

JOHN WAIHEE
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS DIVISION
HONOLULU INTERNATIONAL AIRPORT • HONOLULU, HAWAII 96819-1898

REX D. JOHNSON
DIRECTOR

DEPUTY DIRECTORS
JOYCE T. OMINE
AL PANG
JEANNE K. SCHULTZ
CALVIN M. TSUDA

IN REPLY REFER TO:

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OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

May 20, 1993

To: Mr. Brian J. J. Choy, Director
Office of Environmental Quality Control

From: Owen Miyamoto, Airports Administrator
Owen Miyamoto

Subject: LIHUE AIRPORT LAND ACQUISITION
FINAL ENVIRONMENTAL ASSESSMENT AND
NEGATIVE DECLARATION
TAX MAP KEYS: 3-5-01:06, 10, 85, 103, PORTIONS
OF 27 AND 82; 3-7-02:PORTION OF 01
LIHUE, KAUAI, HAWAII

We are filing with your office the enclosed four (4) copies of the Lihue Airport Land Acquisition Final Environmental Assessment and Negative Declaration in compliance with Chapter 343, HRS. No comments were received during the 30-day public comment period and no significant changes have been made to the document.

May we request that notice of this filing be published in the June 8, 1993 OEQC Bulletin? Included with the Final Environmental Assessment (EA) is a completed OEQC Document Publication form.

If you have any questions, please call Dean Nakagawa at 836-6526 or our consultant, Earl Matsukawa of Wilson Okamoto & Associates at 946-2277. Thank you for your attention on this matter.

Encs: Lihue Airport Land Acquisition Final EA
OEQC Document Publication form

c: WOA - Mr. Earl Matsukawa

1993-05-08- KA-FEA- Lihue Airport Land Acquisition

JUN - 8 1993

ORIGINAL

*Lihue Airport Land Acquisition
Final Environmental Assessment
and Negative Declaration*

Tax Map Keys:

3-5-01:10, 85, 103;

3-5-01:06, portions of 27 and 82;

3-7-02:portion of 01

Lihue, Kauai, Hawaii

*Airports Division
Department of Transportation
State of Hawaii*

May 1993

**LIHUE AIRPORT LAND ACQUISITION
FINAL ENVIRONMENTAL ASSESSMENT
AND NEGATIVE DECLARATION**

This environmental document is prepared pursuant
to Chapter 343, Hawaii Revised Statutes

Proposing Agency: Airports Division
Department of Transportation
State of Hawaii

Responsible
Official:


Owen Miyamoto, Airports Manager
Department of Transportation
State of Hawaii

5/20/93
Date

May 1993

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PREFACE

This final environmental assessment (EA) and negative declaration is prepared pursuant to Chapter 343, Hawaii Revised Statutes, and Title 11 (as amended), Chapter 200, Administrative Rules, Department of Health, State of Hawaii. The proposed action is an agency action involving the expenditure of State funds by the Airports Division, Department of Transportation, State of Hawaii. The final EA and negative declaration has been filed with the State Office of Environmental Quality Control by the proposing agency following public review of the draft EA pursuant to Act 241, Session Laws of Hawaii 1992.

The proposed action assessed herein is the acquisition of various lands adjacent to the existing Lihue Airport. The immediate intent of the action is for the Airports Division to control future use of these lands to assure their long-term compatibility with airport operations. No development activities are proposed at this time. Some of these lands to be acquired are planned for future development as recommended in the Lihue Airport Master Plan 1989. The Department of Transportation, Airports Division shall prepare a separate Environmental Impact Statement encompassing all development recommended by the Lihue Airport Master Plan pursuant to Chapter 343, HRS.

SUMMARY**LIHUE AIRPORT LAND ACQUISITION**

Proposing Agency: Airports Division, Department of Transportation
State of Hawaii
Honolulu International Airport
Honolulu, Hawaii 96819-1898
Contact: Owen Miyamoto, Airports Manager

EA Preparer: Wilson Okamoto & Associates, Inc. in association with
Edward K. Noda & Associates, Inc.

Tax Map Keys: 3-5-01:10, 85, 103;
3-5-01:06, portions of 82 and 27;
3-7-02:portion of 01

Area: Approximately 141.73 acres of fee simple
39.338 acres of easement

Location: Lihue, Kauai, Hawaii

Ownership: Lihue Plantation Company, Ltd.
Kauai Lagoons Resort Company, Ltd.

Existing Uses: Agriculture and miscellaneous maintenance and repair
buildings, resort, one residence

Proposed Action: Acquisition of land for airport related purposes:

Phase 1:

Property "A" - This area consists of 74.511 acres, in fee, to control land uses in areas impacted by airport noise, runway clear zone and approach surfaces, and to reserve the area for the expansion of airport uses and the potential lengthening of Runway 17-35. (TMKs 3-5-01:10, 85, 103; and 3-7-02:portion of 1).

Property "B" - This area consists of an aviation easement proposed for 25.5 acres east of Runway 3-21 which lies

within the Building Restriction Line (BRL). (TMK 3-5-01:portions of 06, 82). This easement is required to maintain control over this area which is subject to FAA clear area criteria.

Property "C" - Property "C" is a 13.8-acre line-of-sight easement to control land uses in an area potentially needed to preserve a line-of-sight from the control tower to the end of the proposed Runway 17-35 extension. (TMK 3-5-01:portions of 06, 27, and 82).

Phase 2:

Property "D" - This area consists of approximately 19.38 acres, in fee, to be developed at a later date as support for airport commercial operations. (TMK 3-7-02: portion of 1).

Property "E" - Property "E" consists of 47.839 acres, in fee, to be developed at a later date for aviation support facilities. (TMK 3-5-01:06).

Impacts:

Because no construction or alteration in the current use of the acquisition area is involved in the proposed action, no short-term impacts are anticipated. Long-term impacts over time will be associated with the displacement of current uses, which include sugarcane cultivation, a single residence near Ahukini State Recreation Pier, and miscellaneous maintenance and repair buildings along Ahukini Road. The proposed lands for acquisition are rated prime agricultural lands by the State of Hawaii Department of Agriculture. Control over building heights will also be affected in the areas acquired for aviation and line-of-sight easements.

**Agencies Consulted
in Pre-Assessment
Process:**

The proposed land acquisition, except for Property "E", was recommended in the Lihue Airport Master Plan 1989. Agencies represented on the Technical Advisory Committee to the master planning process are listed in Chapter VII, "Pre-Assessment Consultation".

I. PROJECT DESCRIPTION**A. INTRODUCTION**

Lihue Airport is located on the southeastern coast of Kauai, approximately 1.5 miles east of the town of Lihue, the island's governmental, business/commercial, and industrial center. See Figure 1. The Airport property is defined by Tax Map Keys 3-5-01: 5, 8, 9, 13, 109, 111, and 128. The Airport encompasses 804 acres of land and is owned and operated by the State of Hawaii as part of the statewide airport system within which it ranks third in passenger volume, after Honolulu International and Kahului Airports. Lihue Airport is the largest and busiest airport on the island of Kauai and the only airport providing overseas air carrier service. Major facilities at the airport include two runways with taxiways, aprons, hangars and tie-downs; a passenger terminal building with parking and car rental facilities; interim helicopter facility; and a range of supporting facilities, such as the air cargo building (damaged during Hurricane Iniki), FAA control tower, National Weather Service Building, and navigational aids.

