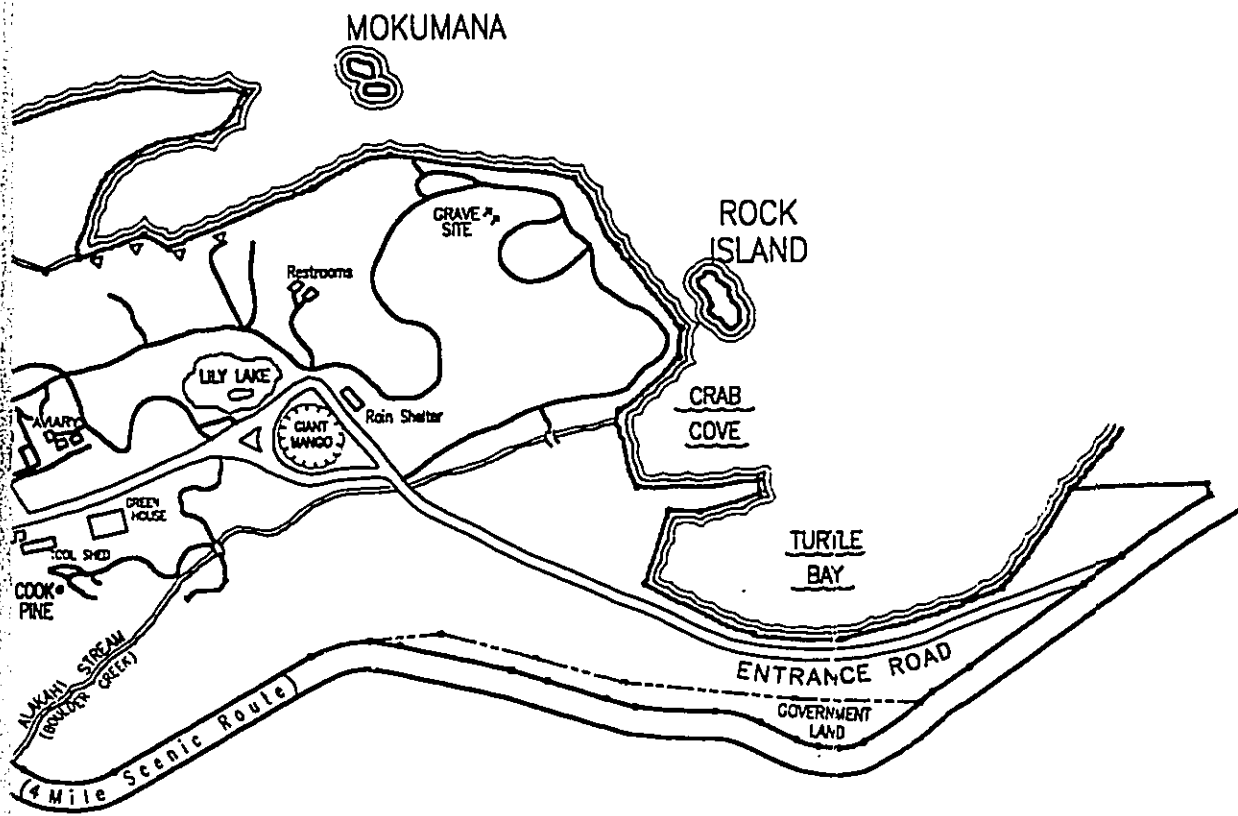
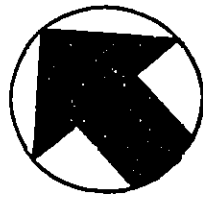
Correspondence from the chairman of the State Board of Land and Natural Resources, dated March 18, 1992 (Appendix B), advised Mr. Dan Lutkenhouse of Hawaii Tropical Botanical Garden that these alterations and uses were not approved or allowed via the existing conservation district use permit for the arboretum and Garden. Further, Chairman William Paty instructed Mr. Lutkenhouse to file an after-the-fact CDUA for the preceding items. Consequently, the four "after-the-fact" alterations and uses have been incorporated into this environmental assessment along with the proposed construction of a new educational rain shelter.

The consultation letter (Appendix A) that was distributed in July and August, 1992 to various governmental agencies, community organizations, and special interest groups also included a proposal for the installation of security fencing within the Garden's property. This proposal has been eliminated from the present proposal in light of land management and archaeological resource concerns that were identified during the consultation process.



LEGEND	
	GARDEN TRAILS
	STREAMS
	PROPOSED NO TRESSPASS SIGNS

ONOMEA
BAY



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Planning Consultant
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Volcano, Hawaii 96785
(808) 967-7619

Proposed Site Improvements to
Hawaii Tropical Botanical Gardens
Scale: 1" = 200' January 14, 1993

FIGURE
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Figure 2-2
Example of Proposed 20 Feet x 30 Feet Educational Rain Shelter



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Figure 2-3
Zoological Garden and Related Flamingo Pond (12 Feet in Diameter, 8 Inches Deep)



Figure 2-4
Aviary for Macaw Birds

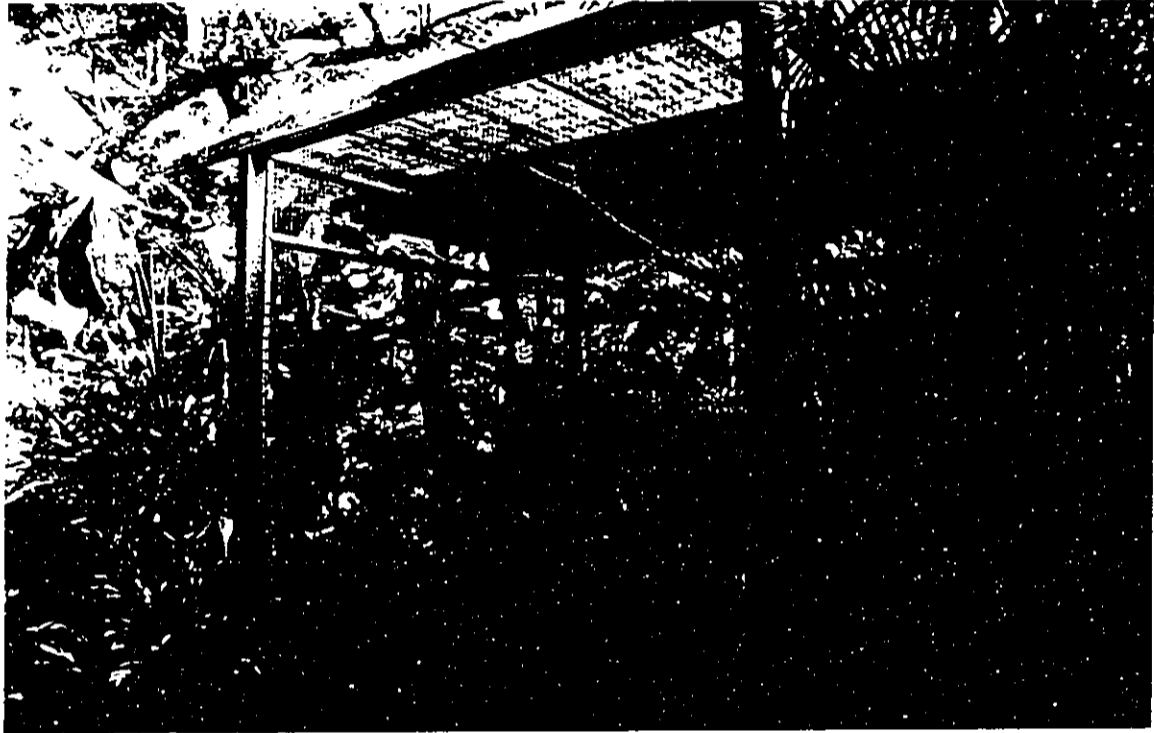
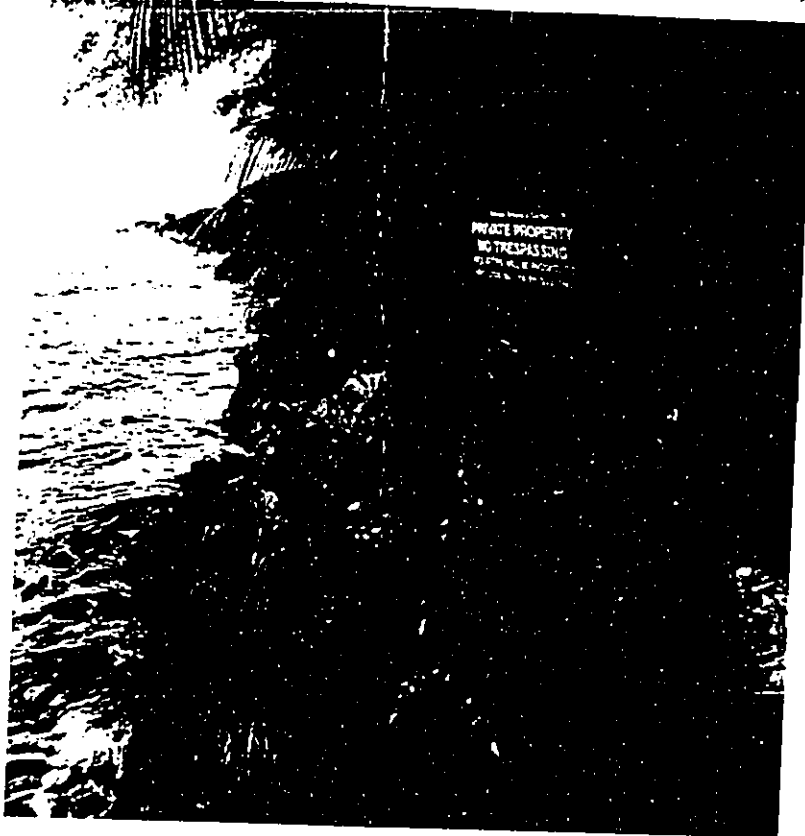


Figure 2-5
Wooden Exhibition Stands for Macaw Birds



Figure 2-7
Existing "No Trespassing" Signs (Three 18 Inches x 2 Feet)



2.3.2 Zoological Garden and Lily Lake

The Garden's incorporation of these added features was to provide an enhanced visitor experience and understanding of tropical botanical resources. Lily Lake, for example, was built to provide visitors with a glimpse of fresh-water tropical plants. The carp in the pond serve to help maintain the water quality of the fresh-water botanical environment which is indicative of the ecological balance and relationships that exist in most, undeveloped tropical areas. The display of Macaws, Flamingos, and ducks provides visitors with a more complete understanding of the role of botanical plants which, in part, is to provide habitat for various types of tropical birds.

2.3.3 Educational Rain Shelter

A 20 x 30 foot shelter (Figure 2-2) consisting of wooden support posts, a corrugated metal roof, and gravel floor will be built in the vicinity of the existing bird pond. This open structure will be used primarily for presenting lectures to selected groups of incoming visitors such as school-aged children. The Garden currently provides no-cost tours to local school children in order that they may be instructed first-hand about the values of tropical plants and animals.

One end of the shelter will also include an open counter where canned sodas, fresh fruits, and pre-packaged foods will be distributed. No alcoholic beverages will be sold or consumed in the Garden at anytime. No potable water supply or sewage disposal facilities will be installed at the rain shelter.

The proposed rain shelter will be built upon existing ground elevations; post and pier construction will be used to provide an adequate foundation for the shelter. Consequently, no ground disturbance will be made upon the surface soils at the proposed rain shelter site.

2.3.4 Signage

Three portable advisory signs, each approximately 18-inches x 2 feet in size, have been placed near the shoreline to discourage trespassers from entering the Garden site. Garden management and operations personnel have had to confront malicious vandalism and theft by various persons which have trespassed onto Garden property. These illegal activities have generated costly damages and losses to the Garden as many of the rare tropical plants have a high cash value and are likely stolen for illegal re-sale purposes. However, these signs do not discourage public shoreline access along the foot path that is situated along the northeast side of Onomea Stream.

CHAPTER THREE ENVIRONMENTAL SETTING

3.1 PHYSICAL ENVIRONMENT

3.1.1 Location

The Hawaii Tropical Botanical Garden is accessible via State Highway 19 and the old Mamalahoa Highway (Figure 1-1). The Garden is a 17-acre shoreline land parcel (TMK: 2-7-09:2) that is situated mauka of Onomea Bay within the ahupuaa similarly known as Onomea. Hawaii Tropical Botanical Garden is located approximately eight miles north of Hilo.

3.1.2 Geology and Soils

The Garden site has been subjected to, at least, historical a'a basaltic lava flows from Mauna Kea. General field observations by James Pedersen, Planning Consultant, on June 30, 1992, confirm the influence of these flows which are evident by the presence of loose fractured boulders and rock outcrops throughout the site, particularly within the Alakahi and Onomea stream channels. This characteristic prompted Mr. Lutkenhouse to nickname Alakahi Stream as "Boulder Creek". The shoreline of the Garden property is also characterized by a'a flows and outcrops filled with volcanic ash and black sand.

The U.S. Soil Conservation Service has classified the soils in the Garden as "rough broken land". This classification is actually a miscellaneous land type referring to steeper, precipitous land that is broken by intermittent drainage channels. The depth of these soils typically range from shallow to deep. The size of some larger overstory trees, e.g. mango, and the presence of numerous outcrops suggest these characteristics within the Garden.

3.1.3 Topography

The Garden property rises from roughly three feet above mean sea level at the shoreline to about the 100-foot elevation along Mamalahoa Highway. Steeper slopes are present on the upper reaches of the property, immediately downslope of Mamalahoa Highway. In this steeper area, slopes generally average from 35 to 50 percent. Downslope of these higher elevations, the topography of the Garden trail and related exhibit area becomes considerably more gradual and generally range from 0 to 10 percent.

