

**STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
OFFICE OF CONSERVATION AND COASTAL LANDS
Honolulu, Hawaii**

September 23, 2011

**Board of Land and
Natural Resources
State of Hawaii
Honolulu, Hawaii**

REGARDING: Proposed Rule Amendment KA 10-1
Request for Public Hearing and Small Business Impact
Determination: Petition to Amend Title 13, Chapter 5,
Hawaii Administrative Rules (13-5, HAR) to Establish the
Lawai Kai Special Subzone

PETITIONER: National Tropical Botanical Garden (NTBG)

LANDOWNER: Allerton Garden Trust in Hawaii
State of Hawaii

LOCATION: Lawai, Island of Kauai
TMKs: (4) 2-6-002:001, 004, 005, 006, 007, 008, 009
And Submerged Land of Lawai Bay

PETITION AREA: Approximately (\approx) 110 acres

SUBZONE: Limited
Resource

BACKGROUND

The property has historically been used for residential, farming, garden and botanical purposes since the 1800's, and as a botanical garden tourist destination since the early 1900's. The Allerton's purchased the property in 1938 and designed the gardens. Over the years, the Garden has primarily been used as an educational and scientific resource.

In 1964, the Allertons approached the State Land Use Commission (LUC) to request their property to be designated into the Conservation District as a way to perpetuate the cultural, archaeological and natural resources of the Allerton Garden Estate. The request was approved.

In 1970, the National Tropical Botanical Garden entered a management agreement with the Trustees of the Allerton Garden Trust for the preservation and use of the Garden's resources. NTBG also maintains and uses the Allerton Garden as an educational resource for its visitors and a research area for its scientists.

DESCRIPTION OF AREA AND CURRENT USE (Exhibit A, B, C, D, E & F)

The subject area is located on the south shore of Kauai. For the purpose of this petition, Lawai Kai encompasses Allerton Garden, the lower reaches of Lawai Stream, Lawai Beach and Bay. To the north is NTBG's McBryde Garden, to the east is Kukuiula Development, to the south is Lawai Bay and to the west is private agricultural land.

The Estate has existing structures, paths, roads, plant collections and irrigation systems. Allerton Garden serves as an educational resource for visitors and a research area for scientists. Research would include monitoring the aquatic, wetland and marine environments and also the restoration of native vegetation in selected coastal areas.

At the southern end of the property is Lawai Bay characterized by a white sand beach. The sandy beach is surrounded on the east and west sides by steep basaltic cliffs that also restrict shoreline access due to this topography. Lawai Bay is approximately 20-acres of mostly sandy bottom with coral reef communities colonizing the basalt rock perimeter. The bay is a high wave energy environment, particularly in summer months receiving intermittent freshwater and terrestrial sediments/debris input from Lawai stream. There is high wave energy and periodic stream flooding. Upstream land uses contribute to increased sedimentation, nutrients and organic debris deposited into the bay.

The marine environment of Lawai Bay has a sand silt bottom and is considered nearly pristine. The sandy shoreline is approx two aces in size and consists of a white sand beach and small dune system that transition into the lawn fronting the Allerton house.

On the west side of the stream, a research collection of plant material gathered by the Allertons during trips to the Pacific and Southeast Asia exists. The collection includes the Pandanus Collection, the Palmetum and the Micronesian Riparian Habitat. On-site training and education for archaeological field techniques, stream restoration, Elementary School programs, garden as a classroom and horticultural internships are available at the site.

Between November 2007 and October 2008, NTBG conducted a user survey of the beach and bay. The average number of surfers, swimmers and beach goers was ≈ 246 /month; pole and net fishermen ≈ 28 /month; and kayaks and motorized vessels ≈ 36 /month.

Existing Land Use Classifications

The fastlands of the petitioned area appears to lie within the Limited subzone of the Conservation District. Pursuant to §13-5-12, Hawaii Administrative rules (HAR), the objective of the Limited subzone is to limit uses where natural conditions suggest constraints on human activities. This subzone encompasses:

1. Land susceptible to floods and soil erosion, lands undergoing major erosion damage and requiring corrective attention by the county, state, or federal governments; and

2. Lands necessary for the protection of the health, safety, and welfare of the public by reason of the land's susceptibility to inundation by tsunami, flooding, volcanic activity or landslides, or which have a general slope of forty percent or more.

The submerged land of Lawai Bay lies within the Resource subzone of the Conservation District. The objective of this subzone is to develop, with proper management, areas to ensure sustained use of the natural resources of those areas. The Resource subzone encompasses:

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 recreational uses such as hunting, fishing, hiking, camping, and picnicking;
4. Offshore islands of the State of Hawaii, unless placed in the Protective or Limited subzone;
5. Lands and state marine waters seaward of 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 on shore to the extent of the State's jurisdiction, unless placed in the Protective or Limited subzone.