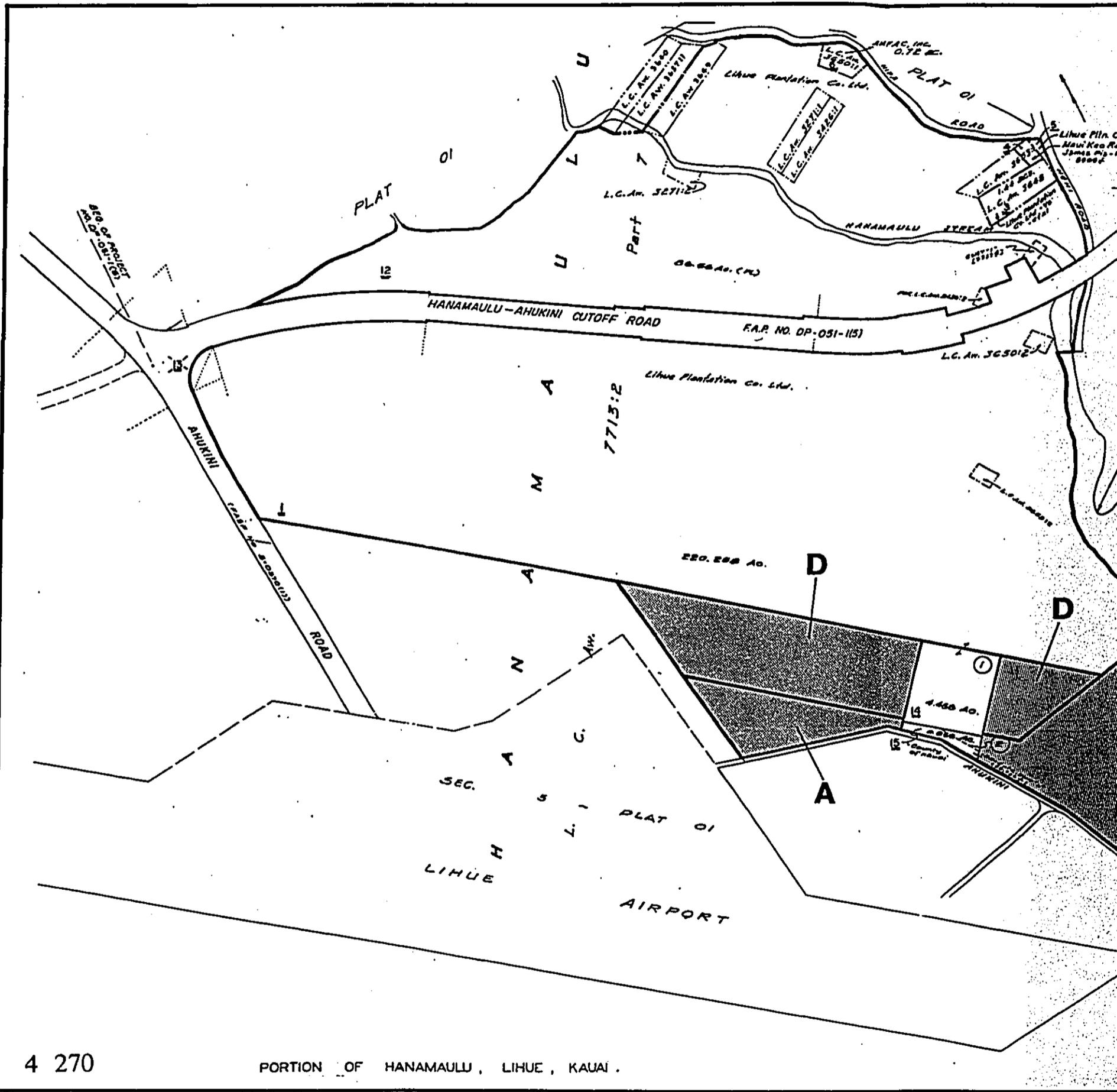
This Environmental Assessment is for the acquisition of lands adjacent to Lihue Airport which would be kept in their present use in the short-term. In the long-term, any development of the acquired lands would be subject to a future Environmental Assessment/Environmental Impact Statement.

B. PROPOSED ACTION/PURPOSE

The Department of Transportation, Airports Division is proposing to acquire approximately 141.73 acres of fee simple land in two phases in order to assure long-term compatibility of adjacent areas with airport operations. Also included in the proposed action is the acquisition in Phase 1 of a 39.338-acre easement area adjacent to the Lihue Airport. These lands are described as follows using letters "A" through "E" to identify the properties. (See Table 1 and Figures 1, 2 and 3).

1. Phase 1

"Property A" - Property "A" consists of 74.511 acres of agricultural land which is currently in use for sugarcane cultivation (TMKs 3-5-01:10, 85, 103, and 3-7-02:portion of 1). The land is under the ownership of Lihue Plantation Company Ltd. There is also a single residence on the property's northern boundary, and miscellaneous maintenance and repair buildings along Ahukini Road which belong to Lihue Plantation Company, Ltd. The property is situated northeast of the Lihue Airport terminal area, and stretches eastward from the Airport property line to encompass a portion of the southern shoreline of Hanamaulu Bay and virtually all of Ahukini landing. Ahukini State Recreational Pier and a roadway easement



4 270

PORTION OF HANAMAULU, LIHUE, KAUAI.

**TABLE 1
ACQUISITION SUMMARY**

Phase	Property	Tax Map Key	Approx. Area of Taking	Easement Acreage	Fee Acreage
1	A	3-5-01:10	22.056		
		85	7.276		
		103	0.256		
		3-7-02:portion of 01	44.917		74.511
1	B	3-5-01:portion of 06	11.362		
		portion of 82	10.686		
		portion of 27	3.466	25.514	
1	C	3-5-01:portion of 06	5.268		
		portion of 82	8.386		
		portion of 27	0.170	13.824	
2	D	3-7-02:portion of 01	≈ 19.380		≈ 19.380
		E	3-5-01:06	47.839	
Totals				39.338	≈ 141.730

≈ = Approximately

for public access to the Pier and shoreline areas adjacent to the Airport property are excluded from this acquisition.

Fee simple acquisition is proposed to gain control of this land which is subject to significant airport noise as determined by the Federal Aviation Regulation (FAR) Part 150 Noise Compatibility Program requirements (1989). The configuration of Property "A" which was recommended in the Lihue Airport Master Plan considers future use of the land for various airport support facilities which will be compatible with the noise impacts. Acquisition of this area is also necessary in order to protect the clear zone and preserve the option of lengthening Runway 17-35 in the future.

Property "B" - Property "B" consists of 25.514 acres east of Runway 3-21 (TMK 3-5-01:portions of 06 and 82), which lies within the Building Restriction Line (BRL). This area is currently owned by Kauai Lagoons Resort Company, Ltd. and serves as the location for the Westin Kauai's stables. The current use of the

area makes fee acquisition impractical, therefore it is proposed for acquisition as an avigation easement in order for the Airports Division to maintain control of runway sideline clearance area.

Property "C" - This line-of-sight easement of 13.824 acres is proposed for an area northwest of Runway 17-35 for the FAA Air Traffic Control Tower operations if determined necessary by the FAA (TMK 3-5-01:portions of 06, 27 and 82). This easement would preserve the line-of-sight from the Control Tower to the southern end of Runway 17-35, as well as to any future extension of the runway. The property is owned by Kauai Lagoons Resort Company, Ltd.

2. Phase 2

Property "D" - This area consists of approximately 19.38 acres of agricultural land, to be acquired in fee, which is located north of Property "A" (TMK 3-7-02:portion of 01). The property is bordered on the southwest and northeast sides of the new Refuse Transfer Station (RTS). Control over this area will assure future noise compatibility as well as logical and cohesive airport expansion. This area is currently in use for sugarcane cultivation and is under the ownership of Lihue Plantation Company, Ltd.

Property "E" - This is an area of 47.839 acres, to be acquired in fee, which is located in the corner formed at the juncture of Runways 3-21 and 17-35 (TMK 3-5-01:06). The land would be used for future expansion of aviation support facilities. The property is owned by Kauai Lagoons Resort Company, Ltd. and is currently used for storage and composting.

C. ACQUISITION COST AND SCHEDULE

The properties in Phase 1 are scheduled for acquisition in 1993, while the lands in Phase 2 are anticipated for acquisition between 1997 through 2000. The estimated cost to acquire the lands in Phase 1 and Phase 2 ranges from \$6.9 million to \$7.5 million. Phase 2 acquisition will depend on future funding.

II. AFFECTED ENVIRONMENT**A. PHYSICAL ENVIRONMENT****1. Climate and Air Quality**

The climate in Lihue is characterized as semi-tropical and is influenced by Hawaii's geographic location within the tropics, southwest of the Pacific High or anticyclone. The average annual temperatures recorded in the Lihue area range between a high of 77.9°F and a low of 65.5°F. The average annual rainfall is approximately 45 inches a year. Winds at Lihue Airport blow predominantly from the northeast at speeds of 10-13 knots. The average relative humidity recorded at Lihue Airport is 67% in mid-afternoon and 83% in the early morning hours.