3.1.4 Climate

The tropical coastal climate of the South Hilo district shoreline and Onomea Bay is primarily influenced by north to northeasterly winds and an average annual rainfall of roughly 4,000 millimeters (mm), or almost 158 inches per year. Average ambient temperatures vary not more than five degrees throughout the year (University of Hawaii, Department of Geography, 1983) which reflect a limited seasonal variation in local weather. Two climatic seasons occur in the area: the

"wet season occurs between the months of November through April while a "dry season" characterizes the months of May through October. The wet season brings greater rainfall, somewhat cooler temperatures, and more frequent winds from the south.

**TABLE 3-1
MEDIAN ANNUAL RAINFALL
ONOMEA BAY AND SOUTH HILO COASTLINE
SOUTH HILO DISTRICT, ISLAND OF HAWAII**

<u>Month</u>	<u>Precipitation (millimeters)</u>
January	300
February	400
March	400
April	400
May	250
June	200
July	250
August	300
September	250
October	300
November	400
December	400
Annual	4,000

Source: State Department of Land and Natural Resources,
Division of Land and Water Development, 1986.

3.1.5 Storm Wave Exposure and Potential Tsunami Inundation

The project site is directly exposed to northerly and easterly swells. Documented information from the University of Hawaii, Department of Geography, indicates that historical tsunamis occurring in Onomea Bay generated wave run-ups of 35 feet above mean lower low water (MLLW) datum in 1946 and 9 feet above MLLW in 1957 and 1960. Tsunamis occurring in 1952 and 1964 generated considerably smaller waves along the northerly and easterly-exposed shoreline areas of the Island of Hawaii.

Vertical basaltic cliffs, extending up to 200 feet along the Onomea Bay shoreline, are believed to provide significant natural protection to occasional storm waves and tsunami-generated waves. However, the rocky shoreline immediately seaward of the Garden property generally ranges between 3 and 25 feet MLLW. In this regard, it should be noted that the 35-foot runup occurring in 1946 was severe enough to demolish the Hawaii Consolidated Railway line (Paul H. Rosendahl, Ph.D., Inc., 1991).

3.2 BIOLOGICAL RESOURCES

3.2.1 Flora

Vegetation in the Hawaii Tropical Botanical Garden presently includes a collection of some 10,000 cultivated plants and trees that represent roughly 1,800 different species.

While much of the natural vegetation in this area was replaced by plantings of numerous taxa, the original vegetation canopy in the Garden was left in place. The overstory includes mango (Mangifera indica), hala (Pandanus sp.), monkeypod (Samanea saman), coconut, (Cocos nucifera), Alexandra palms (Archontophoenix alexandrae), ulu (Artocarpus altilis) and false kamani (Terminalia catappa).

Original understory vegetation includes strawberry guava (Psidium cattleianum), naupaka (Scaevola taccada), Dieffenbachia sp., lauae (Microsorium scolopendrium), and warabi (Athyrium esculantum). "The vegetation includes a few common native species and some naturalized weeds, but the majority of the plant cover consists of cultivated species and hybrids, from both before and during the garden plantings..." of the last 15 years (Hawaii County Planning Department, 1988).

3.2.2 Fauna

3.2.2.1 Macaw Birds

Within the Garden, three pairs of Red and Blue Macaw birds (Ara macao) are presently housed in an aviary (Figure 1-2). The Macaws are housed in three 8 x 8 x 8-foot cages and occasionally placed on open wooden exhibition stands for the education and enjoyment of the public, and the health of the birds. There are also three guava tree branch perches which provide additional protection and enhanced habitat for the birds.

The Macaw bird Ara macao is a native of tropical America (Munro, 1971). However, the six Macaw birds in the Garden were obtained from a local bird breeder on the Island of Hawaii where they originally hatched.

3.2.2.2 American Flamingo Birds

Another exotic bird in the Garden is Phoenicopterus ruber, the American Flamingo. This specie, originally from Africa, was introduced to the Hawaiian Islands on the Island of Kauai in 1929 (Berger, 1972).

Eleven Flamingos have been placed in the Garden. They inhabit the Flamingo pond area depicted on Figure 2-1 and are not caged. The Flamingos were the inspiration of, and made available by, Mr. Paul Brease, the former director of the Honolulu Zoo.

3.2.2.3 Ducks

There are four ducks (*Mandaria sp.*) that generally cohabitate in the existing bird pond area. This bird specie is a native of China. The ducks were donated to the Hawaii Tropical Botanical Garden for their use.

3.2.2.4 Aquatic Fish

Several carp (Koi) have been placed in Lily Lake. These fish were imported to the Lake for mosquito abatement, their beauty, general enhancement of the aquatic environment, and an extension of the learning experience concerning aquatic plants.

3.3 CULTURAL RESOURCES

3.3.1 Archaeological and Historical Resources

An archaeological field inspection was made by Paul H. Rosendahl, Ph.D., Inc. (PHRI) of an adjacent land parcel on the north side of the Garden on May 8, 1991. While no archaeological sites were identified during that inspection, a related field report provides some insights concerning historical land uses in the adjoining Garden area.

Available historical records indicate that various government grants were awarded to Hawaiians in the vicinity of the Garden from, at least, the 1850's. Grant documents, old photographs, a local history, and other historical documents indicate that numerous taro lo'i and a number of house sites were part of a former Hawaiian fishing and farming community called Kahalii. A Chinese store was also located on the south side of Onomea Bay (Hawaii County Planning Department, 1991).

By the late 1800's, some of the government grants of land in the Garden area were issued to Onomea Sugar Company. Onomea Plantation was established in 1863 and was recognized as the most advanced and best-equipped plantation of its time. A visitor to Onomea Bay in 1873, Isabella Bird, also mentioned that kegs of sugar were hauled down to a cove in the bay where a shipping terminal for schooners was apparently present. In 1888, Onomea Sugar Company consolidated the independent cultivation activities of three smaller plantations at Paukaa, Papaikou and Onomea (Paul H. Rosendahl, Ph.D. Inc., 1991).

Another personal account made in 1913 indicates that a Hawaiian community was still active in the Garden area. The presence of this community was observed again in 1932 by Hudson who noted, in part, that the Onomea community continued to produce taro.

"Although this community was still actively farming taro in the 1930's, presently, little remaining of the community can be seen through the garden plantings other than a few terraces at the fronts

of the expanding plantings, some concrete and stone foundations and basins, a few graves near the water and an abundance of pottery shards along the southern Onomea Stream banks" (Hawaii County Planning Department, 1991).

The presence of a government road is also mentioned or suggested by personal observations of Isabella Bird (1873), Kinney (1913), and Hudson (1932). Isabella Bird indicates that the Onomea Plantation used 100 mules, in part, for hauling kegs of sugar downslope to a cove in Onomea Bay; however, no specific location of any trail is identified. In recorded property descriptions given for various land grants made during the 1857-1895 period, a Government Road is consistently mentioned. Following its review of the land file and subject index at the Hawaii State Archives and discussions with the Hawaii Sugar Planters Association Archives, PHRI representatives concluded a government road existed before Onomea Plantation and Onomea Sugar Company, and was not built by either company. If the trail was a pre-historic trail, it is likely that the trail or road was altered by increased traffic associated with sugar plantation operations.

Goldstein conducted a survey of the Garden site in 1982. Several features resembling grave sites were observed along the shoreline of the Garden property. These grave sites have been preserved and integrated into the Garden property with proper ground maintenance being performed by the Garden in the vicinity of this important area.

3.4 BUILT ENVIRONMENT AND GENERAL LAND USES

3.4.1 Adjacent Land Uses

The properties surrounding the project site remain undeveloped except for a portion of the existing Mamalahoa Highway, better known as the "Scenic 4-Mile Route".

North of the Garden property is a 20-acre land parcel (TMK: 2-7-10:22) which is owned by Mr. Dan Lutkenhouse Revocable Trust. This parcel was originally purchased by Mr. Lutkenhouse to pursue an expansion of the existing Garden. However, former expansion plans have been abandoned.

East of the property is Onomea Bay and the Pacific Ocean.

3.4.2 Shoreline Recreation and Other Shoreline Activities

A limited number of shoreline fishermen presently access the Onomea Shoreline via a foot trail from Mamalahoa Highway along the north side of Onomea Stream. Typically, local fishermen will park their vehicles along Mamalahoa Highway in the vicinity of the Onomea Stream.

Unfortunately, a number of other persons also use the existing foot trail along Onomea Stream to illegally trespass onto the Hawaii Tropical Botanical Garden. Persons trespassing within the Garden generally access the property by climbing along the rocky shoreline and walking through existing plant exhibits. Once within the property, some trespassers have vandalized existing plant exhibits, stolen valuable plants for re-sale purposes, and on several occasions, removed valuable tools and power equipment.

3.4.3 Public Facilities and Services in the Project Site Vicinity

3.4.3.1 Roads and Vehicular Access

A portion of Mamalahoa Highway, which borders the southern and western boundaries of the Garden property, includes a 17-foot wide paved roadway with a designated 50-foot right-of-way. The "4-Mile Scenic Route" is accessible from Highway 19 at highway intersections situated roughly 4 and 8 miles from Hilo.

A survey map of the Onomea, Kahalii and Alakahi area was prepared by William K. Kamau, Sr. in October, 1962 and subsequently revised in October, 1970. This map indicates the presence of an old 12-foot wide Government Road from Mamalahoa Highway to Onomea Stream (Figure 3-1). A May, 1993 survey, performed and mapped by Murray Smith and Associates, indicates that portions of the existing Garden driveway traverse the old Government Road (Figure 3-2). However, it is also clear that a remnant of the former Government Road that was built along steep slopes (adjacent to Mamalahoa Highway) has eroded during the past two decades.

3.4.3.2 Water, Wastewater and Electrical Power Systems

The project site is not served by any public water distribution, wastewater collection, or electrical power distribution systems.

An existing water supply is presently required for the operation of toilets in the Garden. The water requirements for these facilities is met through the present use of an onsite water catchment system from Onomea Stream. Wastewater generated from the restroom facilities are disposed into an existing cesspool which was approved by the State Department of Health.

Electrical power is available along Mamalahoa Highway from existing transformers. However, these transformers are not in close proximity to the Garden property. Further, the cost of installing service connections and additional power poles is beyond the present financial capability of the Garden.