Geographic Characteristics

The petitioned area includes open meadows, jungle ravines; rugged cliff faces and submerged land. There are a variety of soil types from Jaucas Loamy Fine Sand inland, Marsh soil around the stream mouth and fishpond area, Rough Broken Land along the steep valley walls with gullies that serve as drainage channels, Kaena Clay and beach sands interspersed with cobble stones, coral and seashells.

About a mile makai of Kaumualii Hwy., an incised lowland valley feature 200-feet deep in sections has been created by the stream and is surrounded by agricultural lands elevated above the stream channel.

Climatic/Hydrological Characteristics

Average rainfall is less than 40-50 inches of rain per year with an annual temperature from the mid-60's to the mid-80's. Generally there are trade winds with the possibility of Kona storms from October to April.

According to the applicant, five unnamed tributaries drain Lawai's upper watershed joining its main channel by the time the stream reaches about 600-foot elevation. The site is subject to hurricane impacts and flooding from the stream. According to the Flood Insurance Rate Maps (FIRM), the subject area lies within numerous flood zones: A, AE, VE, X and XS.

Biological Characteristics

FLORA

Lawai Kai was once a part of the lowland dry forest and coastal ecosystems. Due to the land use changes over time, the terrestrial ecosystems found on the subject property today are dominated by introduced plant species. A botanical survey of the Garden found very few native species, and no threatened or endangered flora.

According to the applicant, there are few native Hawaiian plants in the lower region of Lawai Valley except along the coastal beach area and the inaccessible rocky slopes and cliffs. These plants would include akoko, aalii, alaalawainui, kookoolau, uhaloa and akia. Also found along the coastal areas are naupaka, pohuehue, hunakai, pauohiika, akiaki and mohihihi.

A botanical inventory of the Allerton garden was conducted in June 2007. The inventory identified approximately 858 different species, varieties, and cultivars of flowering plants and ferns, including cultivated, native, and naturalized weedy species.

FAUNA

A marine resource survey conducted in May 2007 found that the biological community exhibited relatively healthy herbivore populations (both sea urchins and fish). No alien or invasive algae species were observed and turf algae were dominant. Overall coral abundance was low most likely due to the high-energy environment and dominated by lobe coral and cauliflower coral. Forty benthic taxa and 90 fish species were found within the survey sites.

Fish species diversity was low, owing to the small size of the bay and its limited habitat complexity. Akule, weke'ula were the most important fishery resources utilizing the bay. Uhu and opihi were low in abundance and size reflecting high harvest pressures in the bay.

A biological and habitat assessment of the lower Lawai Kai Stream was conducted in June 2007. Native aquatic species present include o'opu and opae species. Of concern was the presence of a large population of alien cichlids and grass shrimp.

Endemic, endangered avifauna in the vicinity of Lawai estuary and stream include the Hawaiian duck, Hawaiian coot and the moorhen. The coastal area of Lawai is an identified hauling out and resting area for the endangered Hawaiian monk Seal and a nesting site for threatened green sea turtles.

Historic Sites

At the present time there are no properties listed on the State or National Register of Historic Places. Some structures and other features over 50-years old may qualify for placement on the Register.

An archaeological survey identified six new sites. These sites are in addition to the thirteen previously identified sites. A Cultural Impact Assessment of Allerton Garden was prepared by Scientific consultant Services in February 2008.

Scenic & Visual Resources

There are a variety of dramatic scenic resources. The mauka to makai views include lush tropical vegetation with cliffs rising steeply from the valley floor. Along the stream the Gardens offer a series of garden rooms and vistas between the stream bank and the cliffs that rise behind. The absence of human impacts contributes to the natural beauty.

Infrastructure Evaluations

Hurricane Iniki undermined the former access to the property in 1992. According to the petition, there is no longer any direct vehicular access to Allerton Garden from a public road. A number of infrastructural improvements are illustrated on Exhibit F.

REVIEW OF PROPERTY CHARACTERISTICS IN RELATION TO PROPOSED SUBZONE OBJECTIVES (Exhibit G)

The petitioner is proposing to amend 13-5, HAR to establish a Special Subzone within the Conservation District for Lawai-Kai. The objective of a Special subzone designation is to provide for areas possessing unique developmental qualities that complement the resources of the area. The purpose of this Special Subzone is to protect, preserve and perpetuate the natural and cultural resources of the petitioned area; and to allow for land uses for educational, recreational and scientific purposes.

The petition requests that the makai portions of Lawai that lie within the Limited subzone and Lawai Bay be designated into a Special Subzone. The purpose is to holistically efficiently link the long-term management of the land with the stream, beach and bay by taking an ahupuaa based management approach.

ALTERNATIVES CONSIDERED

An alternative to this plan would be to leave the Conservation Limited subzone designation as is or to possibly designate the subject area within another subzone of the Conservation District. Staff notes the subject area is in conformity with the objectives for the Limited subzone. It contains lands susceptible to erosion, tsunami and is located in an area subject to coastal flood with velocity hazard (wave action). Staff believes that the area is suitable for the Limited subzone designation.