The State Department of Health, Clean Air Branch, regularly measures total suspended particulates at various locations in the State, including Lihue. In 1990, air quality measurements of total suspended particulates in Lihue ranged from a minimum of 13 micrograms per cubic meter (mg/m³) to a maximum of 20 mg/m³. No measurements of other potential pollutants such as carbon monoxide and sulphur dioxide are available.

2. Geology and Topography

The Island of Kauai is geologically one of the oldest and structurally complex islands in the State of Hawaii, consisting principally of a large volcano, the Kauai shield, which became active approximately 4 million years ago. The island's land mass was formed by two major volcanic series identified as the Waimea Canyon Volcanic Series and the Koloa Volcanic Series.

The Koloa Volcanic Series occurred during the Pleistocene Epoch, covering the older Waimea Canyon Volcanic Series with lava. The Lihue Airport site is located on the Koloa Volcanic Series which is mostly dense to moderately dense, and includes lava flows of nepheline basalt, melilite-nepheline basalt, olivine basalt, picrite-basalt and basanite. Lava flows are pahoehoe and the predominant a'a.

Lihue Airport is located on a plateau between the Hanamaulu and Huleia Streams. The plateau is characterized by uniform soils on slopes of less than 8%. A considerable percentage of the lands within the area of Runway 17-35 are at a 5% slope or less.

3. Soils

a. Soil Type

Soils on the subject lands generally belong to the Lihue-Puhi association, which are characterized as well-drained soils, with fine textured or moderately fine textured subsoil. The soils are deep, nearly level to steep, with moderate shrink-swell potential. The soil types which underlie the various areas consist of the following classifications:

Property	Agricultural Potential	Soil Types	Soil Descriptions
A	Prime - 95% remainder unclassified	LhB - 95% KvD - 4% LhC - 1%	LhB - red silty clay, 0 to 8% slope KvD - dark-red stony silty clay, 15 to 25% slope LhC - red silty clay, 8 to 15% slope
B	Prime	LhB - 100%	red silty clay, 0 to 8% slope
C	Prime	LhB - 95% LIB - 5%	red silty clay, 0 to 8% slope red silty clay, pebbles, 0 to 8% slope
D	Prime	LhB - 100%	red silty clay, 0 to 8% slope
E	Prime	LhB - 100%	red silty clay, 0 to 8% slope

Lihue Silty Clay (LhB), 0 to 8% slopes - This soil type consists of a surface layer of dusky red silty clay about 12 inches thick which is strongly acid. The subsoil is dark-red and dark reddish-brown compact silty clay which is more than 48 inches thick and is slightly acid to neutral. The substratum is soft, weathered rock. Permeability is moderately rapid, runoff is slow, and the erosion hazard is slight. The available water capacity is about 1.5 inches per foot of soil.

Lihue Silty Clay (LhC), 8 to 15% slopes - This subseries is characterized by 8 to 15% slopes with slow runoff and a slight erosion hazard.

Lihue Gravelly Silty Clay (LIB) - This soil consists of 0 to 8% slopes and is similar to the LhB subseries, except that it contains ironstone-gibbsite pebbles.

Soils in the Lihue silty clay subseries are suitable for use as topsoil, road fill, roads and low buildings. The remaining soil type in the project area is underlain by soils in the Waikomo-Kalihi-Koloa association. This association is characterized by well-drained soils underlain by hard rock at a depth of 20 to 40 inches, with gentle to moderately steep slopes and a moderate shrink-swell potential. The subseries located at Ahukini Point is characterized as follows:

Koloa Stony Silty Clay (KvD), 15 to 25% slopes - This soil type consists of dark reddish-brown stony silty clay approximately 7 inches thick. The subsoil is dark-red and dark reddish-brown stony silty clay about 13 inches thick. The substratum is hard rock, and the soil is slightly acid to neutral. Permeability is moderately rapid, with a medium runoff and a moderate to severe erosion hazard. Koloa soils are rated as fair for use as topsoil and road fill; however, they are not considered suitable for septic tanks filter fields.

b. **Agricultural Potential**

The State of Hawaii Department of Agriculture has identified Agricultural Lands of Importance for the State of Hawaii (ALISH) and categorizes these into three groups. According to the ALISH map for the Lihue Airport area, nearly all of the proposed project properties are classified as Prime Agricultural Land. According to this categorization, Prime Agricultural land is, "Land which has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops economically when treated and managed according to modern farming methods". One small area along the shoreline at Ahukini Point is unclassified. This area corresponds with KvD soils.

4. **Hydrology**

a. **Surface Water Runoff**

Surface water on the Island of Kauai generally consists of perennial streams which flow to the sea. The major streams originate in the rainy Kauai uplands and are relatively large and uniform in flow. Stream water

is often diverted into ditch and tunnel systems for sugarcane irrigation purposes. The Lihue Airport has a natural drainage area of 2,270 acres with extensive crossing of irrigation systems over the sub-basin boundaries. However, the Airport is not situated in a major drainage course.

b. Groundwater

The Airport is not located in an aquifer recharge area nor over an aquifer used for domestic water supply. Groundwater in the vicinity of the Airport is brackish.

c. Coastal Waters

The ocean waters surrounding the Airport peninsula are designated Class A by the State of Hawaii, Department of Health Administrative Rules, Chapter 54, Water Quality Standards. Class A uses required to be protected are recreational, including swimming, bathing, and other water-contact sports and aesthetic enjoyment. The Lihue Plantation Company has constructed several small settling ponds adjacent to the coast to settle out suspended solids before water from the drainage basin, including the Airport, is discharged into the ocean.

5. Flora

Intense sugarcane cultivation in the vicinity of Lihue Airport since the late 1800's and early 1900's has replaced almost all of the native (endemic) vegetation. Further impacts on the diversity and prevalence of native vegetation have resulted from urban development, the introduction of aggressive nonnative (exotic) species and feral animals, and the use of herbicides in agricultural activities. There are no rare or endangered plant species within the project area.

Indigenous species observed in the vicinity of Lihue Airport include the following endemic species: hawaiian koa (*Acacia koa*), kukui (*Aleurites moluccana*), tree fern (*Cibotium chamissoi*), ti (*Cordyline terminalis*), staghorn fern (*Dicranopteris linearis*), hau (*Hibiscus tiliaceus*), and sandalwood (*Santalum ellipticum*).

Exotic species observed in the airport vicinity include the following: klu (*Acacia farnesiana*), spiny amaranth (*Amaranthus spinosus*), Japanese tea (*Cassia leschenaultiana*), radiate fingergrass (*Chloris radiata*), philipiliula (*Chrysopogon aciculatus*), bermuda grass (*Cynodon dactylon*), demanthus (*Demanthus virgatus*), lantana (*Lantana camara*), eroa (*Leucaena glauca*), sensitive plant (*Mimosa*

pubica), guinea grass (*Panicum maximum*), para grass (*Panicum purpescens*), hilo grass (*Paspalum conjugatum*), guava (*Psidium guajava*), rhodomyrtus (*Rhodomyrtus tomentosa*), thimbleberry (*Rubus rosaefolius*), bristly foxtail (*Setaria verticillata*), natal red top (*Tricholaena repens*), hilaloa (*Watheria americana*), and cocklebur (*Xanthium strumarium*).

6. Fauna

Mammals found in the vicinity of Lihue Airport include the Black rat (*Rattus rattus*), Hawaiian Rat (*Rattus exulans*), Norway Rat (*Rattus norvegicus*), House Mouse (*mus musculus*), Feral Pig (*sus scrofa*), Feral Goat (*copra hircus*), and Feral Cat (*Felis felis*). The Hawaiian Hoary Bat (*Lasiurus cinerus sematus*) is the only known endemic or native mammal found on the island of Kauai, although this species has not been observed in the Lihue Airport area.

As native forests of the area yielded to urban development, most native birds retreated to mountainous native forests. Native water birds continue to inhabit coastal areas in the Airport vicinity, however, very few suitable habitats and nesting areas for endemic and indigenous species are found.