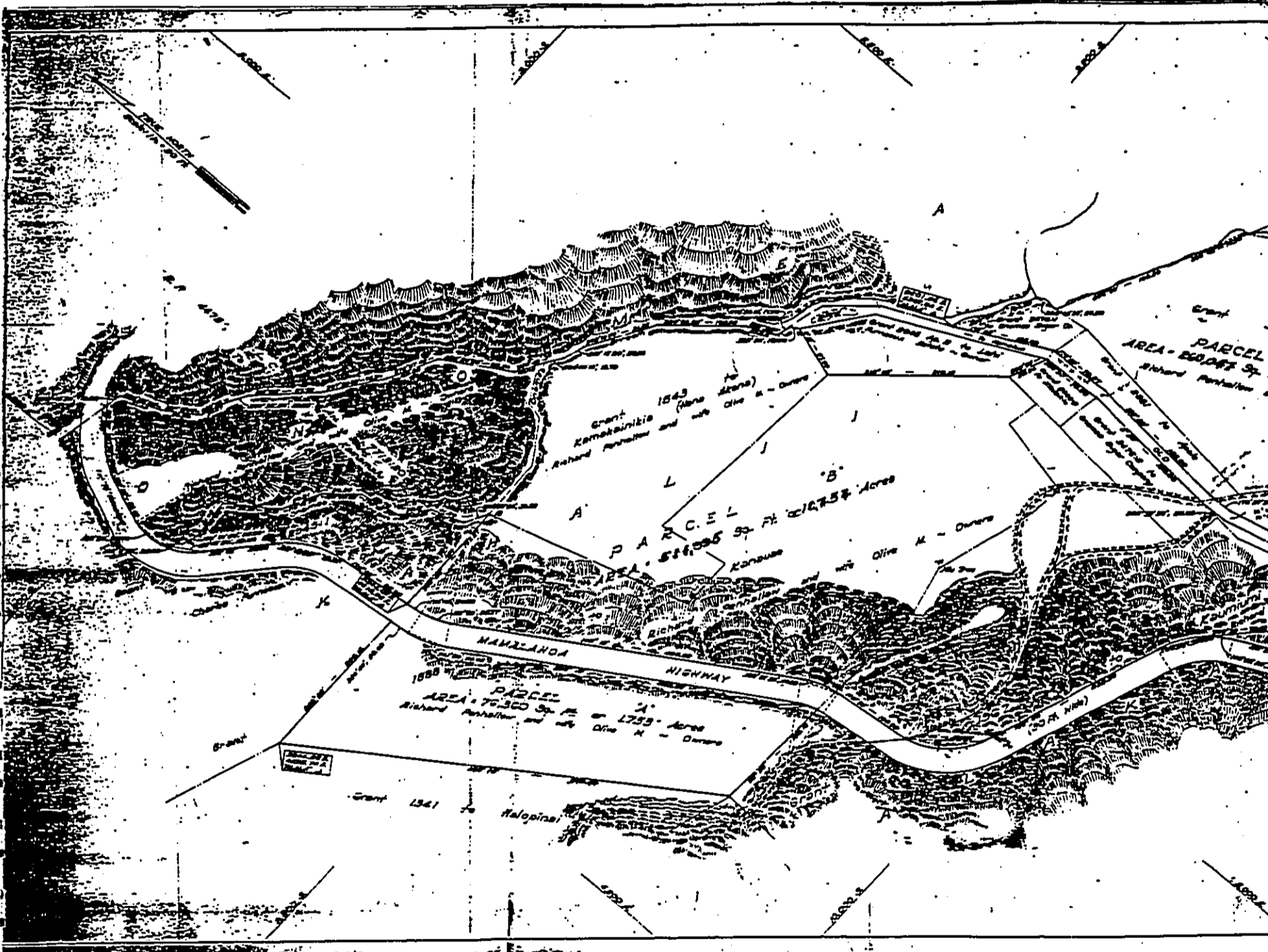
3.5 PLANS, POLICIES AND CONTROLS

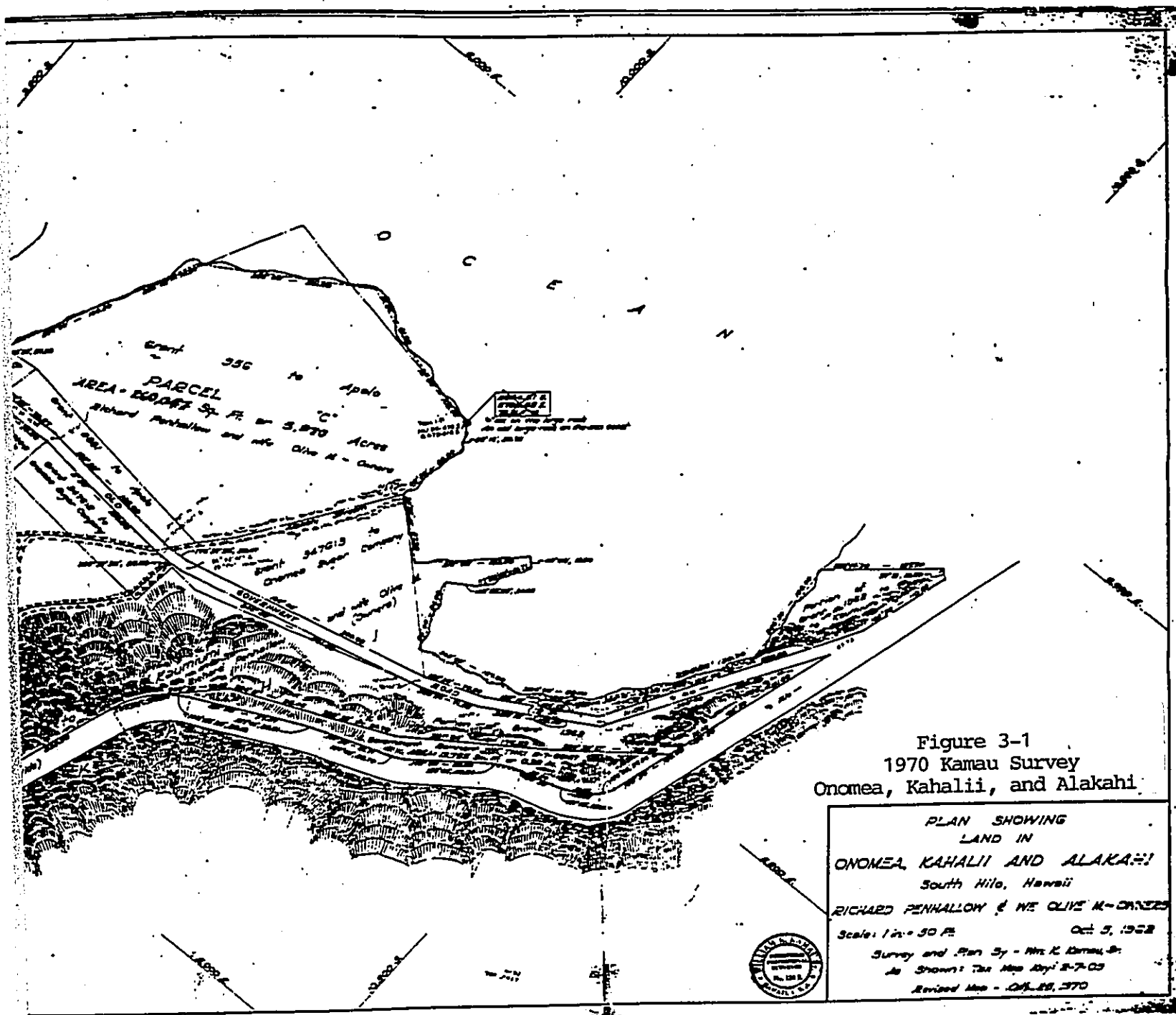
3.5.1 Hawaii State Plan, Hawaii Revised Statutes, Chapter 226

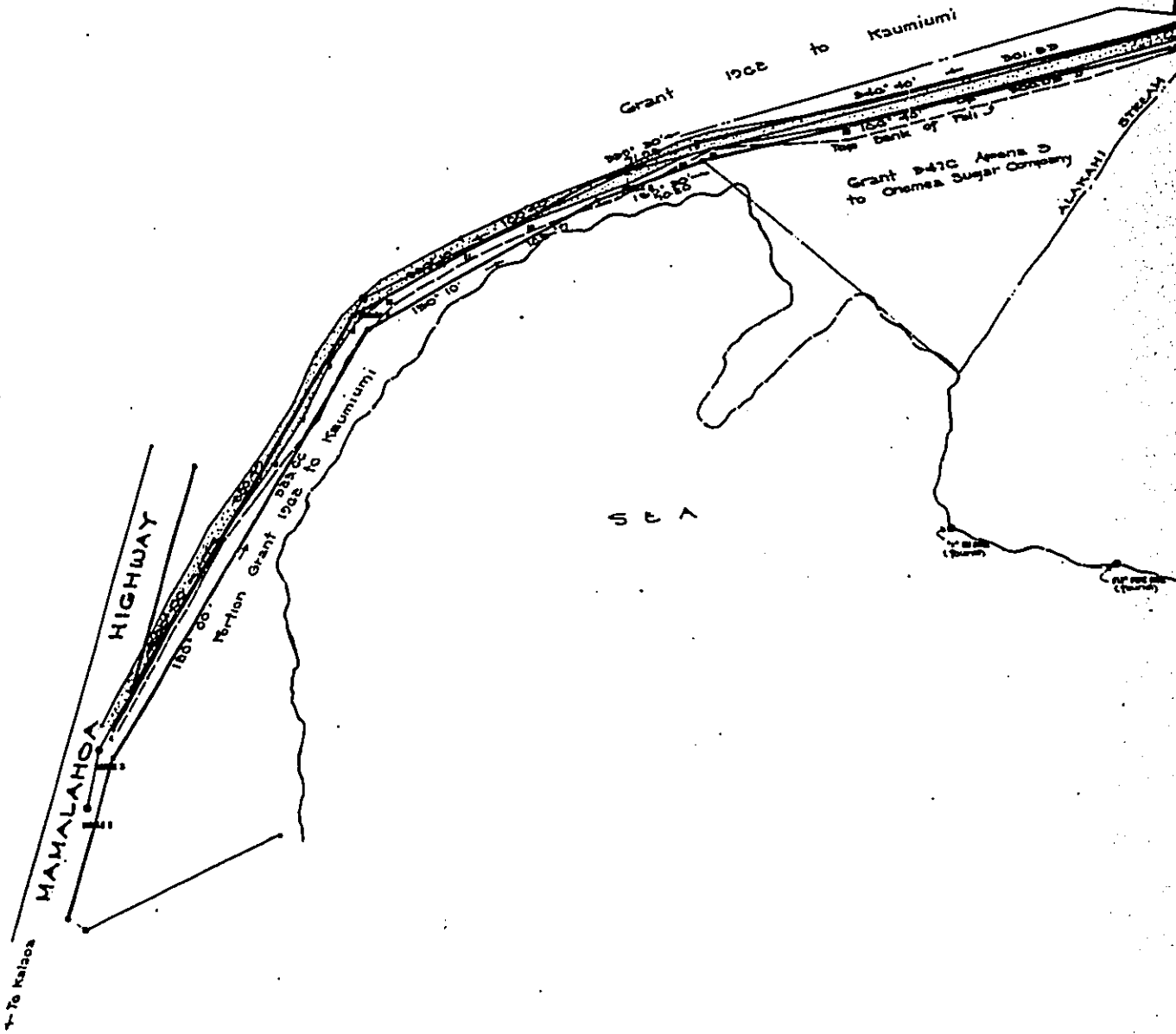
The Hawaii State Plan, originally adopted in 1978, provides a guide for the short and long-term development of Hawaii. These guidelines are presented in the form of regional goals, objectives, policies, and priorities for improving Hawaii's population, economy, environment, and man-made resources (Office of the Governor, Office of State Planning, 1991).

The following paragraphs include selected guidelines that are considered to be relevant to the proposed project.

Section 226-6: Objectives and Policies for the Economy







THIS PLAN WAS PREPARED BY ME
 OR UNDER MY SUPERVISION
Donald Spencer Tenney

THK 874/ B-7-10
 May 14, 1909

F 9904

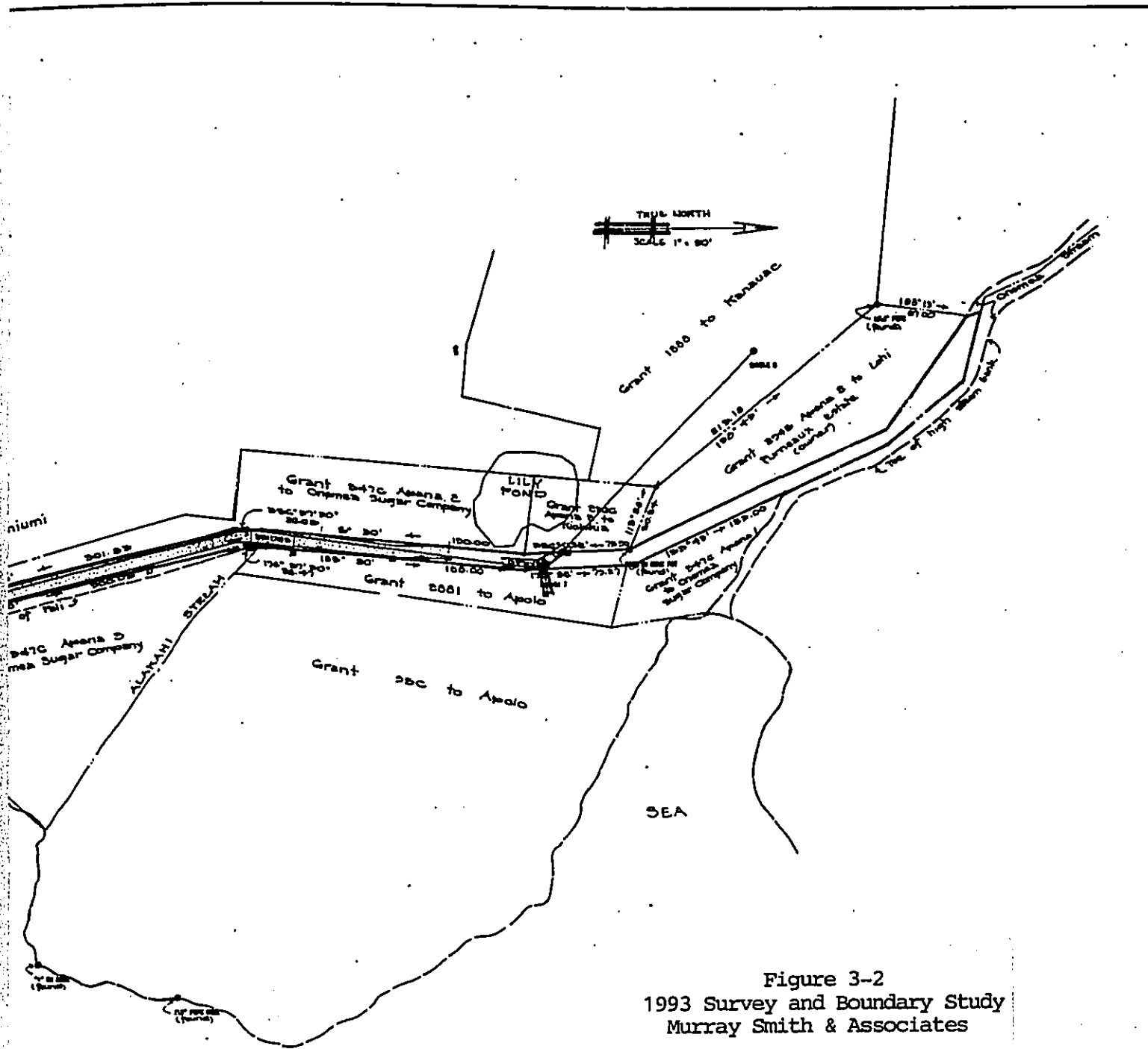





Figure 3-2
1993 Survey and Boundary Study
Murray Smith & Associates

BOUNDARY STUDY
OLD GOVERNMENT ROAD RIGHT-OF-WAY
(12- FEET WIDE)
Onomes, South Hilo, Hawaii, Hawaii

Survey and Plan by Murray, Smith & Associates, Ltd.
P.O. Box 803 Hilo, Hawaii

NOTE:

-  HEAVY LINES DENOTES LIMITS OF OLD GOVERNMENT ROAD (12- FEET WIDE)
-  DENOTES EXISTING A.C PAVEMENT (5- FEET WIDE)
-  DENOTES TOP BANK OF STEEP SEA FALI ALONG MAKAI SIDE OF A.C. PAVEMENT
- THE LILY POND WAS LOCATED BY ACTUAL SURVEY

In order to pursue a steadily growing and diversified economic base, this section states that one economic development objective should be the promotion and protection of intangible resources such as scenic beauty which is vital to a healthy economy. The economic benefits of the Garden are evident via its employment generation, attendance, and related visitor expenditures into the local economy. The loss or decreased viability of this non-profit economic program would represent a step away from this economic development objective.

Section 226-11: Objectives and Policies for the Physical Environment--Land-Based, Shoreline, and Marine Resources

This section states that a policy objective of the State of Hawaii is to conserve Hawaii's natural resources. A related natural resource management objective provided in this section includes the encouragement of multiple uses without generating costly or irreparable environmental damage to natural resources and local environmental settings. The Garden clearly provides conservation, as well as an added educational opportunity, for one of Hawaii's *more stunning shoreline environments*. With the introduction of both endemic and exotic plants into the Garden environment, it is important that the Garden sustain its aggressive plant maintenance program.

3.5.2 State Coastal Management Objectives: Chapter 205A-2, Hawaii Revised Statutes and Related County Special Management Area Designation

Chapter 205A-2, Hawaii Revised Statutes, outlines various objectives for conserving the State's coastal, scenic, open space and recreational resources. One pertinent set of objectives relates to the conservation of scenic and open space resources.