STAFF ANALYSIS

Pursuant to Chapter 13-5, Hawaii Administrative Rules (HAR), any change to Conservation District subzone boundaries must be made by amending Chapter 13-5, HAR. Statutes and rules that govern the process by which amendments of Chapter 13-5, HAR, may be made include:

- A. §91-2 through 91-7, Hawaii Revised Statutes (HRS);
- B. §2, Act 168, Session Laws of Hawaii 1998;
- C. §183(c)-4, HRS;

D. §13-1, HAR; and

E. §13-5-5, HAR.

Requests to amend the administrative rules are reviewed by the Legislative Reference Bureau and the Department of the Attorney General. In general, in order to take effect, proposed rule amendments must obtain departmental and gubernatorial authorizations for both the public hearing and final approval.

Authorization for Public Hearing

The first major step to amend the administrative rules is to hold a public hearing. The request for public hearing is the subject of this staff submittal. Should the Board of Land and Natural Resources (Board) approve the subject request, the department would forward the request for public hearing to the Governor for approval. At the Board's discretion, the Board may modify the proposed rule change at this time.

Approval/Disapproval

After public hearing, the second major step would be to seek the Board's discretion to forward the proposed rule change to the Governor for approval. The Board may also modify the proposed rule change at that time. Both the Legislative Reference Bureau and the Department of the Attorney General would review, and the Department of the Attorney General approves as to form, the proposed rule change prior to forwarding the proposed amendment to the Governor for decision.

State Policies and Procedures

The former Governor of the State of Hawaii has issued Administrative Directive # 09-01 to guide policy and procedures for the adoption, amendment or repeal of administrative rules. The Governor directs that petitions for administrative rule changes address certain policy topic areas such as impacts to small businesses.

In this particular case, the rule-making checklist for "small business impact statement" has been filled out and based upon this checklist, staff believes that the proposed rule amendments will not impact or affect small business.

Chapter 343, HRS, Requirements

Staff believes that due to the scope and nature of the proposed amendment, Chapter 343, Hawaii Revised Statutes (HRS), is not applicable at this time as no land use is proposed.

DISCUSSION

The petitioner is proposing to create the Lawai Kai Special subzone to implement an ahupuaa base land management plan to protect the important natural, cultural and historical resources of the area. A draft Master and Management Plan encompasses the petitioned land area of Allerton Garden, the aquatic resources of Lawai stream, the Lawai Kai coastal zone and the marine waters of the bay to support the petition. Implementation of the Master Plan will involve other Divisions of the Department.

The subject request is to take the proposed subzone redesignation rule amendment to public hearing and to determine if the proposed action would have an affect on small business. Staff believes the proposed subzone redesignation would not affect any small business.

STAFF RECOMMENDATION:

That the Board of Land and Natural Resources:

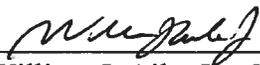
1. Approve the petitioner's request to process the subject petition to amend Chapter 13-5, Hawaii Administrative Rules;
2. Determine that the proposed rule amendment will not impact or affect small business;
3. Authorize the forwarding of a request for public hearing for the proposed rule amendment to the Governor, State of Hawaii;
4. Upon executive approval, publish public hearing notice; and
5. Upon executive approval, appoint a representative of the Board of Land and Natural Resources as public hearing master for the proposed rule amendment's public hearing.

Respectfully submitted,



K. Tiger Mills, Staff Planner
Office of Conservation and Coastal Lands

Approved for Submittal:



William J. Aila, Jr., Chairperson
Board of Land and Natural Resources

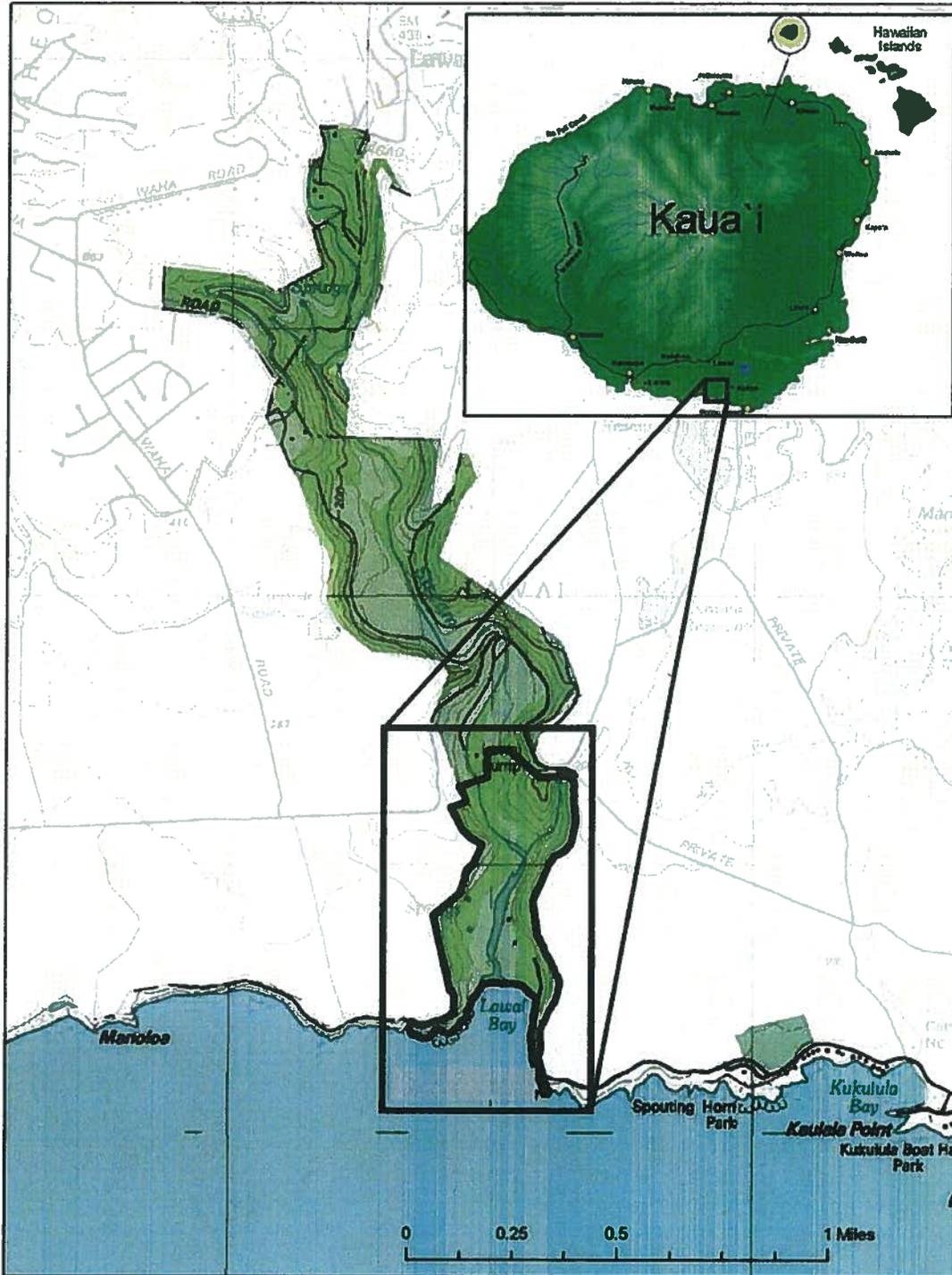


Exhibit A
LOCATION MAP

LĀWA'I KAI SPECIAL SUBZONE MASTER PLAN
National Tropical Botanical Garden

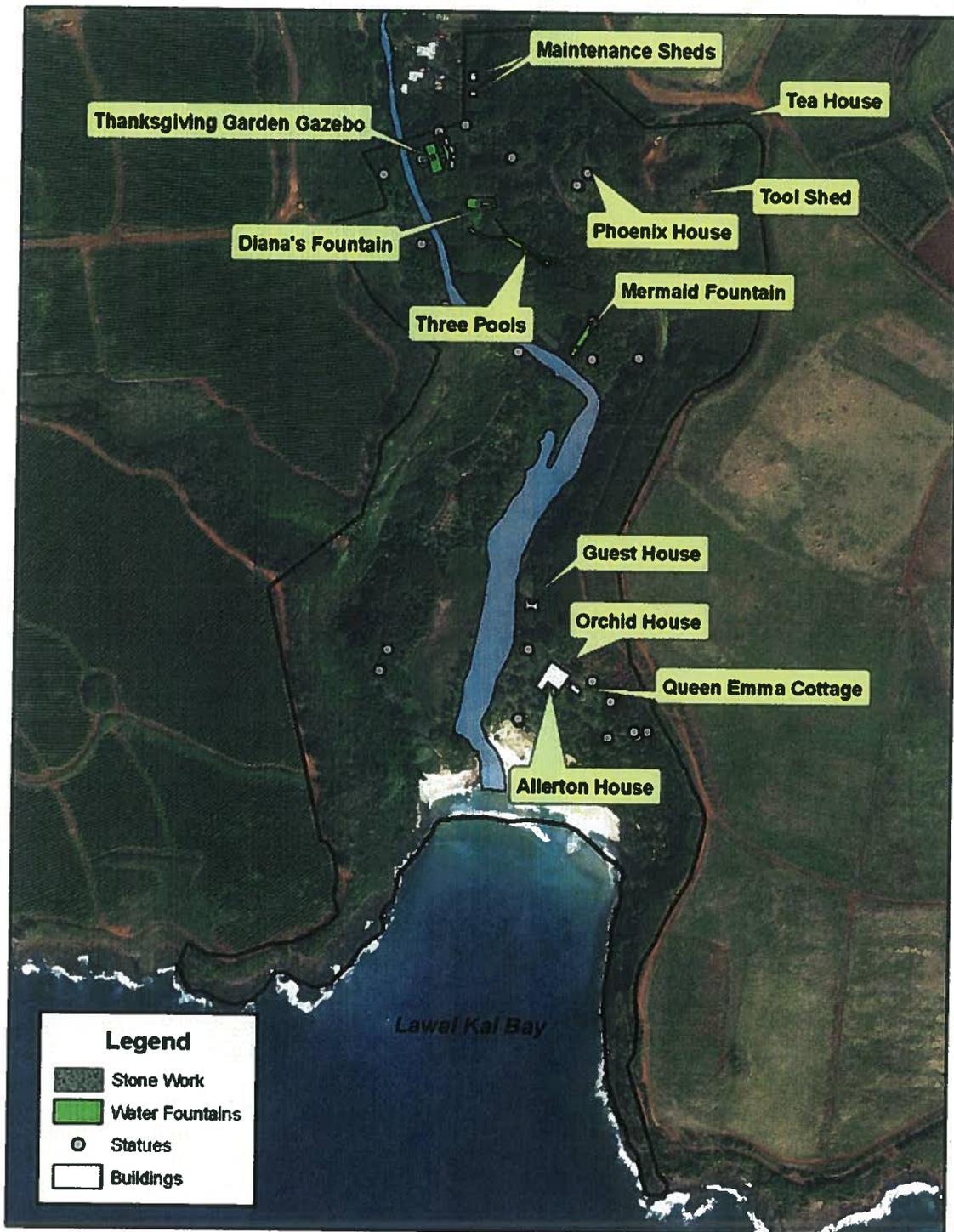


Exhibit B
HISTORIC RESOURCES

LĀWA'I KAI SPECIAL SUBZONE MASTER PLAN
National Tropical Botanical Garden

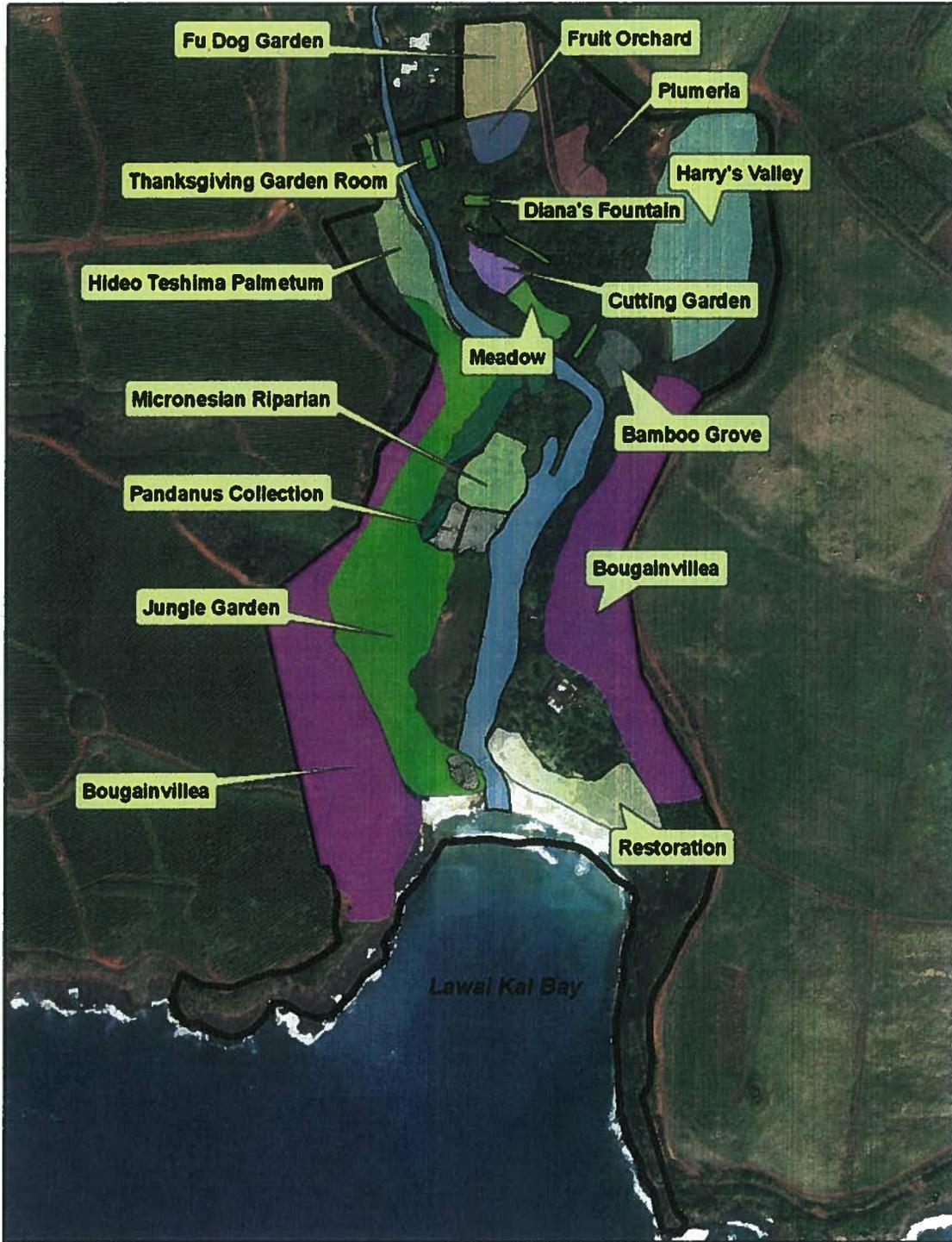
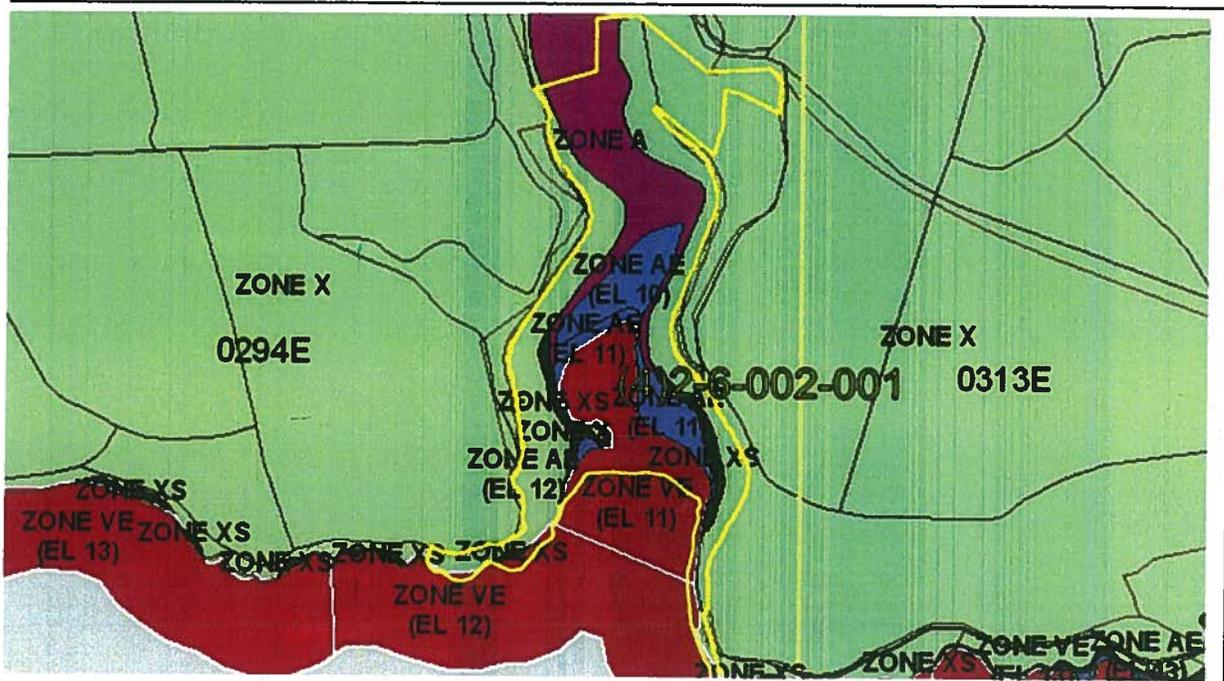


Exhibit C
LANDSCAPE RESOURCES

LĀWA'I KAI SPECIAL SUBZONE MASTER PLAN
National Tropical Botanical Garden

NATIONAL FLOOD INSURANCE PROGRAM



What flood hazard zones are shown on FEMA's Flood Insurance Rate Map and what do they mean?

Zones VE and V1-V30: Areas along coasts subject to inundation by the 1-percent-annual-chance flood event with additional hazards due to storm-induced velocity wave action. Base Flood Elevation (BFEs) derived from detail hydraulic analyses are shown within these zones. Mandatory flood insurance purchase requirements apply.

Zone A: Areas subject to inundation by the 1-percent-annual-chance flood event. Because detailed hydraulic analyses have not been performed, no BFEs or flood depths are shown. Mandatory flood insurance purchase requirements apply.

Zones AE and A1-A30: Areas subject to inundation by the 1-percent-annual-chance flood event determined by detailed methods. BFEs are shown within these zones. Mandatory flood insurance purchase requirements apply.

Zone AH: Areas subject to inundation by the 1-percent-annual-chance shallow flooding (usually areas of ponding) where average depths are between 1 and 3 feet. BFEs derived from detailed hydraulic analyses are shown in this zone. Mandatory flood insurance purchase requirements apply.