Four endangered bird species are observable within a 5-mile radius of the Airport. These species include the Koloa Duck (*Anas platyrhynchos wyv.*), the Hawaiian Coot (*Fulica americana haw.*), Hawaiian Gallinule (*Gallinula chloropus haw.*), and the Hawaiian Stilt (*Himantopus mexicanus haw.*). Of the four endangered bird species, only the Hawaiian Stilt (*Himantopus mexicanus haw.*) and the Hawaiian Coot (*Fulica americana haw.*), have been observed in the immediate vicinity of Lihue Airport. A preferred habitat of both these species is the former Lihue Mill Settling Basin southwest of Ahukini road and State Route 51.

The areas proposed for land acquisition are presently utilized for sugarcane cultivation and accessory agricultural buildings, resort use, and one residence. They are not suitable habitat for any endangered wildlife. The proposed easement area, Property "B", includes a horse stable and part of a golf course, which contains a man-made water feature that may provide desirable habitat for endangered waterfowl.

7. Natural Hazards

As indicated by the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), the Airport is located within Zone "X", which is the area outside of the 500-year flood plain, floodway and flood fringe zones.

The Airport is located outside of the evacuation zone designated for tsunami hazards.

B. SOCIO-ECONOMIC ENVIRONMENT

1. Recreation and Lifestyle

The coastal environs directly east of Runway 17-35 comprise a locally popular shoreline fishing area from Ahukini Recreational Pier State Park at Ahukini Landing southward to Ninini Point. Ahukini Recreation Pier State Park, also popular with local anglers, includes the remains of a sugarcane transshipment facility. Nearby recreational facilities include the following: Hanamaulu Beach County Park to the north, Nawiliwili County Park to the south, and the Antone Vidinha Memorial Stadium southwest of Lihue Airport.

2. Archaeological/Historical Resources

The project area has not undergone an extensive archaeological reconnaissance survey. However, the project area has long been modified for intensive agricultural cultivation and ancillary uses, and any historic sites that might have been found on Airport property are likely to have been destroyed. Therefore, it is highly unlikely that any significant historic sites are to be found within the project area. Any proposed future development of the proposed acquisition lands will be preceded by an archaeological reconnaissance study.

3. Visual Quality

The Lihue Airport is no longer completely surrounded by sugarcane fields. The Westin Kauai golf course, resort and stables lie directly south of the Airport between Runways 3-21 and 17-35, encompassing Properties "B", "C", and "E". The area was classified in the 1976 Lihue Development Plan as a "visual district". In addition, Ahukini Road which bisects Property "A" is listed as a "major path", a "circulation corridor which provides both physical and visual access throughout the immediate community and to several or more districts."

4. Noise

Aircraft noise at the Lihue Airport area has been an on-going concern as aviation activity has increased. Among the efforts to address these concerns, completion of Runway 17-35 in May 1984 provided significant relief to the towns of Kupolo and Nawiliwili. Aircraft noise levels were reduced from approximately 67 Ldn

to levels below 55 Ldn as north flow (tradewind) arrivals and south flow (Kona) departures were transferred from Runway 3-21 to the new runway.

The FAA in coordination with local jurisdictions has taken a number of steps to address the airport noise problem. These include the establishment of limits on noise emissions by new aircraft, mandatory retirement of noisier aircraft or retrofitting them with quieter engines, and creation of an environmental review process for airport development projects.

The Department of Transportation, Airports Division has completed a Noise Compatibility Program that incorporates the extension of Runway 17-35 according to guidelines contained in Federal Aviation Regulations (FAR) Part 150 Noise Compatibility Planning Program for airports. The study identified only two noise incompatibilities. One is a single-family residence at the end of Runway 3-21 at Ahukini Landing which is proposed for acquisition in Property "A". The other is resort development at the Westin Kauai Lagoons Resort south of the Airport. A noise easement will be acquired from the Westin Kauai Lagoons Resort as a condition of the land use approval granted for the resort use.

5. Solid Waste Disposal

Solid waste collection and disposal in the Lihue area is handled by private contract with Kauai Refuse Company. The County of Kauai also collects and disposes of domestic solid waste materials. Kauai County has constructed a new municipal solid refuse transfer station (RTS) at Lihue Airport. The RTS facility is designed to accept domestic solid waste from Kauai County refuse collection vehicles and private cars and trucks on a daily basis. The refuse is compacted and transported via large trucks to the Kekaha landfill for disposal.

III. LAND USE PLANS

A. STATE LAND USE DISTRICTS

All lands in the State are classified in one of four districts: Urban, Agricultural, Conservation, and Rural. The State Land Use District classification for Lihue Airport is "Urban". The portions of Property "A" and Property "D" located immediately north of the Airport are designated "Agriculture", while the portion of land along the shoreline of Hanamaulu Bay is designated "Conservation". (See Figure 4). Properties "B", "C", and "E", located between Runways 3-21 and 17-35, are designated "Agriculture".

Reclassification to "Urban" will be required for proposed development within any of the subject properties.

B. COUNTY GENERAL PLAN

The General Plan provides guidance for the County in anticipation of increasing development demands and the need for improved resource management. The plan has significant bearing on rezoning decisions.

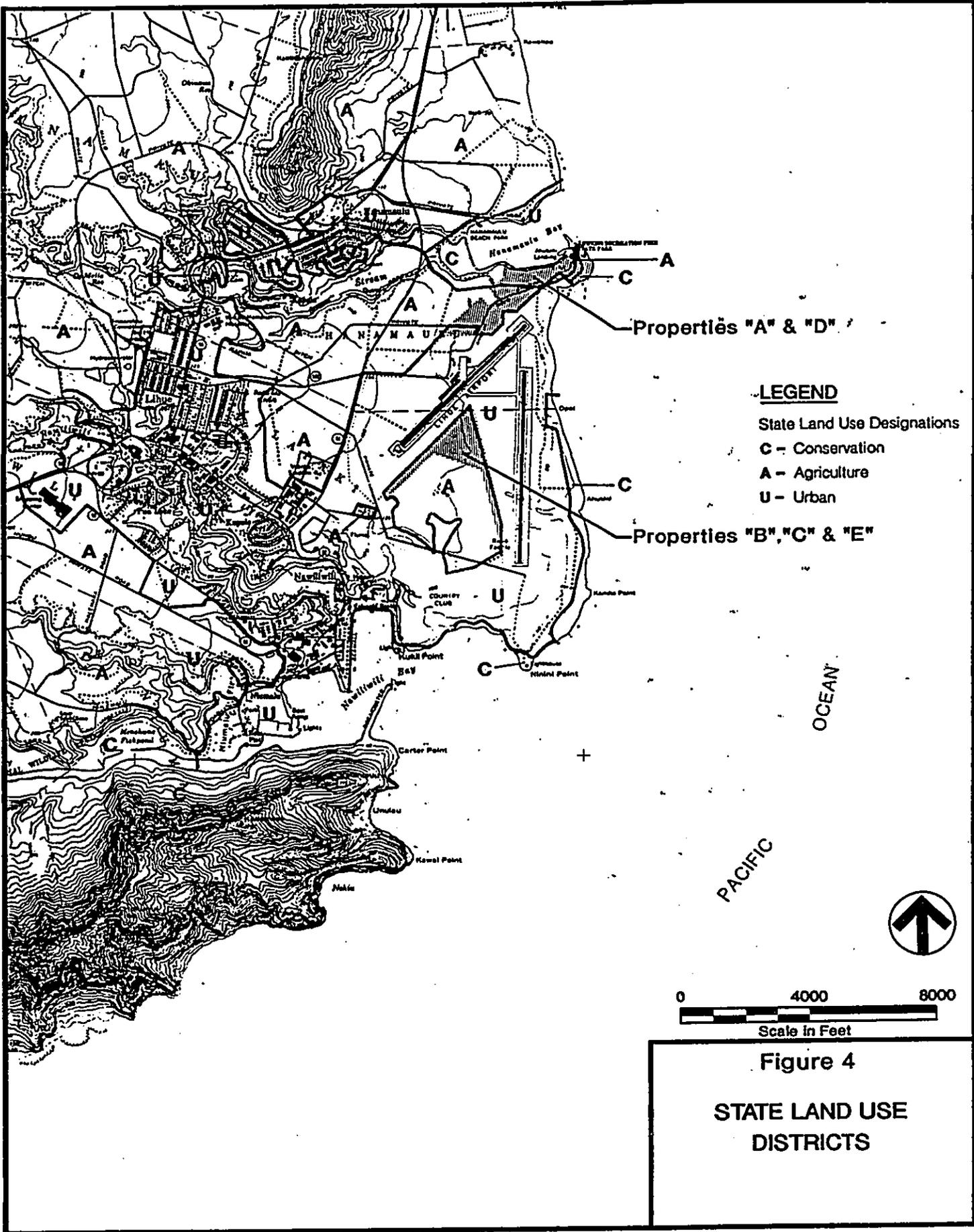
Lihue Airport is designated as Public Facility (PF) on the County General Plan, which classifies airport lands as publicly owned or intended to be publicly owned and operated. Property "A" and Property "D" are also designated PF, which makes them consistent with airport use. To the south, Properties "B", "C", and "E" are designated as Open. (See Figure 5).