One of the four objectives cited in Chapter 205A is the preservation, maintenance, improvement and restoration of shoreline and open space and scenic resources. This objective commits the State of Hawaii to a generic long-term approach for the conservation of coastal resources. The continued development, operation and maintenance of projects such as the Garden provide a specific opportunity for coastal resource conservation which requires commitment by both the Garden and regulating State and County agencies.

The State CZM objectives are implemented in Hawaii County primarily by the Hawaii County Planning Commission and the Hawaii County Planning Department. One aspect of their implementation has been the establishment of special management areas and the application of a special review process for development projects or land uses proposed within these geographical areas. The State CZM objectives are reiterated in the administrative rules of the Hawaii County Planning Commission and serve as the Commission's general criteria for project review.

The Garden property is designated as a special management area. SMA Minor Use Permit No. 82-28 for the existing Garden was issued by the Hawaii County Planning Director on July 2, 1982. In addition, SMA Minor Use Permit No. 88-20 was subsequently issued for the construction of restrooms and a cesspool within the Garden.

Existing uses may be authorized under SMA Minor Use Permit No. 82-28. However, an SMA Permit would have to be secured for the rain shelter.

3.5.3 State Land Use Law and Related Land Use Designations

All lands within the State of Hawaii have been classified into one of four general land use designations: Urban, Rural, Agriculture, and Conservation. These classifications were established by the State Land Use Commission via the authorization provided by Chapter 205 of the Hawaii Revised Statutes.

The Garden property is situated in an area designated for "conservation" uses. Chapter 205-2 of the Hawaii Revised Statutes indicates that conservation districts "*...shall include areas necessary for protecting watersheds and water sources; preserving scenic and historic areas; providing park lands, wilderness, and beach reserves; conserving endemic plants, fish and wildlife; preventing floods and soil erosion; forestry; open space areas whose existing openness, natural condition, or present state of use, if retained, would enhance the present or potential value of abutting or surrounding communities, or would maintain or enhance the conservation of natural or scenic resources; areas of value for recreational purposes; other related activities; and other permitted uses not detrimental to a multiple use conservation concept.*"

Lands located in State conservation districts are administered by the State Department of Land and Natural Resources (DLNR).

3.5.4 State Administrative Rules Governing Land Uses Within Conservation Districts Title 13, Sub-Title 1 Administration, Chapter 2 Conservation Districts

The State Department of Land and Natural Resources (DLNR) has established administrative rules for approving or disapproving land uses within State conservation districts. Further, it has more recently defined protective, limited, resource, general, and special subzones that have been mapped by DLNR. The subzone designations are accompanied by defined planning objectives and separate lists of permitted uses.

These administrative rules indicate that all land uses within the conservation district must be approved by the Board of Land and Natural Resources via an application for a conservation district use permit. Within 180 days of an application, the Board must give notice and render a decision. During this period, the Board must also hold a public hearing for applications that involve commercial uses. Otherwise, the landowner may put the land to the land use(s) requested as long as all application requirements have been met.

The Garden property has been designated as a resource subzone. Within this type of subzone, the planning objective is to develop areas to ensure the sustained use of the natural resources. Further, resource subzones will include:

1. lands necessary for providing future parkland and lands presently used for national, state, county, or private parks;
2. lands suitable for growing and harvesting of commercial timber or other forest products;
3. lands suitable for outdoor recreation;
4. offshore islands of the State of Hawaii;

5. lands and territorial waters below the upper reaches of the wash of waves, usually evidenced by the edge of vegetation, or by the debris left by the wash of waves; and
6. all territorial water not assigned to any subzone.

Permitted uses include aquaculture, artificial reefs, commercial fishing operations, emergency warning or telephone systems; flood, erosion or siltation control projects; the maintenance and protection of desired vegetation, including the removal of dead, deteriorated and noxious plants; marine, plant and wildlife sanctuaries; and other related uses.

The present CDUA application by Hawaii Tropical Botanical Garden contains proposals that are identified as permitted uses under of Chapter Two of the State Administrative Rules. The Garden

is a sanctuary for both plants and a limited number of birds and fish. The uses proposed are also consistent with the objectives of the resource subzone since the uses will continue to provide private park land, as well as land suitable for outdoor recreation.

3.5.5 Hawaii County General Plan

The Hawaii County General Plan, and related land use pattern allocation and facilities map, recommend a general development pattern for the Island of Hawaii. The plans also outlines recommended policies and objectives for resort, residential, commercial, industrial and agricultural development.

The land use pattern map (LUPAG) for the South Hilo district recommends use of the immediate shoreline, e.g., roughly 400 feet inland, as an open area. The "open area" designation uses is interpreted by the Hawaii County planning department staff to suggest potential uses such as parks and historic sites. Continued operation of the Garden is compatible with this designation.

The remaining portions of the Garden area, upslope of the shoreline, are designated for "extensive agricultural" use. The Hawaii County Planning Department staff interprets this designation to reflect desirable opportunities for pasture and range land uses. Pasture and range land uses are inconsistent with the more conservation-oriented Garden use; since the Garden is a less intensive use of the property, this designation suggests no conflict with the operation of the Garden.

3.5.6 Hawaii County Zoning

Hawaii County zoning designates the entire Garden property for agricultural uses. More specifically, the entire property is zoned "A-20a"; this designation generally allows a minimum lot size of 20 acres.

CHAPTER FOUR ANTICIPATED ENVIRONMENTAL CONSEQUENCES AND PROPOSED MITIGATIVE MEASURES

4.1 PHYSICAL IMPACTS

4.1.1 Alteration of Existing Topography

4.1.1.1 Potential Erosion and Sedimentation

The construction of a new educational rain shelter will directly impact about 600 square feet of land near the existing bird pond. Exotic vegetation will be removed and replaced with a new wooden shelter structure. Erosion and sedimentation is not expected since ground slopes are almost flat in the proposed shelter location. In addition, the shelter site does not drain into any of the existing streams on the Garden property.

Site clearing will be accomplished by hand. The shelter foundation will be built using post and pier construction to avoid any unnecessary disturbance to existing soils. The Garden will also re-establish and maintain landscaping around the perimeter of the shelter structure.

4.1.1.2 Recommended Mitigation

None required.

4.2 CULTURAL IMPACTS

4.2.1 Provision of Additional Attractions within the Garden

4.2.1.1 Anticipated Impact: Increased Visitor Interest and Environmental Education

The added provision of tropical birds and fish within the Garden will help facilitate continued interest and educational opportunities for incoming Garden visitors. The presence of tropical birds and fish provides visitors with a greater understanding of the ecological balance which occurs between plants and animals in tropical areas, as well as the specific role of plants in tropical environments. In the long-term, these benefits will help maintain or sustain increased visitor attendance to the Garden.

The construction of a new rain shelter will afford increased opportunities to incoming groups such as school-aged children. The added shelter will provide temporary cover for visiting children which will facilitate continued educational instruction when intermittent rains interrupt school tours to the Garden.

4.2.1.2 Recommended Mitigation

None required.

4.2.2 Potential Disturbance of Archaeological Features or Subsurface Deposits

4.2.2.1 Conservation of Existing Resources

The Garden recognizes that the former Hawaiian shoreline community, known as Kahalii, was located in the vicinity of the Hawaii Tropical Botanical Garden. Former occupation in the vicinity of the Garden suggests that subsurface areas of the Garden may contain some cultural deposits.

The proposed use of a post and pier foundation and an exposed dirt floor covering with cinder or gravel will ensure that no disturbance will be made in surface soils where potential cultural deposits may be located.

4.2.2.2 Recommended Mitigation

None required.

4.2.3 Future Public Access to the Shoreline

4.2.3.1 Anticipated Impact

The proposed improvements will not impede future public access to the shoreline. Local fishermen presently use a trail along the northeast side of Onomea Stream known as the "Donkey Trail". This access is expected to continue. The Garden's earlier proposals for security fencing have been eliminated due to concerns expressed by public agencies regarding public access and archaeological resources.

The Garden's only vehicular access is via a narrow driveway that adjoins Mamalahoa Highway along the Garden's southeastern boundary. Portions of the driveway traverse remnants of the old Government Road that formerly extended from Mamalahoa Highway to Onomea Stream. Since a portion of the old Government Road has eroded, there is no longer public access from Mamalahoa Highway to the remaining remnant of the old Government Road. The public must cross the Garden's property to gain access to a "land-locked" portion of the old Government Road.

4.2.3.2 Recommended Mitigation

None required.

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APPENDIX A

**CONSULTATION WITH
AGENCIES AND ORGANIZATIONS**

LIST OF AGENCIES SENT
CONSULTATION LETTER

Hawaii Visitors Bureau - Big Island Chapter
250 Keawe Street
Hilo, HI 96720

Japanese C of C & Industry of Hawaii
11 Laula Road
Hilo, HI 96720

✓ State of Hawaii
Dept. of Land & Natural Resources
1151 Punchbowl Street
Honolulu, HI 96813

✓ State of Hawaii
Historic Preservation Division
1151 Punchbowl Street
Honolulu, HI 96813

✓ Ms. Debbie Ward
Sierra Club - Moku Loa
P. O. Box 1137
Hilo, HI 96721

U.S. Dept. of the Interior
Fish & Wildlife Services
P. O. Box 50156
Honolulu, HI 96850

✓ County of Hawaii
Planning Department
25 Aupuni St.
Hilo, HI 96720

County of Hawaii
Dept. of Parks & Recreation
25 Aupuni St.
Hilo, HI 96720

County of Hawaii
Dept. of Research & Development
25 Aupuni St.
Hilo, HI 96720

Mr. Paul P. Spaulding III, Attorney-at-Law
Sierra Club Legal Defense Fund, Inc.
212 Merchant St., Suite 202
Honolulu, HI 96813

Hawaii Audubon Society
212 Merchant St., Suite 320
Honolulu, HI 96813

The Big Island Group
P. O. Box 5900
Kamuela, HI 96743

State Div. of Water Resource Management
Dept. of Land & Natural Resources
1151 Punchbowl St.
Honolulu, HI 96813

Aquatic Resources Division
State Dept. of Land & Natural Resources
1151 Punchbowl St.
Honolulu, HI 96813

Destination Hilo
193 Kilauea Ave., Room 9
Hilo, HI 96720

Hawaii Island Chamber of Commerce
180 Kinoole St., Room 118
Hilo, HI 96720

County of Hawaii
Office of the Mayor
25 Aupuni St.
Hilo, HI 96720

✓ Na Ala Hele Program
State Division of Forestry & Wildlife
P. O. Box 4849
Hilo, HI 96720

Office of State Planning
250 South Hotel St., 4th Floor
Honolulu, HI 96813

*aquatic
forestry
historic
land mgmt
addressed*

*comments
addressed*

addressed

*comments
addressed*

comments ok

**JAMES PEDERSEN
PLANNING CONSULTANT
P.O. Box 22
19-3950 Keonelehua Road
Volcano, Hawaii 96785-0022
Tel/Fax: (808) 967 - 7619**

July 27, 1992

Ladies and Gentlemen:

SUBJECT: HAWAII TROPICAL BOTANICAL GARDEN
Onomea Bay, Hawaii
Environmental Assessment for Proposed Educational Rain Shelter,
Boundary Fencing, Zoological Garden and Other Onsite Improvements

Hawaii Tropical Botanical Garden is in the midst of preparing an environmental assessment that will provide the State Board of Land and Natural Resources with supplemental information necessary to review a related conservation district use application (CDUA) for proposed improvements to the Garden. During preparation of an environmental assessment, Title 11, Chapter 200, of the Hawaii Administrative Rules requires that applicants, e.g. Hawaii Tropical Botanical Garden, should consult with agencies, organizations, citizen groups and individuals having jurisdiction or expertise relating to a proposed project. This letter represents a more formal approach to obtain your concerns and comments prior to preparation of the draft environmental assessment.

Hawaii Tropical Botanical Garden intends to construct a new 20 x 30-foot rain shelter that would support educational lectures, particularly school-aged children, in the vicinity of an existing bird pond (Figure 2-1). In addition, the Garden seeks approval for the installation of security fencing along selected portions of the Garden's boundary (Figure 2-1) when, and if, persons continue to illegally trespass onto the Garden property from the shoreline.

The remaining portion of the Garden's proposals represent site alterations and uses that have already been built and incorporated into the Garden operation subsequent to the issuance of the Garden's existing CDUA permit in 1982. These site alterations and uses include the following:

- a zoological garden presently inhabited by six Macaws, 11 Flamingos, four ducks, a related pond that is approximately 12-feet in diameter and 8-inches deep;
- an aviary consisting of three 8 x 8 x 8-foot bird cages housing six Macaw birds, as well as nearby wooden exhibition stands;

July 27, 1992

Page 2

-a small lake, i.e., Lily Lake, approximately 50 x 70 feet and 3-feet deep, which contains fresh-water carp and fresh-water plants;and

-three 2 x 2-foot signs advising adjacent shoreline visitors not to trespass within the Hawaii Tropical Botanical Garden.

Correspondence from the chairman of the State Board of Land and Natural Resources, dated March 18, 1992, advised Mr. Dan Lutkenhouse of Hawaii Tropical Botanical Garden that these alterations and uses were not approved or allowed via existing conservation district use permits for the arboretum and Garden. Further, Chairman William Paty instructed Mr. Lutkenhouse to file an after-the-fact CDUA for the preceding four items. Consequently, the four "after-the-fact" alterations and uses have been incorporated into this environmental assessment along with the proposed construction of a new educational rain shelter and the installation of fencing along selected portions of the Garden's boundary.

With this perspective, we invite you to provide written comments concerning any planning issues or concerns that you have regarding the proposed project. Your input will be reviewed and evaluated by Hawaii Tropical Botanical Garden and its consultants during preparation of the environmental assessment. In addition, your written comments will be incorporated into the draft environmental assessment document. Please send any correspondence to:

Ms. Sandra P. Schutte, Attorney-at-Law
Roehrig, Roehrig, Wilson, Hara, Schutte & De Silva
101 Aupuni Street, Suite 124
Hilo, Hawaii 96720

We thank you for your potential participation in the planning of this project. Should you have any questions, please contact me at your convenience.