Zones B, C, and X: Areas identified as areas of moderate or minimal hazard from the principal source of flood in the area. However, buildings in these zones could be flooded by severe, concentrated rainfall coupled with inadequate local drainage systems. Flood insurance is available in participating communities but is not required by regulation in these zones.

Zone D: Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

PROPERTY INFORMATION	
COUNTY:	KAUAI
TMK NO:	(4)2-6-002-001
SITE ADDRESS:	4081 LAWAI RD
FEMA FIRM PANEL(S):	1500020294E
PANEL EFFECTIVE DATE(S):	SEPTEMBER 16, 2005
FIRM INDEX DATE:	SEPTEMBER 16, 2005
LETTER OF MAP CHANGE(S):	NONE

PARCEL DATA FROM:	MARCH 2008
IMAGERY DATA FROM:	MAY 2005

IMPORTANT PHONE NUMBERS	
<u>County NFIP Coordinator</u>	
County of Kauai	(808) 241-4873
Mario Antonio, P.E., CFM	
<u>State NFIP Coordinator</u>	
Carol Tyau-Beam, P.E., CFM	(808) 587-0267

Disclaimer: The Department of Land and Natural Resources assumes no responsibility arising from the use of the information contained in this report. Viewers/Users are responsible for verifying the accuracy of the information and agree to indemnify the Department of Land and Natural Resources from any liability, which may arise from its use.