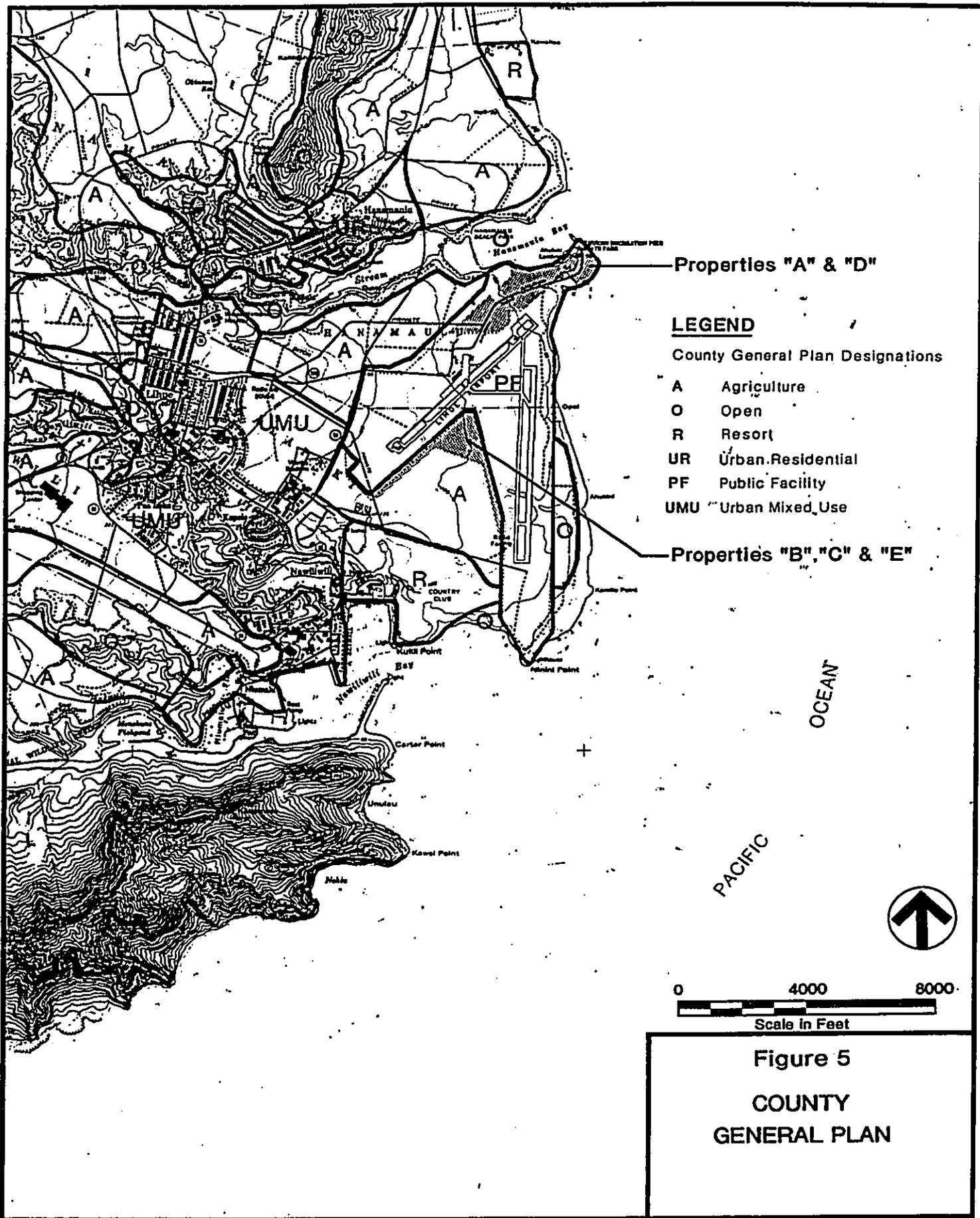
C. LIHUE DEVELOPMENT PLAN

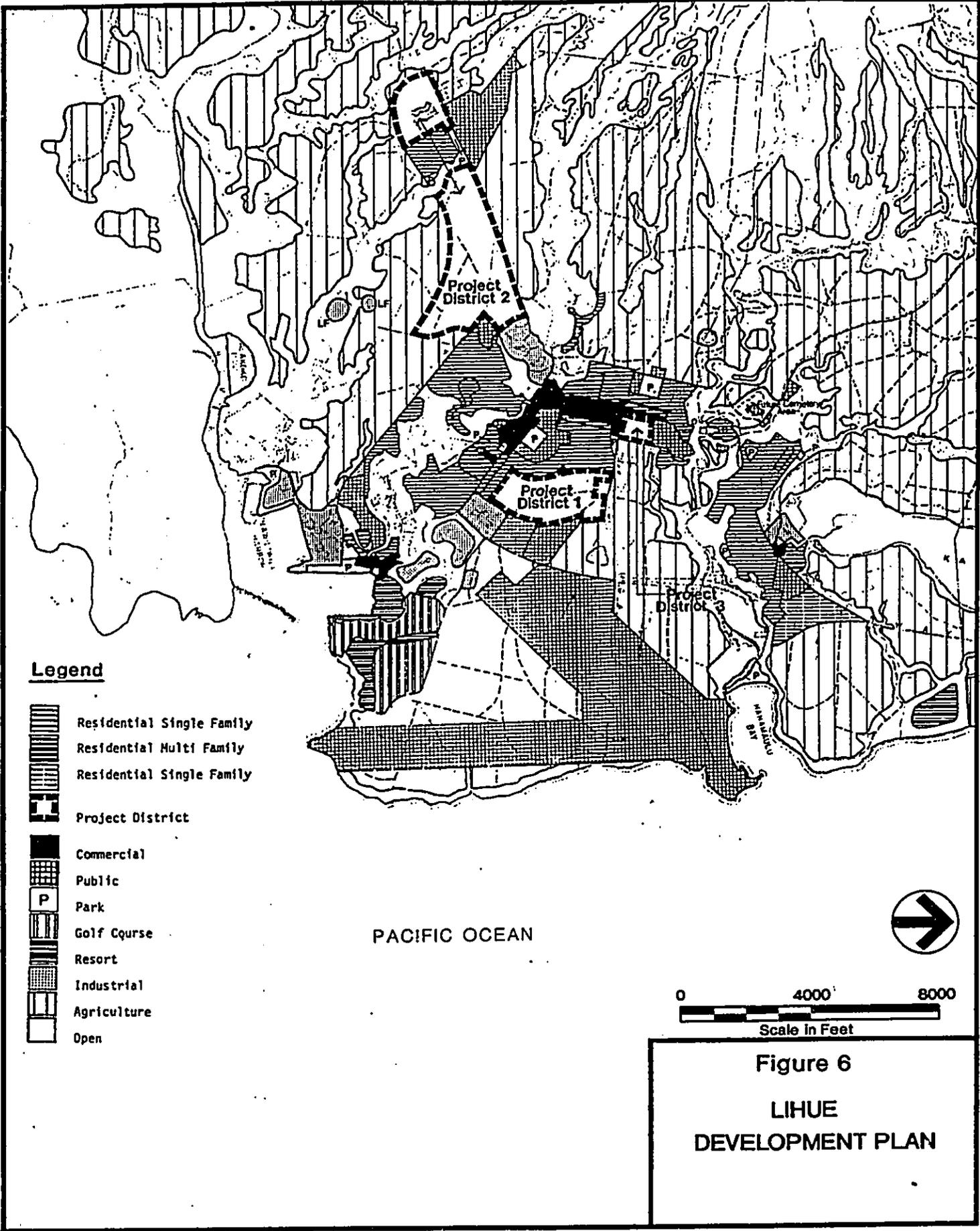
The purpose of the Lihue Development Plan is to establish long range designations for commercial, industrial, residential and other land uses which are intended to provide the Lihue area with organized and better detailed development goals and objectives than those expressed in the General Plan. The Lihue Development Plan designates Lihue Airport property as "Public" lands. Properties "A" and "D" to the north are also within the "Public" designation. (See Figure 6). Properties "B", "C", and "E" to the south are within the "Agriculture" designation.