Regards,

Jim Pedersen
Principal Planner

cc: Mr. Dan Lutkenhouse, Hawaii Tropical Botanical Garden, Hilo, Hawaii
Ms. Sandra Schutte, Attorney-at-Law, Hilo, Hawaii

Enclosure: Figure 2-1 depicting proposed improvements at Hawaii Tropical Botanical Garden

RECEIVED AUG 17 1992



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY & WILDLIFE

P.O. BOX 4849
HILLO, HAWAII 96720

August 13, 1992

Ms. Sandra P. Schutte, Attorney-at-Law
Roehrig, Roehrig, Wilson, Hara, Schutte & De Silva
101 Aupuni St., Suite 124
Hilo, HI 96720

Dear Ms. Schutte:

The Na Ala Hele Advisory Council has reviewed your inquiry prior to an environmental assessment for after-the-fact improvements along with a proposed educational rain shelter and the installation of a security fence along selected portions of HTEG's boundary.

It is the council's position that a certified shoreline survey be conducted for identification of the property boundaries and the location of the proposed improvements to enable compliance with the requirements of shoreline setback as regulated by the County. A map indicating all public trails, roads and accesses within the property is also requested.

Thank you for the opportunity to comment.

Very truly yours,

RODNEY A. OSHIRO
Na Ala Hele - Hawaii

cc: Chris Meller
Na Ala Hele Advisory Council
County Planning Dept.

JAMES PEDERSEN
PLANNING CONSULTANT
P.O. Box 22
19-3950 Keonelehu Road
Volcano, Hawaii 96785-0022
Tel/Fax: (808) 967 - 7619

January 6, 1993

Mr. Rodney T. Oshiro
Na Ala Hele - Hawaii
State Department of Land and Natural Resources
Division of Forestry and Wildlife
P.O. Box 4849
Hilo, Hawaii 96720

Dear Mr. Oshiro:

Subject: Proposed Site Improvements
Hawaii Tropical Botanical Garden
Onomea Bay, Hawaii

We are in receipt of your letter to Ms. Sandra P. Schutte, Attorney-at-Law, dated August 13, 1992. We appreciate your responding to our solicitation for comments during our recent preparation of a draft environmental assessment for this project.

We have received a number of concerns relating to the installation of a security fence along selected portions of the Garden's boundary. For this reason, Mr. Dan Lukenhouse has withdrawn his proposal for the security fencing. Consequently, his related application to the Board of Land and Natural Resources will include only the after-the-fact improvements for a zoological garden, aviary and small lake, as well as a proposed rain shelter.

Since the proposed rain shelter would be located substantially inland from the shoreline, we believe that a certified shoreline survey is not necessary.

We are also not aware of the location of any public trails, roads or accesses that are located within the property. Kalima and Rosendahl produced a 1884 map of Onomea Bay that indicates the presence of an Old Government Road; the State Historic Preservation Division believes that the Old Government Road may be a remnant of this road. However, we have no additional information that would clarify this question.

Regards,

Jim Pedersen
Principal Planner



JAMES PEDERSEN
PLANNING CONSULTANT
P.O. Box 22
Volcano, Hawaii 96785
Tel/Fax: (808) 967-7619

August 23, 1993

Mr. Rod Osbino
Na Ala Hele Program Representative - Hawaii
State Department of Land and Natural Resources
Division of Forestry and Wildlife
P.O. Box 4849
Hilo, Hawaii 96720

Dear Mr. Osbino:

Subject: CDUA HA-147A and Drain Environmental Assessment
After-the-Fact and Proposed Improvements
Hawaii Tropical Botanical Garden
Oonuenoa, South Hilo, Hawaii

We have reviewed your comments of August 13, 1992 and have informally discussed this project with you on a couple of occasions during the past several months. You have in the past raised concerns regarding the installation of security fencing along selected portions of the Garden boundary, and the location of the Garden improvements in relationship to all public trails and road accesses. While we have discussed these issues, I wanted to make sure that you have all available information that is necessary for your consideration of the application.

SECURITY FENCING

As you may recall, the earlier proposal for security fencing has been eliminated from the Garden's application.

PUBLIC ACCESS

In terms of public access, the only public road within the HTRG property is a road remnant of the old Government Road. The existing driveway into HTRG was resurveyed in May, 1993 by Donald James Murray, a registered land surveyor. This information was subsequently plotted over an earlier survey of the Oonuenoa, Kahaiki and Alakahi area that was prepared by William K. Kamao, Sr. in 1962 and later revised in 1970. It is my understanding that Sandra Pechter

Mr. Rod Osbino
Na Ala Hele Program Representative - Hawaii
August 23, 1993
Page 2

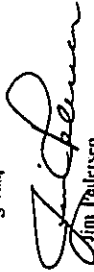
Schulte, the Garden's attorney, recently provided you with a copy of Jim Murray's boundary study map.

The Murray map indicates that there is no public access from Mamalahoa Highway to the Old Government Road remnant. Survey information indicates that a portion of the road, which was formerly situated along the cliffs, has eroded away. The road remnant ends at a point along the banks of Oonuenoa Stream which drop approximately 30 feet to the Stream below. A trail providing the public with access from the Old Mamalahoa Highway to the cliffs at the ocean is situated within the adjoining parcel of land north of the HTRG. This public access route was previously approved by the Board of Land and Natural Resources in conjunction with the original conservation district use permit issued for HTRG.

With respect to the ramifications associated with prohibiting public access from the remnant of the old Government Road, the existing road remnant is presently unimproved. Further, the portion of the old Government Road that formerly connected with the Old Mamalahoa Highway, no longer exists. The road remnant ends at a steep embankment approximately 30 feet above Oonuenoa Stream. The Daniel J. Lutkenhouse Trust, the owner of the HTRG property, is seeking to purchase the road remnant from the State as the adjoining landowner. The final environmental assessment will reflect the more recent findings associated with the old Government Road remnant and its present condition.

Thank you for your continued interest in the project and taking the time to provide constructive comments to us.

Regards,


Jim Pedersen
Principal Planner

cc: Mr. Dan Lutkenhouse
Sandra Pechter Schulte, Attorney-at-Law

Roger Evans
Page 2

If such subsurface sites are present, then they could be extremely important for their information content on the prehistory of the Hilo area (an area for which few coastal historic sites still survive) and an acceptable mitigation plan would have to be developed in consultation with our office. The Zoological Garden and other on-site improvements would have adversely affected any significant subsurface layer(s) in the property, if such existed, and it would be too late to undertake any actions now.

Typically, subsurface survey would include recordation of soil deposits from a series of test trenches in the proposed construction location to determine if significant cultural layer(s) are present. The number of excavation trenches should be enough to constitute a representative sample of the subsurface areas and to adequately document the size and nature of any sites that are found. The results of the test excavations should be submitted to our office in report format for review and approval.

Again, if significant subsurface cultural layers are present, then a mitigation plan, detailing a program of data recovery and/or preservation, should also be submitted to our office for review and approval.

If your office should have any further questions, please contact Kanaki Shum at 587-0007.

References Cited:

Kalima, L., and Paul Rosendahl
1991 Historical Research: Old Government Road, Hawaii Tropical Botanical Garden Project Area, Land of Onomea, South Hilo, Hawaii. PIIRU Report 1032-061791.

KS:sty

September 18, 1992

LOG NO: 6153
DOC NO: 0312x

MEMORANDUM

TO: Roger Evans, OCEA
FROM: Don Hibbard, Administrator
State Historic Preservation Division
SUBJECT: Environmental Assessment--Hawaii Tropical Botanical Garden
Proposed Educational Itain Shelter, Boundary Fencing, Zoological
Garden and Other On-site Improvements (File No. 93-099)
Onomea, South Hilo, Island of Hawaii
TMK: 2-7-09; Various

HISTORIC PRESERVATION PROGRAM CONCERNS:

Kalima and Rosendahl (1991) conducted a historical search of the Old Government Road that cuts across the subject property. These authors produced an 1884 map of Onomea Bay that shows the Old Government Road, as well as house lots, were once located on either side of the road. The map also indicates at least one house lot and possible taro loi system on the south side of Onomea Stream.

The entrance road to the Garden appears to be a remnant of the Old Government Road. Thus, the subject proposed improvements are in the vicinity of the house lots indicated in the old map. Although no surface archaeological remains were observed by our Hilo Office archaeologist, Marc Smith, during a field inspection of the project area on September 10, 1992, subsurface remnants of the old house sites and associated features may, nevertheless, still be present. Hence, we recommend that no action be taken on the subject application until an archaeological inventory survey with subsurface testing occurs to determine if subsurface historic sites are present in the proposed rain shelter and in the fencing corridor running along the south banks of Onomea Stream. If no such subsurface historic sites are present, then these projects will have "no effect" on significant historic sites.

**JAMES PEDERSEN
PLANNING CONSULTANT**

P.O. Box 22
19-3950 Keonelehua Road
Volcano, Hawaii 96785-0022
Tel/Fax: (808) 967 - 7619

October 12, 1992

Department of Land and Natural Resources
State Division of Historic Preservation
P.O. Box 621
Honolulu, Hawaii 96809
Fax: 1-587-0018


Attention: Mr. Kamalet Shun
Mr. Russ Curdy

Gentlemen:

Subject: Hawaii Tropical Botanical Garden
Proposed Educational Rain Shelter, Boundary Fencing,
Zoological Garden and Other Onsite Improvements
Onuamea, South Hilo, Island of Hawaii

Earlier today, the three of us spoke concerning your agency's recommended requirement for archaeological inventory survey with subsurface testing for these proposals. As we discussed, Mr. Lutkenhouse has decided to eliminate his proposals for any boundary fencing. In addition, the proposed rain shelter would be built at grade using simple post and pier construction. Using this approach, no ground disturbance would be made upon the surface layer. Otherwise, the remaining proposals outlined in the consultation letter represent existing onsite improvements that will be included into the after-the-fact CDUA. During our telephone conversation, it is my understanding that the elimination of security fencing and the type of construction envisioned for the rain shelter would negate the need for any archaeological inventory survey with subsurface testing. We would appreciate your written confirmation of this conclusion in order that we might incorporate your findings as part of the environmental assessment that will be submitted with the after-the-fact CDUA.

Regards,


Jim Pedersen
Principal Planner

cc: Mr. Dan Lutkenhouse, Hawaii Tropical Botanical Garden
Mrs. Sandra Pechter Schulte, Attorney-at-Law

RECEIVED

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P.O. BOX 411
HONOLULU, HAWAII 96821

REF: DCEA: VVKH

SEP 21 1982

FILE NO.: 93-099
DOC. NO.: 1431

WILLIAM W. PATY, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
DEPT. OF LAND AND NATURAL RESOURCES
STATE OF HAWAII
1015 KALANANAKU DRIVE
HONOLULU, HAWAII 96813

Ms. S. Schutte

-2-

File No.: 93-099

Ms. Sandra P. Schutte, Attorney-at-Law
Roehrig, Roehrig, Wilson, Hara, Schutte & De Silva
101 Aupuni Street, Suite 124
Hilo, Hawaii 96720

Dear Ms. Schutte:

SUBJECT: Environmental Assessment for Proposed Educational Rain Shelter,
Boundary Fencing, Zoological Garden & Other On-site
Improvements at the Hawaii Tropical Botanical Garden at
Onomea Bay, Hawaii

Thank you for giving our Department the opportunity to comment on this matter. We have circulated the submitted material within our Department. Comments received to date include the following:

Division of Aquatic Resources Comments:

Our Big Island biologist states that the proposed activity will not cause significant adverse impacts to aquatic resources at Onomea Bay. However, fencing along the Garden boundaries may inhibit or impede fishermen and other recreational shoreline use. Therefore, he suggests that historical and traditional public access to and along the shoreline be maintained.

Further, precautions should be taken to prevent debris, construction material and other potential contaminants from entering the aquatic environment.

Division of Forestry and Wildlife Comments:

It is the Ma Ala Hele Advisory Council's position that a certified shoreline survey be conducted for identification of the property boundaries and the location of the proposed improvements to enable compliance with the requirements of shoreline setback as regulated by the County. A map indicating all public trails, roads and accesses within the property is also requested.

We will contact you if we receive additional comments from the Divisions. Thank you for your cooperation in this matter. Please feel free to call Cathy Hilton of our Office of Conservation and Environmental Affairs, at 587-0377, should you have any questions.

Very truly yours,

John P. Kappeler
WILLIAM W. PATY



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

REF: OCEA:WR01

PO BOX 21
HONOLULU HAWAII 96820

WILLIAM W. PAIT, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
MEMBERS:
JOHN P. STUBBINS
DONALD W. HARRIS
AGRICULTURE DEVELOPMENT
PROGRAM
NATIVE RESOURCES
CONSERVATION
ENVIRONMENTAL AFFAIRS
COORDINATOR AND IN CHARGE
COMMITTEE
FORESTRY AND WILDLIFE
MANAGEMENT
LAND MANAGEMENT
PLANNING
SOILS AND LAND DEVELOPMENT

Ms. S. Schutte

-2-

File No.: 93-099

be taken on the subject application until an archaeological inventory survey with subsurface testing occurs to determine if subsurface historic sites are present in the proposed rain shelter and in the fencing corridor running along the south banks of Onomea Stream. If no such subsurface historic sites are present, then these projects will have "no effect" on significant historic sites.

If such subsurface sites are present, then they could be extremely important for their information content on the prehistory of the Hilo area (an area for which few coastal historic sites still survive) and an acceptable mitigation plan would have to be developed in consultation with our office. The Zoological Garden and other on-site improvements would have adversely affected any significant subsurface layer(s) in the property, if such existed, and it would be too late to undertake any actions now.