EXHIBIT D
FLOOD ZONE MAP

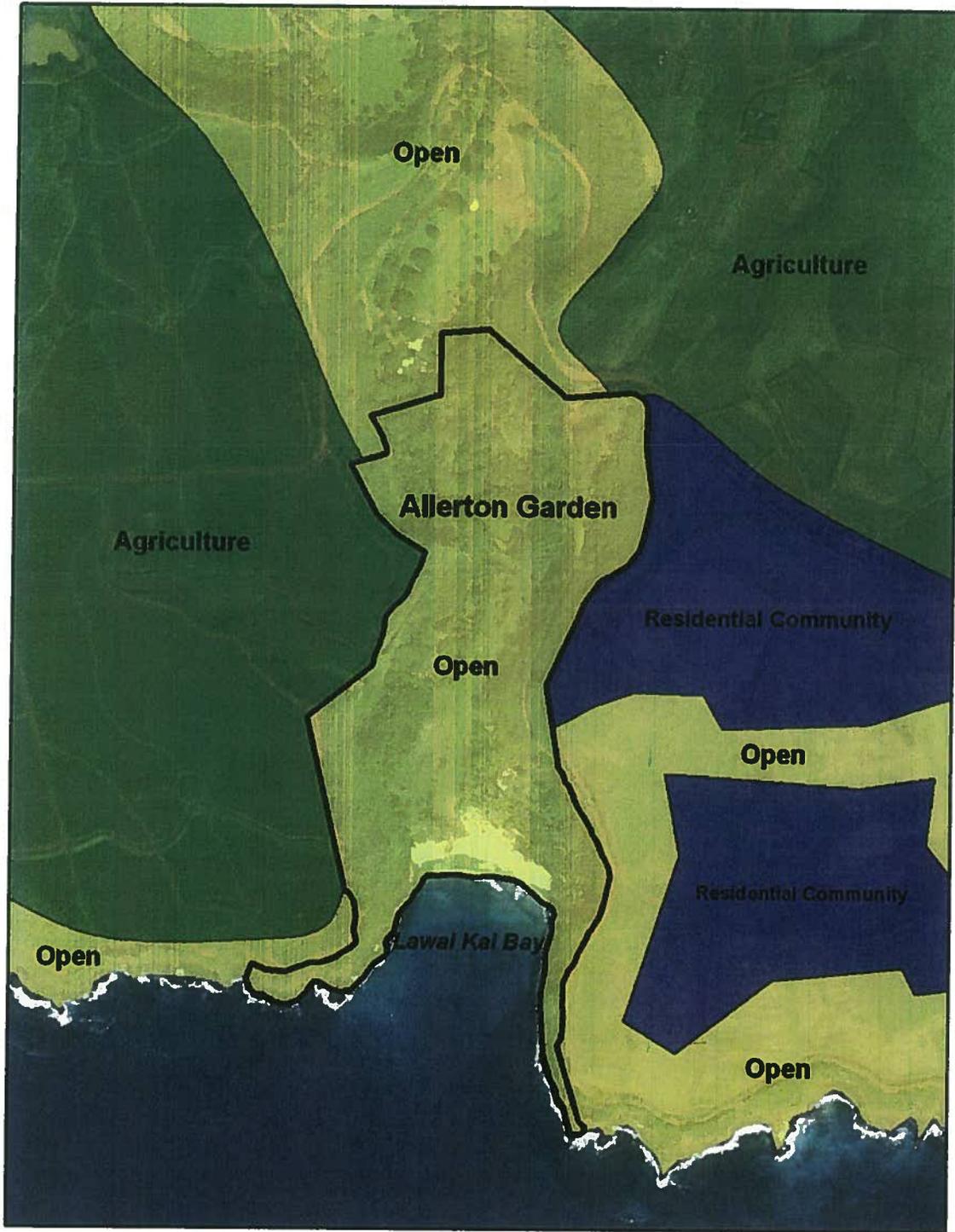


Exhibit E
COUNTY GENERAL PLAN MAP

LĀWA'I KAI SPECIAL SUBZONE MASTER PLAN
National Tropical Botanical Garden

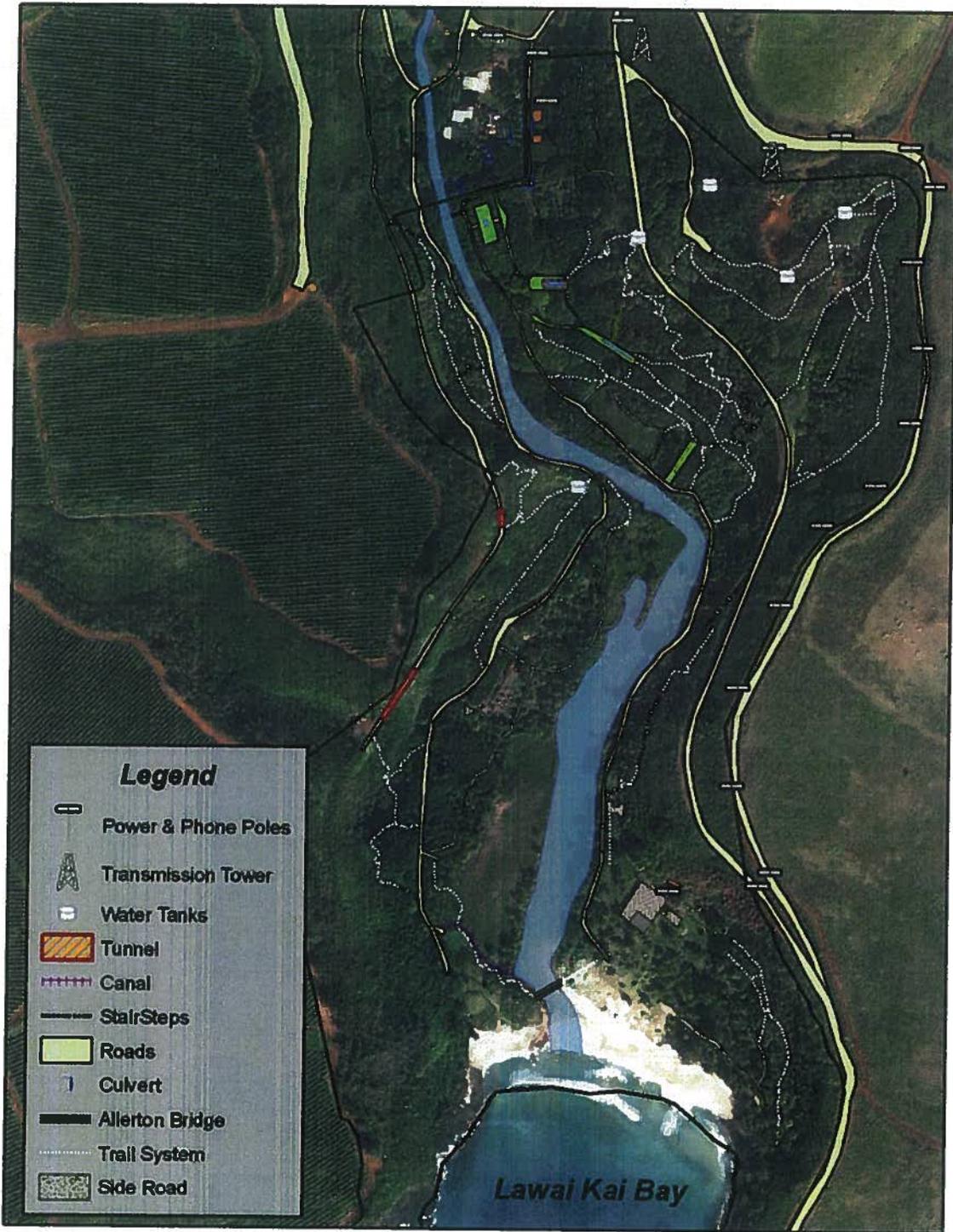


Exhibit F
INFRASTRUCTURE

LĀWA'I KAI SPECIAL SUBZONE MASTER PLAN
National Tropical Botanical Garden



Exhibit G
PROPOSED CONSERVATION DISTRICT SUBZONE

LĀWA'I KAI SPECIAL SUBZONE MASTER PLAN
National Tropical Botanical Garden