D. COUNTY ZONING

The Comprehensive Zoning Ordinance (CZO) for the County of Kauai (County of Kauai Ordinance 164, as amended) regulates the type, size, siting, and uses of structures within various zoning district classifications. Lihue Airport is zoned "IG/ST-P", denoting general-industrial as well as special treatment public use. The portions of Property "A"







Legend

-  Residential Single Family
-  Residential Multi Family
-  Residential Single Family
-  Project District
-  Commercial
-  Public
-  Park
-  Golf Course
-  Resort
-  Industrial
-  Agriculture
-  Open

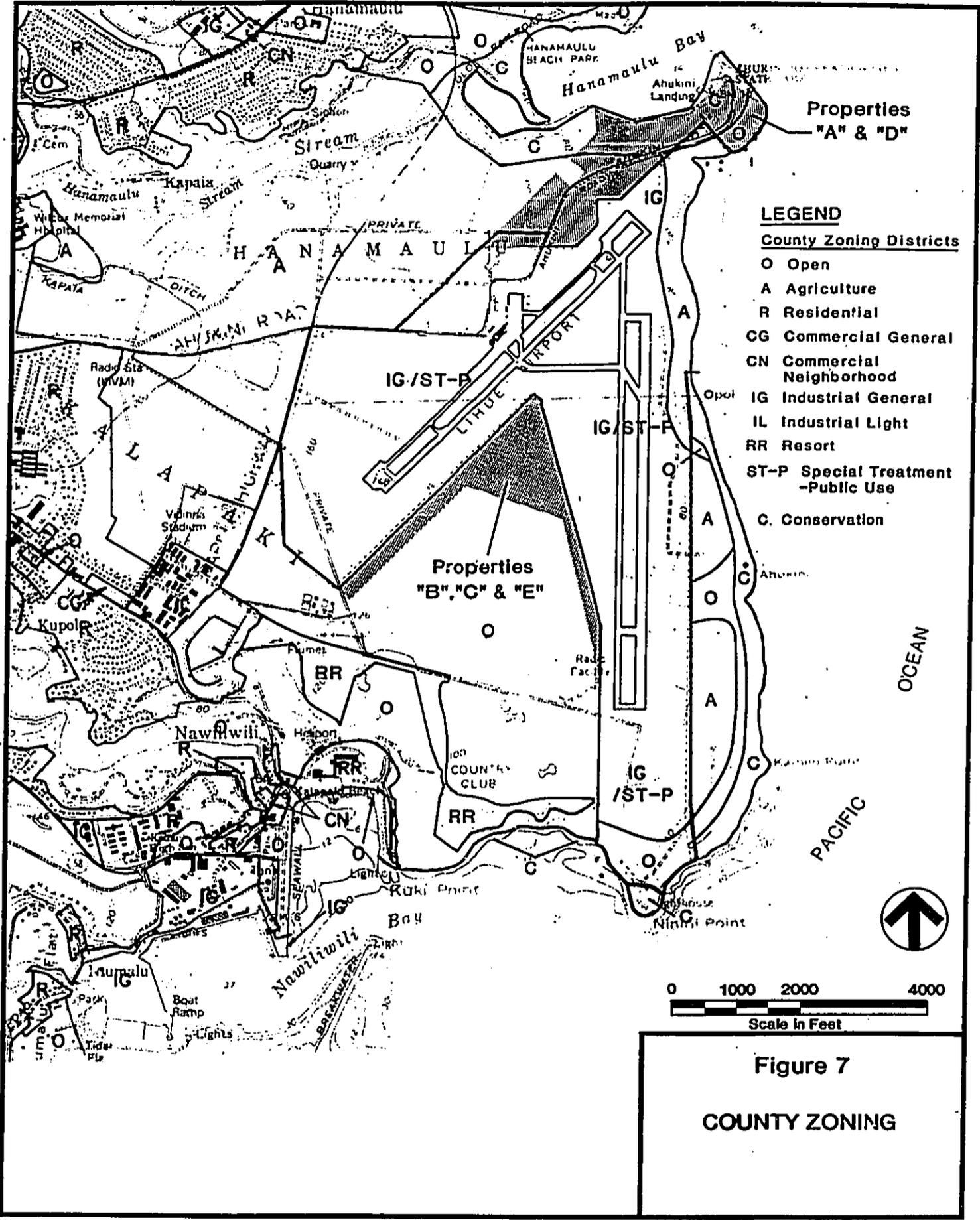
0 4000 8000
Scale in Feet

Figure 6
LIHUE
DEVELOPMENT PLAN

and Property "D" immediately north of the Airport are designated "Agriculture", while the portion of Property "A" near the Hanamaulu Bay shoreline is designated "Conservation" and "Open". Properties "B", "C", and "E", located between the two airport runways, are designated as "Open". (See Figure 7). In the future, major development of any of the proposed acquisition lands will require a zoning change to "I-G/ST-P".

E. SPECIAL MANAGEMENT AREA

A portion of the Lihue Airport property is located within the Special Management Area (SMA) boundaries established pursuant to the State Coastal Zone Management Law (Chapter 205A, HRS). Of the proposed acquisition lands, only the portion of Property "A" located at Ahukini Point and along the shoreline of Hanamaulu Bay is within the SMA boundary. (See Figure 8).



IV. ANTICIPATED IMPACTS AND MITIGATION MEASURES**A. SHORT-TERM IMPACTS**

Because the proposed action only involves the acquisition of land, no construction impacts will result. Public access to the Ahukini State Recreational Pier will be maintained. Agricultural use will be allowed to continue under the present lease. All uses of the subject land area will remain status quo in the short-term.

B. LONG-TERM IMPACTS

In the long-term, the proposed action will result in the loss of approximately 94 acres of prime agricultural land in Properties "A" and "D". The approximately 48 acres of prime agricultural land in Property "E", although not currently used for agriculture, are also designated prime agricultural lands and will also be relinquished for airport use. In the long-term, the loss of 94 acres of agricultural land will not be significant to the operations of Lihue Plantation Company, Ltd., which is increasingly phasing out large tracts of agricultural land for housing. The recent phaseout of 3,300 acres at Kealia is a recent example. Overall, Lihue Plantation is still Kauai's largest plantation, with approximately 11,200 acres under cultivation.

The single residence near Ahukini State Recreational Pier will eventually be displaced. Four miscellaneous maintenance and repair buildings along Ahukini Road will also be displaced. These buildings include a repair shop, office and lean-to, a second repair shop and storage space, and a fumigation chamber.

The Building Restriction Line (BRL) will be extended out approximately 255 feet to the southeast of Runway 3-21. This will have the effect of placing new restrictions on building heights in adjacent areas in order to comply with the 7:1 Airport Runway Clear Zone transition slope. As a result of the land acquisition, the Airport will preserve the option to extend Runway 17-35 to the north.

C. MITIGATION MEASURES

Since no development is proposed at this time, there are no mitigation measures proposed. Any future development proposals for the acquired land introduced by the Department of Transportation, Airports Division, will be subject to review through a separate Environmental Assessment or Environmental Impact Statement.

V. ALTERNATIVES TO THE PROPOSED ACTION**A. "NO ACTION " ALTERNATIVE****1. Property "A"**

Presently, this area conflicts with the FAR Part 150 requirement that lands in the 70 Ldn contour be under DOT-Airports control. The no action alternative would prevent compliance with this regulation. Also, without acquiring this area, DOT Airports Division could not control uses in land potentially required for lengthening of Runway 17-35. Acquisition of the area merely preserves the option of extending the runway.