Typically, subsurface survey would include recordation of soil deposits from a series of test trenches in the proposed construction location to determine if significant cultural layer(s) are present. The number of excavation trenches should be enough to constitute a representative sample of the subsurface areas and to adequately document the size and nature of any sites that are found. The results of the test excavations should be submitted to our office in report format for review and approval.

Again, if significant subsurface cultural layers are present, then a mitigation plan, detailing a program of data recovery and/or preservation, should also be submitted to our office for review and approval.

Land Management Comments:

1. Under no circumstances should any of the on-site improvements impede, block, or be placed within the recently discovered "old government (donkey) trail or roadway" which the State of Hawai'i claims fee simple title to.
2. Land Management staff is especially concerned about the placement of the boundary fencing. Under no circumstances should the Hawai'i Tropical Botanical Garden be allowed to erect boundary fencing along, across, or within the "old government trail or roadway".

Ms. Sandra P. Schutte, Attorney-at-Law
Rohrig, Rohrig, Wilson, Hara, Schutte & De Silva
101 Awana Street, Suite 124
Hilo, Hawaii 96720

Dear Ms. Schutte:

SUBJECT: Environmental Assessment for Proposed Educational Rain Shelter,
Boundary Fencing, Zoological Garden & Other On-site
Improvements at the Hawaii Tropical Botanical Garden at
Onomea Bay, Hawaii

Thank you for giving our Department the opportunity to comment on this matter. Additional comments we have received since our letter dated September 21, 1992 include the following:

Historic Preservation Division Comments:

Kalina and Rosendahl (1991) conducted a historical search of the Old Government Road that cuts across the subject property. These authors produced an 1884 map of Onomea Bay that shows the Old Government Road, as well as house lots, were once located on either side of the road. The map also indicates at least one house lot and possible taro lo'i systems on the south side of Onomea Stream.

The entrance road to the Garden appears to be a remnant of the Old Government Road. Thus, the subject proposed improvements are in the vicinity of the house lots indicated in the old map. Although no surface archaeological remains were observed by our Hilo Office archaeologist, Marc Smith, during a field inspection of the project area on September 10, 1992, subsurface remnants of the old house sites and associated features may, nevertheless, still be present. Hence, we recommend that no action



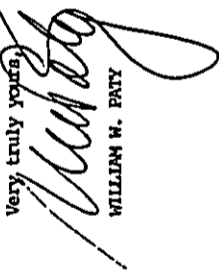
Ms. S. Schutte

-3-

File No.: 93-099

Thank you for your cooperation in this matter. Please feel free to call Cathy Tilton of our Office of Conservation and Environmental Affairs, at 587-0377, should you have any questions.

Very truly yours,



WILLIAM W. PATE

JAMES PEDERSEN
PLANNING CONSULTANT
P.O. Box 22
19-3950 Keonolehua Road
Volcano, Hawaii 96785-0022
Tel/Fax: (808) 967 - 7619

Mr. John Keppeler
January 6, 1993
Page 2

Should you have any questions, please contact us at your convenience.

January 6, 1993

Mr. John Keppeler
State Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Keppeler:

Subject: Proposed Site Improvements
Hawaii Tropical Botanical Garden
Onomea Bay, Hawaii

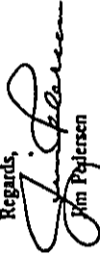
Thank you for taking the time to respond to our recent solicitation for comments concerning this project. We are in receipt of your letters dated September 21 and September 30, 1992 in Sanita P. Schutte, Attorney-at-Law.

We have received a number of concerns relating to the installation of a security fence along selected portions of the Garden's boundary. From this, we sense a concern for public access and historical/archaeological resources. In response to these concerns, Mr. Dan Luikenhouse has withdrawn his proposal for the installation of security fencing. His related application to the Board of Land and Natural Resources will include only after-the-fact improvements for a zoological garden, aviary and small lake, as well as a proposed rain shelter.

Since the proposed rain shelter would be located substantially inland from the shoreline, we believe that a certified shoreline survey is not necessary.

We are also not aware of the location of any public trails, roads or accesses that are located within the property. Kallima and Rosendahl produced a 1884 map of Onomea Bay that indicates the presence of an Old Government Road; the State Historic Preservation Division believes that the Old Government Road may be a remnant of this road. We have no additional information that would clarify this question.

We concur with your concern for construction debris entering the aquatic environment. Fortunately, the Garden has established an aggressive ground maintenance program to ensure the presence of an attractive Garden setting for incoming visitors. Since the Garden would continue to operate during the brief construction of the proposed rain shelter, Garden maintenance personnel would incorporate the collection of construction debris, from the proposed shelter area, as part of its regular ground maintenance activity.

Regards,

Jim Pedersen



Planning Department

County of Hawaii • 25 Aupuni Street, Room 104 • Hilo, Hawaii 96720 • (808) 941-8286

Lorraine K. Inouye
Mayor

Norman K. Hayashi
Deputy Mayor

Tad Nagasaki
City Engineer

November 9, 1992

Mr. James Pedersen
P. O. Box 22
Volcano, HI 96785-0022

Dear Mr. Pedersen:

**Inquiry: Environmental Assessment
Proposed and After-The-Fact Improvements in Special
Management Area and Conservation District
Hawaii Tropical Botanical Garden
TMK: 2-7-09: 2: Kahali and Alakahi, North Hilo, Hawaii**

This responds to your request for concerns to be covered in a forthcoming Environmental Assessment (EA) for proposed and after-the-fact construction at the Hawaii Tropical Botanical Garden. We have reviewed your general proposal and our files. It is our understanding that the EA is to cover the proposed construction of a 600 square foot rain shelter and the installation of security fencing along selected portions of the garden's boundaries. In addition, the EA is to cover the after-the-fact development on the property, including several structures related to a "zoological garden" and its use, the construction of a below-grade 50 by 70 foot fish pond, and the erection of three signs along the shoreline. We have comments and questions in different categories as discussed below.

Government Road. The State has recently acknowledged ownership of the old government roadway which loops down into and through the garden from the south, and returns to the Scenic Drive along the north side of Onomea Stream. This fact and its implications should be discussed. In order to identify any conflict in placement, the exact location of the road needs to be indicated on the plot plan for the proposed and completed construction on the garden properties. Given that the garden's interior access road follows an old jeep road, it is likely that it occupies a portion of the government road alignment. Additionally, the location of the 50 by 70 foot fish pond may include another part of the roadway. Currently, the roadway loop is blocked at both ends. The garden uses a portion for exclusive bus and staff entry, a portion appears to have been incorporated into garden grounds; and the portion along Onomea Stream (on TMK: 2-7-10: 22) is restricted only to pedestrian access to the shoreline.

Mr. James Pedersen
November 9, 1992
Page 2

The government roadway provides the sole access for parcel 6, which is owned by the Charles Furneaux Trust Estate and is a separate inholding along the makai margin of the garden near the mouth of Onomea Stream. Similarly, parcels 2, 3, 4, 5, and possibly 7 (portions of the garden properties which flank the government roadway) also seem to take sole access from the same old road.

Security Fences. The diagram supplied with the inquiry is unclear in that the only segment of fencing which is evident is running from the mouth of Onomea Stream to the southeast about 200-250 feet along the coastline. The exact location and extent of all the proposed security fences need to be accurately portrayed on a scaled plot plan relative to a certified shoreline and the County's 40-foot shoreline setback in order to determine whether a Shoreline Setback Variance will be required. Additionally, the State roadway and the boundaries of parcel 6 need to be portrayed on the same plot plan in order to ensure that neither the roadway nor parcel 6 will be encroached upon. Similarly, the known graves in that area should be accurately placed on the plot plan. If the proposed fence is not to follow the alignment of the previously emplaced steel fenceposts along the shoreline southeast of Onomea Stream, will these posts and any remnant wire be removed?

Fish Pond. The water supply and disposal system for the 50 by 70 foot pond should be explained in the EA. If the water supply is from a nearby stream, then approval and restrictions for such use by the Commission On Water Resource Management should be disclosed. How is the overflow/discharge water to be disposed?

Archaeological Concerns. In that many improvements to the garden have preceded permit issuance, and thus a requirement for archaeological survey, the developed garden lacks review by the State Historic Preservation Division. That office notified this department on October 24, 1991, that it is "quite likely that historic sites are in the area south of Onomea Stream and possibly the trail-road remnant on the north side." They also said that these "could be surface remnants and could be buried deposits (e.g., taro lo'i deposits). Any remnants would be extremely important for our information on prehistory, because we have virtually no modern archaeological information on areas north of Hilo Bay in the Hilo districts. Information and dates out of deposits are critical for our understanding the spread of settlements over time on the island."

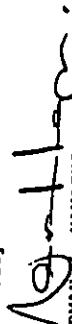
Consequently, the EA should disclose the findings of archaeological survey work and/or review of the proposal by the Historic Preservation Division. The aforementioned letter offered to supply a State archaeologist to inspect the area to assess the possibility of site remnants.

Mr. James Pedersen
November 9, 1992
Page 3

Place Names. It would be easier for people reviewing the EA if original place names are used rather than those given on the site diagram. For instance, "Onomea" is the mapped name for the north boundary stream, not "Hanawi" (and it is reported that "Kukilu" is a prehistoric name of the stream); the "Twin Rocks" prehistoric name is "Mokumana"; "Kahalii Stream" is the name for "Dry Creek"; and "Alakahi Stream" is the name for "Boulder Creek". These names and any archeological features and graves are all that remain of the Hawaiian village of Kahalii which originally occupied the site of the garden.

Thank you for considering our concerns for use in the upcoming EA. Should you need any clarification, please contact Rick Marshauer or Alice Kawaha at this office.

Sincerely



NORMAN K. HAYASHI
Planning Director

FRW:mjh
6900D

cc: HPD/DLNR
Na Ala Hele/DLNR
Land Management Division/DLNR
Chris Yuen/BLNR
Sandra P. Schutte, Esq.
Chas. Furneaux Trust Est./Bishop Trust
SMA Section Counsel
Corporation Counsel

JAMES PEDERSEN PLANNING CONSULTANTS
P.O. Box 22
19-3950 Keonelehua Road
Volcano, Hawaii 96785-0022
Tel: (808) 967 - 7619
Fax/Modem: (808) 967 - 8543

February 21, 1994

Ms. Virginia Goldstein, Planning Director
Planning Department
County of Hawaii
25 Aupuni Street
Hilo, Hawaii 96720

Dear Ms. Goldstein:

Subject: Proposed Site Improvements
Hawaii Tropical Botanical Garden
Onomea Bay, Hawaii

Our thanks to you and your Department for taking the time to respond to our past solicitation for comments concerning this project. A few days ago, I learned from the State Division of Conservation and Environmental Affairs that, inadvertently, no response had been made to Mr. Norman Hayashi's letter of November 9, 1992. I apologize for not providing a response earlier. However, I understand that you have already reviewed a copy of the final environmental assessment and that most of the questions that the Department had have been resolved. See enclosed copy of the October 12, 1993, Planning Department letter to Daniel Lutkenhouse.

Government Road

The only public road within the Hawaii Tropical Botanical Garden (HTBG) is a road remnant of the old Government Road, sometimes referred to as the "Jeep Trail". The existing driveway into HTBG was resurveyed in May, 1993, by Donald James Murray, a registered land surveyor. This information was subsequently plotted over an earlier survey of the Onomea, Kahalii and Alakahi area that was prepared by William K. Kamau, Sr. in 1962 and later revised in 1970. Mr. Murray's survey has since been confirmed by the State Surveyor on February 18, 1994.

At the present time, there is no public access from Mamalahoa Highway to the old Government Road remnant. Survey information by Murray, Smith & Associates, and confirmed by the State Surveyor, indicates that substantial portions of the road, which were formerly situated along the cliffs, have eroded away.

Ms. Virginia Goldstein, Planning Director
February 21, 1994
Page 2

The road remnant ends at a point along the banks of Onomea Stream where it drops approximately 30 feet to the Stream below.

A trail providing the public with access from the Old Mamalahoa Highway to the ocean is situated within the adjoining parcel of land north of the HTBG. This public access route is known as the "Donkey Trail" and was previously approved by the Board of Land and Natural Resources in conjunction with the original conservation district use permit that was issued for HTBG. I understand that the ownership of the Donkey Trail alignment is in question.

With respect to prohibiting public access from the remnant of the old Government Road, the road remnant is presently landlocked. The portion of the old Government Road, that formerly connected with the old Mamalahoa Highway, no longer exists. Further, the road remnant did not provide access to the shoreline. The road remnant ends at a steep embankment approximately 30 feet above Onomea Stream. The final environmental assessment reflects the more recent findings associated with the old Government Road remnant and its present condition.

Security Fences

Hawaii Tropical Botanical Garden has deleted its proposal to construct fencing in light of the costs that would be required to complete a certified shoreline survey. The location of existing grave sites is depicted in figures 1-1 and 1-2 of the final environmental assessment.

Fish Pond

Mr. Dan Lutkenhouse, executive director of HTBG, indicates that no new diversion works, or a delivery ditch, were used to construct or maintain Lily Lake which supports fresh-water carp and plants. The primary source of water for this water feature is rainfall; the Onomea area receives about 158 inches per year. Secondly, a portion of water that supplies the Lake is diverted from Onomea Stream via a 1.5-inch pipe which is used once a week to reoxygenate the water in the Lake; this is done to maintain the health of fish and plants living in the pond. The existing diversion from Onomea Stream was previously approved by the Commission on Water Resource Management in 1990 to manually water plants and operate two restrooms.

Archaeology

No archaeological survey has been made of the Garden by the State Historic Preservation Division. During our consultation with the Division in October, 1992, Division representatives expressed to me that the elimination of security fencing and the type of proposed construction for the rain shelter, i.e., post and pier construction on the ground surface, would negate the need for any archaeological inventory survey.

Ms. Virginia Goldstein, Planning Director
February 21, 1994
Page 3

Place Names

I appreciate your recommendation to include the traditional names of geographical features in the HTBG property and adjoining Onomea area. These changes are reflected in the final environmental assessment. More recent names that have been made by the Garden also are included to facilitate onsite inspections of the Garden.

Our thanks for your patience and understanding.

Regards,



Jim Pedersen
Principal Planner

Enclosure

cc: Mr. Daniel J. Lutkenhouse, Executive Director, Hawaii Tropical Botanical Garden
Mr. Steven S.C. Lim, Attorney-at-Law, Carlsmith Ball Wichman Murray Case & Ichiki
Ms. Cathy Tilton, State of Hawaii DLNR Office of Conservation & Environmental Affairs

Stephen K. Yamashiro
Mayor



Virginia Goldstein
Director
Norman Olsen
Deputy Director

County of Hawaii
PLANNING DEPARTMENT
22 August Street, Room 100 • Hilo, Hawaii 96710-4152
(808) 941-8222 • Fax (808) 941-9418

COPY

October 12, 1993

Mr. Daniel J. Lutkenhouse, President
Hawaii Tropical Botanical Garden
248 Kahoa Road
Hilo, HI 96720

Dear Mr. Lutkenhouse:

RE: Special Management Area (SMA) Use Permit Assessment
Application
Conservation District Use Application (CDUA)
Proposed and After-The-Fact Improvements in Special
Management Area and Conservation District
TMK: 2-7-09:02
Onomea, South Hilo, Hawaii

We are writing to advise you that our September 20, 1993, letter to you regarding your Special Management Area Use Permit Assessment Application was in error.

It was discovered that in August, 1993, we received a copy of the Final Environmental Assessment prepared in conjunction with this application. The information contained in this document has resolved most of the questions we had regarding your application. Nevertheless, it appears that the document has not yet been accepted by DLNR. Since the DLNR has been the agency through which Chapter 343 requirements are being satisfied, we have no alternative but to wait until this has been satisfied.

We ask that you re-submit your Special Management Area Use Permit Assessment Application to this Department as soon as the EIS has been accepted and or your earliest convenience and we will make every effort to process the application as expeditiously as possible.

We are sorry for the mix-up in this matter.

Sincerely,

VIRGINIA GOLDSTEIN
DIRECTOR

VG:psk/1050D
cc: Ms. Sandy Schutte
DLNR/OCEA
Mr. Chris Yuan, BLNR, Hilo
SMA Section

File No. HA-1441A

Date: 3-1-93

Factual Comment

It has not been made clear in the application whether any new construction of a diversion works or a delivery ditch took place during the creation of the Lily Lake. If surface water from Onomea Stream or Alakahi Stream was diverted to supply the Lily Lake, the CDUA applicant should be requested to apply for the necessary permits from the Commission on Water Resource Management.



**JAMES PEDERSEN
PLANNING CONSULTANT**
P.O. Box 22
Volcano, Hawaii 96785
Tel/Fax: (808) 967-7619

August 9, 1993

Mr. George S. Matsumoto
Division of Water Resource Management, State DLNR
P.O. Box 621
Honolulu, Hawaii 96819

Dear Mr. Matsumoto:

Subject: CDUA HA-1447A and Draft Environmental Assessment
Alter-the-Fact and Proposed Improvements
Hawaii Tropical Botanical Garden
Onomea, South Hihii, Hawaii

We are in receipt of an internal DLNR memorandum (Document No. 0411E), dated March 8, 1993, which apparently was forwarded by you to Mr. Roger Evans of OCEA. Our thanks for your taking the time to review and evaluate the scope of this project.

Your memorandum seeks clarification concerning how Lily Lake was constructed and, specifically, whether or not a diversion works or delivery ditch was involved to develop the Lake. If a diversion was used, you indicate that ITTBG should apply for necessary permits from the Commission on Water Resource Management.

Mr. Dan Luikenhouse, executive director of ITTBG, indicates that no new diversion works or a delivery ditch were used to construct Lily Lake. The primary source of water for this water feature is rainfall; the Onomea receives about 158 inches of rainfall per year. Secondly, a portion of water, which is regularly diverted from Onomea Stream via a 1.5-inch pipe, is used once a week to reoxygenate the water in the Lake for the health of fish living in the pond. The existing diversion from Onomea Stream was previously approved by the Commission on Water Resource Management in 1990 to hand-water plants and operate two restrooms.

Regards,

Jim Pedersen
Jim Pedersen, Principal Planner

cc: Mr. Dan Luikenhouse, Hawaii Tropical Botanical Garden
Ms. Sandra Pechter Schutte, Attorney-at-Law

Signature: *George S. Matsumoto*

Nelson Ho
Conservation Chairperson
Hoku Loa Group
Sierra Club, Hawaii Chapter:

March 16, 1993

John W. Keppeler, Acting Director
Department of Land and Natural Resources
1151 Punchbowl Street, Room 130
Honolulu, Hawaii

Dear Mr. Keppeler:

The Sierra Club urges rejection of Conservation District Use Application No. HA-1447A for After-the-Fact and Proposed Improvements to the Hawaii Tropical Botanical Garden (THB, 2-7-9, 2), filed by Daniel J. Lutkenhouse. Our concern is that numerous pending issues have been ignored in the current Environmental Assessment. If these can be resolved to the satisfaction of everyone concerned, we would have no objection.

Please note the following points:

1. Mr. Norman Hayashi's (then Planning Director, Hawaii County) November 9, 1992 letter which asks the applicant to identify any conflict of interest regarding the old government roadway which runs through the HFBG. Specific concerns--

1. Were any portions of the 70 X 50 X 3 foot fish pond built on this road? The HFBG uses a portion of this road for exclusive entry of their shuttle bus and staff. As well, a portion of the road is incorporated into garden grounds, therefore ...exact location of the road needs to be indicated...

2. What is the water supply and water disposal system for the 50 X 70 foot fish pond? Is there specific approval from the Commission On Water Resource Management (CWRM) if the water comes from, and is disposed into, any nearby streams? [We also feel this question should be answered for the 12 foot Flamingo Pond, whose "After-the-Fact" Permit is also being sought in this EA.]

3. Given the strong statement supporting the possible existence of "historic sites..." (in the area of) the trail-road remnant on the north side (of the stream) we suggest a State Archaeologist do a thorough inspection along the road and portions by (and perhaps within) the illegally constructed fish pond.

4. Mr. Rodney Oshico's (Ma Ala Hele, DLNR) letter of August 13, 1992, to the Attorney for the Applicant, reads, "A map indicating all public trails, roads and accesses within the property is also requested." Has this map been

supplied?

--Besides the above mentioned concerns of the Planning Department and Ma Ala Hele, we raise additional concerns regarding several other points mentioned in this EA:

1. What is the current status of the 5-year lease (attached to the EA, in DLNR files) Mr. Lutkenhouse holds on the HFBG? If we read it correctly, the lease began in January of 1988, does this mean it is no longer in effect? We strongly question the lease situation at HFBG whereby the owner of this private property is also the President of the organization leasing it.

2. The EA mentions the existence of toilets in the garden, whose water source is "an onsite water catchment system from Onoeca Stream." Does this "catchment system" require a permit from CWRM or the State Health Department, assuming garden guests wash their hands in stream water supplied from restroom faucets?

3. The Attachment (Amendment to Conservation District Use Permit No. HA-1447) states (on pg. 3, section G) that "There are no known recorded covenants, easements, restrictions or other encumbrances affecting the property." Again, we ask that the government roadway issue be settled and, further, remind the DLNR that several separate parcels of land occupy the north side of Onoeca Valley, including one not owned by Daniel J. Lutkenhouse.

And finally, we have the highest regard for the proposed rain shelter and its use, primarily for presenting lectures...to selected groups of incoming visitors. But we question its use as a concession stand for selling items of food and drink. Would this activity be more appropriate outside of the Conservation Area, perhaps at the HFBG's visitor center along the Old Hamalaha Highway?

In conclusion, we strongly feel that an EA should make all attempts to address every questionable issue raised in a proposed project and certainly those expressed by a government agency, such as the County Planning Department. This EA clearly leaves too many questions unanswered.

Sincerely,

Nelson Ho
Nelson Ho

cc: Virginia Goldstein, Hawaii County Planning Director
Chris Yuen, Hawaii Member, BLNR
Cathy Tilton, OCEA
Robert Marks, Attorney General



JAMES PEDERSEN
PLANNING CONSULTANT
P.O. Box 22
Volcano, Hawaii 96785
Tel/Fax: (808) 967-7619

August 9, 1993

Mr. Nelson Ho
Conservation Chairperson
Moku Lau Group
Sierra Club, Hawaii Chapter
P.O. Box 1137
Hilo, Hawaii 96721

Dear Mr. Ho:

Subject: CDUA HIA-1447A and Draft Environmental Assessment
After-the-Fact and Proposed Improvements
Hawaii Tropical Botanical Garden
Onomea, South Hilo, Hawaii

We are in receipt of your letter to Mr. John Keppeler of the State Department of Land and Natural Resources, dated March 10, 1993. We thank you for taking the time to review the CDUA and related draft environmental assessment for this project.

Your letter raises various concerns regarding the existing pond known as Lily Lake, potential historic sites, public access and easements, water supply for restroom operations, lease arrangements of the Garden property, as well as the sale of food and beverage items to incoming visitors. Our response to your comments are presented in the following paragraphs. They will also be incorporated into the final environmental assessment.

Lily Lake

A boundary survey was conducted by Donald James Murray, a registered land surveyor with Murray Smith & Associates, to determine the location of the old Government Road in relation to the existing driveway and the fish pond. Although the driveway follows a portion of the old Government Road remnant, the portion of road that formerly connected the Garden property with Mamalahou Highway no longer exists. Erosion has occurred along the cliffs where the road remnant was formerly located.

Mr. Nelson Ho, Moku Lau Group
August 9, 1993
Page 2

The existing driveway follows the alignment of the old Government Road in the vicinity of the fishpond, but the pond does not encroach upon the road remnant. This new information will be illustrated and described in the final environmental assessment.

Water Supply and Wastewater Systems for Lily Lake and Flamingo Pond

The water supply for both ponds is primarily from rainfall; the Onomea area receives about 158 inches per year. No diversions were constructed to provide water to the ponds. Secondly, a portion of water, which is regularly diverted from Onomea Stream via a 1.5-inch pipe, is used once a week to reoxygenate the water in the Lake for the health of fish living in the pond. The existing diversion from Onomea Stream was previously approved by the Commission on Water Resource Management in 1990 to land-water plants and operate two restrooms.

There is no wastewater system supporting the ponds. Pond water levels are diminished primarily through evaporation. Secondly, a very limited amount of surplus water is discharged to Alakahi Stream through an earthen ditch.

Potential Historical Sites

The State Historic Preservation Division has generally inspected the property and has reviewed the plans for the project. Based upon its review, the Division has concluded that no further archaeological work is required for the proposed project.

Public Access and Easements

A map indicating all public trails, roads and easements has been provided to Mr. Rod Okino, DLNR's Na Ala Hele Program representative on the Island of Hawaii. This map indicates that historically an old Government Road was situated between Mamalahou Highway and Onomea Stream. However, a remnant of this road, adjacent to Mamalahou Highway, was originally located above steeper slopes, but has now eroded away.

The existing Garden driveway traverses over portions of the old Government Road which eventually terminates at Onomea Stream. The end of the road is situated at the edge of a steep bank more than thirty feet above Onomea Stream.

In terms of settlement concerning the old Government Road, the Lutkenhouse Trust is proposing to purchase the road remnant since a portion of the road remnant has already eroded.

Mr. Nelson Ilo
August 9, 1993
Page 3

Existing Lease of the Garden Property

In January, 1988, the Daniel J. Lukenhouse Revocable Trust entered into a five-year lease with the Hawaii Tropical Botanical Garden (HTBG) that permitted the Garden to use the Trust property for one dollar per year. The lease technically expired on December 31, 1992; however, the Trust has continued to permit the Garden to use the property. The Trust is presently considering deciding the property to HTBG.

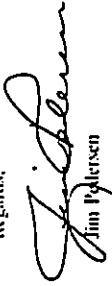
Toilets in the Garden

As stated earlier, surface water is diverted from Ohouma Stream is presently diverted via a 1.5-inch pipe. The existing diversion from Ohouma Stream was previously approved by the Commission on Water Resource Management (CWRM) in 1990 to hand-water plants and operate the two existing restrooms. The State Water Code (Chapter 13-167, Hawaii Administrative Rules), adopted in April, 1988, assigns the CWRM with the authority to issue permits for all new and existing water diversions. The Commission's determinations include, in part, consideration of water quality.

Concession at Educational Rain Shelter

Children and other visitors want some refreshments available during their visit to the Garden. The average time spent in the Garden by visitors is between two and three hours, with some people spending all day in the Garden. The lack of refreshments has been the most serious complaint received from visitors to the Garden. The food and drink concession is not planned to be a major feature and is incidental to the Education Rain Shelter facility.

Regards,


Jim Petersen

cc: Mr. Dan J. Lukenhouse, Hawaii Tropical Botanical Garden
Sandra Pechter Schutte, Attorney-at-Law

Department of Land & Natural Resources
Division of Forestry and Wildlife

MEMORANDUM:

March 16, 1993

TO: Roger Evans, OCEA

FROM: Michael G. Buck, Administrator

SUBJECT: After-the-fact improvements to the Hawaii tropical botanical garden
file no. ha-1447a



JAMES PEDERSEN
PLANNING CONSULTANT
P.O. Box 22
Volcano, Hawaii 96785
Tel/Fax: (808) 967-7619

We have reviewed file no. ha-1447a and have the following comments:

- 1) Prior to the publication of the draft EA, the Na Ala Hele program staff had indicated a need for a certified shoreline survey and a map indicating all public trails, roads and accesses within the property. Correspondence between Ms. Schutte and Mr. Rodney Oshiro (Hawaii Na Ala Hele) indicated this request. Correspondence to Ms. Schutte from the DLNR also indicated this request (see file no. 93-099 for DOFAW's response). Apparently, our request has been ignored.
- 2) The present gated roadway utilized by the HTBG is a remnant of the old Government Road. The draft EA does not address the ownership and the ramifications associated with prohibiting the public from accessing the shoreline and surrounding waters of Onomea Bay from this road.
- 3) Correspondences published in the draft EA from Historic Preservation, DLNR and the County Planning Dept. plainly indicates the presence of the old government road. The draft EA, however, consistently fails to address this issue.
- 4) Until our concerns are addressed, we have very serious reservations in approving this after-the-fact project.

cc: Hawaii Branch
Na Ala Hele

August 16, 1993

Mr. Michael G. Buck, Administrator
Division of Forestry and Wildlife
State Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Buck:

Subject: CDUA HA-1447A and Draft Environmental Assessment
After-the-Fact and Proposed Improvements
Hawaii Tropical Botanical Garden
Onomea, South Hilo, Hawaii

We are in receipt of your memorandum to Mr. Roger Evans of the OCEA, dated March 16, 1993, that provided your comments regarding this project. We thank you for taking the time to review the CDUA application and related environmental assessment.