2. Property "B"

There are existing structures (horse stables) southeast of Runway 3-21 which are within the 750-foot Building Restriction Line (BRL). Because it is currently not possible to acquire this area in fee, an aviation easement is necessary in order to control building heights on this property. The no action alternative would prevent compliance with the BRL which would affect the ability of the DOT Airports Division to control the safety of runway operations.

3. Property "C"

Property "C" is needed in order to control uses in land potentially required to maintain a line-of-sight easement to the southern end of Runway 17-35. Without this easement, the future option to lengthen this runway would be jeopardized. Therefore, the No Action alternative would make control over future airport planning more difficult.

4. Property "D"

These lands are necessary to preserve the future viability of expanded airport operations to the northwest, as well as to ensure control of areas which may be impacted by noise in the future. The no action alternative would make future airport expansion into this area more difficult.

5. Property "E"

It is anticipated that this property, which is already an established parcel, will be necessary in the future for aviation support facilities. Under the no action

alternative, any future uses of this parcel could be exposed to potential conflict with airport type uses.

B. ALTERNATIVE LAND ACQUISITION CONFIGURATION

Alternative land acquisition configurations were addressed during the preparation of the Lihue Airport Master Plan which resulted in the development of two alternative Development Concepts. Both concepts considered the minimum area required for achieving present and future compliance with FAA noise and airspace requirements. This EA reflects the recommended development concept which involved the lesser amount of land area.

The majority of Property "A" is in the clear zone and approach surface of Runways 3-21 and 17-35, and acquisition of the area is needed to control land uses which are impacted by airport noise, to protect the clear zone, and to preserve the option of lengthening Runway 17-35 in the future. The remainder of Property "A", as well as Property "D", forms a logical extension (straight line) to the northeast from the interim heliport facility. The alternative to this configuration in the Master Plan was to extend the expansion land west from the interim helicopter facility to Kapule Highway. This alternative was rejected because plans to use this area as a future helicopter facility were abandoned.

The 25.514-acre aviation easement which constitutes Property "B" is the minimum area required to preserve control over the Building Restriction Line needed for the safe operation of Runway 3-21. Since these regulations are specified by the FAA, there is no alternative configuration for this property. Likewise, the 13.834 acres which comprise Property "C" is the minimum area required to preserve control over the line-of-sight easement to the south end of Runway 17-35. As this line-of-sight easement is a requirement specified by the FAA, there is no alternative configuration for this property.

Acquisition of Property "E" was not included in the Lihue Airport Master Plan. Property "E" is currently a single parcel of record and has no alternative configuration.

VI. DETERMINATION

The Lihue Airport Land Acquisition Draft Environmental Assessment was filed with the State Office of Environmental Quality Control and published in the April 8, 1993 OEQC Bulletin. No comments were received during the 30-day review period which ended on May 8, 1993. Based on the significance criteria set forth in section 11-200-12 of Title 11 Chapter 200, Administrative Rules, Department of Health, State of Hawaii, the Department of Transportation, Airports Division, State of Hawaii has determined that the proposed action will have no significant adverse impact on the environment, and that an Environmental Impact Statement is not required.

Findings and Reasons Supporting the Determination

The effect of the proposed action on the environment is determined to be insignificant. Acquisition of the proposed lands will not involve any construction activity which might lead to a loss or destruction of any natural or cultural resource. There will be no effect on air or water quality, soils, flora or fauna, or ambient noise levels from the proposed action. The lands involved are being and have been beneficially used for many years. Under the proposed action, they will continue to be used in their current manner. Any future development on the subject properties will be subject to environmental review through a separate EA or EIS.

VII. CONSULTATION**A. PRE-ASSESSMENT CONSULTATION**

The proposed action, except for the addition of Property "E", was derived from the Lihue Airport Master Plan (October 1989) which was prepared by consultants through consultation with the State of Hawaii Department of Transportation, Airports Division, the Federal Aviation Administration, a Technical Advisory Committee and the general public. The Technical Advisory Committee was organized for the purpose of reviewing and commenting on detailed aspects of the Master Plan and Noise Compatibility Program as related to their areas of interest or concern. Technical Advisory Committee meetings were held during the course of the Lihue Airport Master Plan study to inform and obtain input from interested organizations. These meetings were held on June 18, 1987, December 10, 1987, March 10, 1988, August 3, 1988, and February 8, 1989. The meeting attendance lists from all five Technical Advisory Committee meetings are included in the Appendix at the back of this document. In addition, five public informational meetings were also held on the same dates to inform and obtain input from the community.

Technical Advisory Committee members consulted in the formulation of the proposed action are listed below.

County of Kauai
County Council
Department of Public Works
Housing Agency
Office of Economic Development
Planning Commission
Planning Department

State of Hawaii
Department of Agriculture
Department of Defense
Department of Hawaiian Home Lands
Department of Land and Natural Resources
Department of Transportation, Airports
Department of Transportation, Highways
Office of Environmental Quality Control
Office of State Planning

Federal Agencies
Federal Aviation Administration

Others

1,000 Friends of Kauai
Air Transportation Association of America
Airline Pilots Association
Alamo Rent-A-Car
Aloha Airlines
Amfac Property Development
Hawaii Helicopter Operators Association
Hawaii Visitor's Bureau
Hawaiian Airlines
Hertz Rent-A-Car
Honolulu Airlines
Kauai Chamber of Commerce
Kauai Economic Development Board
Kauai Farm Bureau
Kauai Lagoons Resort Company, Ltd.
Lihue Airport Improvement Committee
Lihue Plantation Company, Ltd.
Poipu Beach Resort Association
Statewide Helicopter & Tour Aircraft Advisory Board
United Airlines
Westin Kauai

REFERENCES

- Akinaka & Associates, Ltd. Draft Supplemental EIS for Interim Helicopter Facility Lihue Airport Complex. October 1988.
- First Hawaiian Bank, Research Department. Economic Indicators - Kauai County Profile Supplement. November/December 1991.
- Peat, Marwick, Mitchell & Company (in association with Environmental Communications, Inc.). Environmental Impact Statement Lihue Airport Master Plan Study. July 1976.
- State Department of Transportation and the Federal Aviation Administration. Final Environmental Impact Statement for Recommended Development Projects. Volume I. Lihue Airport, Kauai County, State of Hawaii. July 1976.
- State Department of Transportation and the Federal Aviation Administration. Final Environmental Impact Statement for Recommended Development Projects. Volume II, Appendices. Lihue Airport, Kauai County, State of Hawaii. February 1976.
- State of Hawaii, Department of Business and Economic Development. State of Hawaii Data Book. November 1991.
- Takushi, David K. Appraisal Report - Parcels A-1, A-2 and Visual Easements "B and "C" located at Hanamaulu, Kauai, Hawaii. Prepared for State of Hawaii, Department of Transportation, Airports Division.
- Wilson Okamoto & Associates, Inc.; Aries Consultants Ltd.; Y. Ebisu & Associates. Final Lihue Airport Master Plan. January 1989.
- Wilson Okamoto & Associates, Inc.; Y. Ebisu & Associates; Aries Consultants Ltd. Lihue Airport Noise Compatibility Program, Volume I, Noise Exposure Map Report. May 1989.
- Wilson Okamoto & Associates, Inc.; Y. Ebisu & Associates; Aries Consultants Ltd. Lihue Airport-FAR Part 150 Noise Compatibility Program, Volume II Noise Compatibility Program Report. December 1989.
- United States Department of Agriculture Soil Conservation Service. Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii. August 1972.
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APPENDIX

**Technical Advisory Committee
Meeting Attendance Sheets**

MEETING ATTENDANCE

PROJECT: Lihue Airport Master Plan PROJ. NO. 2635-01,02
 MEETING: 1st Technical Committee Meeting DATE: 6/18/87
 LOCATION: Lihue Airport Mezzanine Conf Room TIME: 1:30

NO.	NAME (PLEASE PRINT)	ORGANIZATION/ADDRESS	PHONE NO.
1	BOB DeCAUD	HAWAII HELICOPTER OPERATORS ASSOC. 228 LAECEN DR #207 96819 Hawaii Helicopters Inc	830-1566
2	Jim HENNINGS	P.O. Box 359 Hanalei HI 96714	826-7266
3	Owen Miyamoto	DOT-A	836-6432
4	JIM MOONEY	ALPA 3 PUKAUA PL. KAILUA HI 96734	262-862-3
5	ARVEN SHUNDERS	HONOLULU AIRLINES COMMITTEE	949-8989
6	RICHARD H. COFFIN SR.	DOT AIRPORTS - (KAWAII)	246-1400
7	DEAN S. NAKAGAWA	DOT AIRPORTS	536-6443
8	YOICHI ENISHI	Y. ENISHI & ASSOC.	735-1634
9	LIYOSI MASAKI	DPW - COUNTY OF KAUAI	245-4751
10	SAM LEE	DLNR	245-4326
11	SALVATORE GUITORANO	ALVINIA & ASSOC., LTD	536-7721
12	Henry S. MORITA	" "	" "
13	RALPH UKISHIMA	STATE DPED	5483649
14	DAVID PENHALLON	MAUORE Office	245-3885
15	Bill Moway	Hawaii Kai	826-9708
16	Les Fujii	Hawaiian Air, Lihue	245-3611
17	LELUA FERNANDES SATHY	State Senate	535-7457 535-2288
18	Jeffrey Miller	Assoc. Preparation	945-5360
19	Lawrence Chun	United Airlines	547-2725
20	Jim Shaw	FAR LIHUE A.T.C.T.	245-3431
21	Aidan A. Smith	Lihue Plantation Co. Ltd.	245-7325

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MEETING ATTENDANCE

PROJECT: LIHUE MASTER PLAN
 MEETING: _____
 LOCATION: LIHUE AIRPORT

PROJ. NO. 2435-01
 DATE: 12-10-87
 TIME: 2:00

NO.	NAME (PLEASE PRINT)	ORGANIZATION/ADDRESS	PHONE NO.
1	RALPH UKISHIMA	OSP (STATE)	5483049
2	ARVEN SAUNDERS	HONOLULU AIRLINES COMMITTEE	949 8989
3	JIM MOONEY	AIRLINE PILOTS ASSOCIATION 3PUUKANI PL KAILUA 96734	2628623
4	YOICHI EBUSA	Y. EBUSA ASSOC. Honolulu, HI	8755-1634
5	Bob AKINAKA	AKINAKA & ASSOC.	536-7721
6	Henry Morita	" "	" "
7	TOM ANUSEWICZ	HEMMETER AVIATION HONOLULU	834-7666
8	TIM TEXEIRA	" " LIHUE	332 7035
9	William C Buford	So. Sea Hel.	245 7485
10	Margy Parker	LiHue Airport Improvement Committee and PAPER BEACH RESORT ASSOC.	742-7444
11	JAMES M. SHINNO	LIHUE PLANTATION	245-7325
12	Sue Villanueva	HERTZ COMP.	245-3351
13	Shigeto Yamaguchi	Highways Div.	245-4461
14	Samuel Smith	Shuler Pet & Co	926 4242
15	Charles KIRDSEY	" "	" "
16	David Welhouse	FAA HNL-ADO	541-1243
17	JOHN SANDERS	ARIES CONSULTANTS	415-593-7150
18	MIKE PATTON	PAPILLON Helicopters	826-7266
19	BOB CAMP	HAWAII HELICOPTER OPERATOR'S ASSOC.	826-1566
20	Jim Hennessy	Papillon Helicopters / KAUAI Hel Oper.	826-7266
21			

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Date: March 10, 1988

Sign In Sheet

Name (PLEASE PRINT)

Organization

Phone #

ARVEN SAUNDERS

HONOLULU AIRLINES COMMITTEE

949 8989

David Welbourn

FAA HNL - ADO

541-1243

JIM MOONEY

ALPA

2628623

RON CLARK

DOT

245-4461

Shigeto Yamaguchi

Highways Div

"

Iru Munechika

City Council

245-4771

N. Yamamoto

HAL

245 2111

Kiyomi Masaki

DPW

245-4751

Melvin Parker

BKEDB, CJC, PBRA

742-7444

James Takahashi

County Council

245-4771

GARY BLANCH

1000 FRIENDS OF KAUAI

822-7715

Charlie Lindsey

DOLLAR Rent-A-CAR

926-4242

MIKE PATTON

PARAGON Helicopters

826-7266

Mike Kido

State Commission on Transp

545-1850

Wally Nishigata

DOT - A

Dean S. Nakagawa

DOT - A

Date: _____

Sign In Sheet

Name (PLEASE PRINT)

Organization

Phone #

Tom Finkbeiner
Tom (unclear)

Hemmeter (unclear)

877-7059

Bob Akinaka

Akinaka & Assoc. Ltd.

536-7721

Henry Moritz

" " "

"

REBBIE BATH

PACIFIC RESOURCES, INC.

547-5191

Timothy Francis

Hemmeter Aviation

246-9071

Jeffrey Mallorea

"Amfco" Hawaii Inc.

945-8363

Paul Asimus

South Sea Helicopters

245-7485

DICK CARRIV

Libra Airport (STATE)

246-1400

MEETING ATTENDANCE

PROJECT: _____ PROJ. NO. 2635-01
 MEETING: LIIHUE AIRPORT MASTER PLAN TAC MEETING DATE: 8/3/88
 LOCATION: LIIHUE STATE OFFICE BUILDING TIME: 2:00 pm

NO.	NAME (PLEASE PRINT)	ORGANIZATION	PHONE NO.
1	ROBBIE RATH	PR1	547-3441
2	Jeffrey Williams	Aerfare	945-5363
3	David Lee/House	FAA	591-1243
4	ARVET SANDERS	HAC-	949 8789
5	Lawrence Chan	LIA	547-2725
6	Mark Conway	London & Bissell (312)	726-4967
7	GEORGE HILL	LIA LIIHUE OFFICE	245-7887
8	WAL MCONEY	ALPA	262-8673
9	LEE MITSUHASHI	HONOLULU AIR	745-5015
10	JOHN SANTRE	AER CONSULTANTS LTD	415-588-7150
11	FRANK HARRIS	PLANNING DEPT.	262-3119
12	DECK COFFIN	DOT AIRPORT	246-1400
13	Joe Alunochi	Council member	245-4771
14	BOB ABRAHAM	PR1	547-3210
15	Ron Clark	DOT	246-1400
16	MICHAEL SPOWDER	FAA - LIIHUE TOWER	245-5931
17	Wally Winters	Airlines Assoc.	536-7711
18	TRACY PETERSON	HONOLULU HOSPITAL	537-7000 573-3153
19	LEE JACOB	Honolulu Aviation	246-9074
20	Russell Lukumete	DLNR	548 7519
21	Y. J. Thompson	DLNR	215-3175

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MEETING ATTENDANCE

PROJECT: Little Airport Master Plan TAC Meeting PROJ. NO. 2635-01
 MEETING: _____ DATE: _____
 LOCATION: _____ TIME: _____

NO.	NAME (PLEASE PRINT)	ORGANIZATION	PHONE NO.
1	Jim Hennessey	Propeller Helicopters Ltd.	826-2027
2	Robert Kentler	C/HAWAII H/L	245-3996
3	KAT Childs		79-5572
4	Judy Templeton	Mene Hone Helicopter	245-7705
5	Les Fujj	Linnaw Co.	245-3611
6	Shigeo Taniguchi	Highway Air	795-4461
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LIHUE T.A.C. MEETING

2/8/89

<u>NAME</u>	<u>ORGANIZATION</u>	<u>PHONE</u>
Earl Matsukawa	Wilson Okamoto	531-5261 (OAH)
Mike Baker	"	"
Ernie Takahashi	"	"
JIM MOONEY	ALPA	262-8623
David Welhouse	FAA - HUL-ADO	541-1243
JAMES SHINNO	LIHUE PLANTATION	245-7325
James Hiramoto	ALOKA AIRLINES	245-5015
KIYOJI MASAKI	DPW, COUNTY OF KAUAI	245-4751
Shigeto Yamaguchi	DOT - Hwy's Kauai	245-4461
Margy Parker	Papaikou Resort Assoc / Chamber of Commerce	242-7444
Cathy Shimabukuro	Community	245-8896 (W)
Deanne Schultz	DOT - DIR OFFICE	548-4711
ROBBIE RATH	PACIFIC RESOURCES, INC	547-3141