Your memorandum refers to an earlier request by the Na Ala Hele Program staff for a certified shoreline survey and map that would indicate all public trails, roads, and access points within the property. You suggested that DOFAW's request has been ignored. The draft environmental assessment reviewed by Na Ala Hele staff included the construction of fencing, some of which would have been located near the shoreline. Hawaii Tropical Botanical Garden (HTBG) subsequently deleted its proposal to construct fencing in light of the costs that would be required to complete a certified shoreline survey.

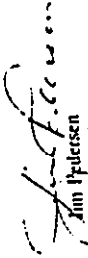
A second issue raised by your memorandum concerns the present access to HTBG, existing land ownership, and related public access considerations. The only public road within the HTBG property is a road remnant of the old Government Road. The existing driveway into HTBG was resurveyed in May, 1993 by Donald James Murray, a registered land surveyor. This information was subsequently plotted over an earlier survey of the Onomea, Kahili and Alakahi area that was prepared by William K. Kanau, Sr. in 1962 and later revised in 1970.

Mr. Michael G. Buck
August 16, 1993
Page 2

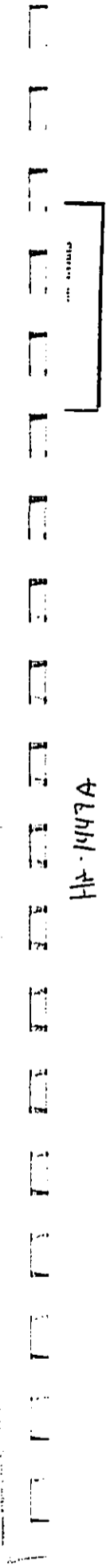
At the present time, there is no public access from Mamalahua Highway to the Old Government Road remnant. Survey information by Murray, Smith & Associates indicates that a portion of the road, which was formerly situated along the cliffs, has eroded away. The road remnant ends at a point along the banks of Onomea Stream which drop approximately 30 feet to the Stream below. A trail providing the public with access from the Old Mamalahua Highway to the cliffs at the ocean is situated within the adjoining parcel of land north of the ITBG. This public access route was previously approved by the Board of Land and Natural Resources in conjunction with the original conservation district use permit issued for ITBG.

With respect to the ramifications associated with prohibiting public access from the road remnant, the road remnant is presently landlocked. The portion of the old Government Road, that formerly connected with the Old Mamalahua Highway, no longer exists. Further, the road remnant did not provide access to the shoreline. The road remnant ends at a steep embankment approximately 30 feet above Onomea Stream. The Daniel J. Lukenhouse Trust, the owner of the ITBG property, is seeking to purchase the road remnant from the State as the adjoining landowner. The final environmental assessment will reflect the more recent findings associated with the old Government Road remnant and its present condition.

Regards,


Jan Petersen
Principal Planner

cc: Dan Lukenhouse, Hawaii Tropical Botanical Garden
Sandra Pechter Schulte, Attorney-at-Law



HP-1447A

Roger Evans
Page 2

disturbance, that is, only for the erection of the posts for the shelter, is anticipated. As for the proposed additional garden display, identification, and "no trespassing" signs, these are also likely to have "no effect" on historic sites as, again, minimal ground disturbances are anticipated for their erection.

In sum, the subject application will have "no effect" on historic sites; however, as we indicated in our memorandum of September 18, 1992, to your office (your File No. 93-099), future projects in the garden south of Onomea Stream entailing extensive alteration of the present ground surface, will require an archaeological inventory survey. The findings of the survey will need to be submitted to our office in report format for review, and if significant archaeological sites are present then a mitigation plan consisting of data recovery and/or preservation plan will also have to be submitted to our office for comment and approval.

If your office should have any questions, please contact Kanalet Shun at 587-0007.

KS:amk

March 31, 1993

LOG NO: 7584
DOC NO: 9303ks06

MEMORANDUM

TO: Roger Evans, OCEA
FROM: Don Hibbard, Administrator
State Historic Preservation Division
SUBJECT: CDUA IIA-1447A -- After-the-fact and Proposed Improvements to the
Hawaii Tropical Botanical Garden
Onomea, South Hilo, Island of Hawaii
THK: 2-7-09: 002

HISTORIC PRESERVATION PROGRAM CONCERNS:

Our office has had several occasions to review activities related to the improvements to the Garden. Our Hilo Office staff archaeologist has also conducted a field check of these property improvements, including the after-the-fact ones.

The after-the-fact improvements consisted of 1) a bird pond, 2) an aviary, 3) Lily Lake, and 4) 3 "no trespassing" sign locations. The first three of these improvements are located on the south side of Onomea Stream. In our letter of October 24, 1991, to the County of Hawaii Planning Department, we pointed out to the County that, based on our records, historic sites were quite likely to be present on this side of the stream. These historic sites could possibly include buried deposits (e.g., taro lo'i deposits), and the presence of any remnants of such deposits would be extremely important as we virtually have no recent archaeological information on the Hilo area's prehistory. The gist of our letter was conveyed to Mr. James Pedersen by the Planning Department in their letter of November 9, 1992 (this letter is included in Appendix A of the Draft Environmental Assessment report). Such cultural deposits, if they existed, would have been likely to have been adversely affected by the bird pond, aviary, and Lily Lake after-the-fact improvements, and it is now too late to undertake any mitigative measures. The fourth after-the-fact improvement (erecting of the 3 "no trespassing" signs), because of the very restricted nature of the ground surface disturbance this improvement entails, would likely have had "no effect" on historic sites.

The proposed improvement as planned, consisting of an above surface construction of the rain shelter, is likely to have "no effect" on significant historic sites as very minimal ground surface



**JAMES PEDERSEN
PLANNING CONSULTANT**
P.O. Box 22
Volcano, Hawaii 96785
Tel/Fax: (808) 967-7619

August 9, 1993

Mr. Don Hibbard, Administrator
State Historic Preservation Division
State Department of Land and Natural Resources
1151 Punchbowl Street
Honolulu, Hawaii 96813

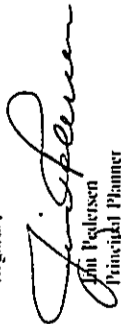
Dear Mr. Hibbard:

Subject: CDUA HA-147A and Draft Environmental Assessment
Alter-the-Fact and Proposed Improvements
Hawaii Tropical Botanical Garden
Onomea, South Hilo, Hawaii

We are in receipt of your memorandum to Mr. Roger Evans of the OCEA, dated March 31, 1993 (DOC No. 9303ks060), that outlined your concerns regarding this project. We thank you for your continued interest in the project and for taking the time to review the CDUA application and related environmental assessment.

We concur with your conclusion that the project will have "no effect" on historic sites. Hawaii Tropical Botanical Garden has no intention of disturbing any archaeological or historical features. If there are future projects involving extensive alterations of surface soils, Hawaii Tropical Botanical Garden will conduct an archaeological inventory survey.

Regards,


Jim Pedersen
Principal Planner

cc: Sandra Pechter Schutte, Attorney-at-Law
Dan Lankenhouse, Hawaii Tropical Botanical Garden

APPENDIX B

**MARCH 18, 1992, LETTER
TO DAN LUTKENHOUSE
FROM
BOARD OF LAND
& NATURAL RESOURCES**



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

P. O. BOX 51
HONOLULU, HAWAII 96809

WILLIAM W. AUST, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

MEMBERS
John F. Keppeler, II
Donna L. Hanauke

PLANNING DEVELOPMENT
ZONING
AGRICULTURE
CIVIL ENGINEERING AND SURVEYING
CONSTRUCTION
CIVIL ENGINEERING
ELECTRICAL ENGINEERING
MECHANICAL ENGINEERING
PLUMBING
LAND MANAGEMENT
STATE AND LAND DEVELOPMENT

MAR 18 1982
FILE NO.: 92-525/HA-2533
I.D. NO.: 317

REF:OCEA:SKK

Mr. Dan J. Lutkenhouse - 2 - FILE NO.: 92-525/HA-2533

Upon approval of the proposed use by the Board, any other work or construction to be done on the land shall be initiated within one (1) year of the approval of such use; and all work and construction must be completed within three (3) years of the approval of such use.

The existing construction plans approved by the Chairman in 1985 are therefore, no longer valid. In order to proceed with the construction of a new access road, an amendment to COUP HA-1447 is required. Your application should include a discussion of the proposed use for the existing access road.

Additionally, we have the following comments in response to a March 3, 1992 site visit conducted by staff from the Office of Conservation and Environmental Affairs.

1. Compliance with COUP HA-1447: On July 9, 1982, the Board approved COUP HA-1447 for an arboretum and botanical garden use subject to 29 conditions. The Board did not approve a zoological garden. During the site visit staff identified the following inconsistencies and possible violations with COUP HA-1447:
 - a. Placement of three large exhibit cages with two birds (Macaws) in each cage;
 - b. Construction of three wooden exhibition stands for the birds;
 - c. Construction of "Lily" lake that houses fish (carp);
 - d. Construction of a small pond with flamingos and ducks.
 - e. Several signs describing the garden or that state "No Trespassing." (We note that plans for a wooden sign bearing the logo, "Hawaii Tropical Botanical Garden" were approved by the Chairman on September 19, 1983.)

In summary, you need to update your existing COUP HA-1447 by filing an after-the-fact COUA for those five items identified above.

2. Public access to and along the shoreline of Oromea Bay: Staff made the following observations while hiking along the old government road/dorkey trail (TMK: 2-7-10: 22) to the Oromea Bay shoreline:
 - a. On-street parking at the top of the road/trail is limited to about one or two cars;
 - b. The "No Trespassing" sign has been removed. However, two posts, cable wire, and a sign warning the hiker of the hazards and risks of using the road/trail remains.

Mr. Dan J. Lutkenhouse
Founder-Director
Hawaii Tropical Botanical Garden
248 Kahoa Road
Hilo, Hawaii 96720

Dear Mr. Lutkenhouse:

SUBJECT: Planting of Vegetation on Tax Map Keys: 2-7-10: 1 and 22;
Construction of New Access Road; Follow-up to the Department's
Site Visit

Thank you for your letters dated January 10, 1992 and February 18, 1992 requesting permission to plant trees and plants on tax map keys: 2-7-10: 1 and 22; and whether or not the approved plans for a new access road are still valid. We have reviewed your requests and have the following comments.

1. Planting of Vegetation on Tax Map Keys: 2-7-10: 1 and 22: According to your information, you are proposing to plant trees and plants on tax map keys: 2-7-10: 1 and 22 for ecological and beautification purposes. These plantings will not be a part of the Hawaii Tropical Botanical Garden. Altering the landscape in order to plant ornamental vegetation, such as palm trees and flowering shrubs, requires a Conservation District Use Permit (COUP). In addition to obtaining a COUP, compliance with the County of Hawaii's Special Management Area requirements will be necessary.
2. Construction of New Access Road: Additionally, we have reviewed your request to construct a new access road that was approved by the Chairman of the Board of Land and Natural Resources in 1985. Condition 25 of COUP HA-1447 for the garden states the following:

Thank you for your cooperation in this matter. Should you have any questions, please contact Cathy Tilton of the Office of Conservation and Environmental Affairs at 587-0377.

Very truly yours,

William W. Paty
WILLIAM W. PATY

Attachment

c. Upon reaching the shoreline, staff observed six fishermen.

Staff observed that public access to the shoreline via the old government road/donkey trail on TMK: 2-7-10: 22 is unimpeded. Therefore, you appear to be in compliance with COUP HA-1447 (requiring you to provide public access to and along the shoreline at Onomea Bay). However, we will continue to monitor any complaints we may receive relative to public access to the shoreline at Onomea Bay.

3. Razor wire: Staff also observed the shoreline area in which razor wire is alleged to have been placed. We did not see any razor wire and you also asserted at that time that all of the razor wire has been removed. However, we have concerns that some of the razor wire may have fallen into the ocean. We ask that you ensure that all razor wire has been removed including any that may have inadvertently fallen into the ocean. We will send an officer from our Division of Conservation and Resources Enforcement to conduct a follow-up inspection to ensure that all of the wire has been removed.

Regarding your concerns of liability along the old government road/donkey trail, we suggest that you discuss this matter with your attorney. You may want to consider purchasing liability insurance. We also suggest that you continue to work with the Na Ala Hele Program.

Also, for your information, Condition 6 of Temporary Variance number TV-HA-91-5 approved by the Board on April 12, 1991 to plant approximately 100 trees on TMK: 2-7-10: 1 states the following:

6. Any activity to be done on the land shall be completed within twelve (12) months of the approval of such use; and any subsequent proposed land use of a similar nature requires the submittal of a Conservation District Use Application (CDUA) within six (6) months on this approval.

Please be advised that once the 12-month time frame for the temporary variance lapses, the use (i.e. planting of trees) will have to be removed.

Because of potential violations with COUP HA-1447, you are required to submit an after-the-fact COUA for the five items previously identified within 60 days of the date of this letter. Failure to submit an adequate after-the-fact COUA (including 18 copies of the environmental assessment and 18 copies of the application) may result in the issuance of a Cease and Desist order for the garden and review of the continuance of your COUP HA-1447.