

BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Petition of)
OFFICE OF STATE PLANNING,)
STATE OF HAWAII)
To Amend the Agricultural Land Use)
District Boundary into the Urban)
Land Use District for Approximately)
660 Acres at Keaau, Puna, Island of)
Hawaii, State of Hawaii, identified)
by Tax Map Key Numbers 1-6-03:)
por. 3, por. 7, por. 8, por. 11,)
por. 12, por. 13, por. 14, por. 15,)
por. 68, 76 and 84)

DOCKET NO. BR93-699
FINDINGS OF FACT,
CONCLUSIONS OF LAW,
AND DECISION AND ORDER

This is to certify that this is a true and correct copy of the Decision and Order on file in the office of the State Land Use Commission, Honolulu Hawaii.

JUL 18 1994

Date

by

[Signature]
Executive Officer

FINDINGS OF FACT,
CONCLUSIONS OF LAW AND DECISION AND ORDER

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LAND USE COMMISSION

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FINDINGS OF FACT,
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The Office of State Planning, State of Hawaii ("Petitioner"), filed a Petition for Land Use District Boundary Amendment on November 18, 1993, and First Amended Petition for Land Use District Boundary Amendment on February 24, 1994, pursuant to chapter 205, Hawaii Revised Statutes, ("HRS") and chapter 15-15, Hawaii Administrative Rules ("HAR") to amend the State land use district boundary for approximately 660 acres of land, identified as Tax Map Key Nos.: 1-6-03:por. 3, por. 7, por. 8, por. 11, por. 12, por. 13, por. 14, por. 15, por. 68, 76 and 84, situated at Keaau, District of Puna, Island of Hawaii, State of Hawaii ("Property"), from the State Land Use Agricultural District to the State Land Use Urban District.

The Land Use Commission ("Commission"), having heard and examined the testimony, evidence and argument of counsel

presented during the hearings, and Petitioner's Proposed Findings of Fact, Conclusions of Law and Decision and Order, hereby makes the following findings of fact, conclusions of law and decision and order:

FINDINGS OF FACT

PROCEDURAL MATTERS

1. On November 18, 1993, Petitioner filed a Petition for Land Use District Boundary Amendment and on February 24, 1994, Petitioner filed a First Amended Petition for Land Use District Boundary Amendment (Collectively "Petition").

2. On March 18, 1994, a prehearing conference on the Petition was held at Honolulu, Oahu, with representatives of the Petitioner and landowner, W.H. Shipman, Limited, present. At the prehearing conference, available exhibits, exhibit lists, and witness lists were submitted.

3. On April 21, 1994, the Commission held a hearing on the Petition in Hilo, Hawaii pursuant to a notice published in the Hawaii Tribune-Herald, and the Honolulu Advertiser, on February 22, 1994.

4. The Commission did not receive any petition for intervention into this proceeding.

5. On April 21, 1994, at the meeting held by the Commission in Hilo, Hawaii, the County of Hawaii ("County") Planning Department represented that it will not participate in the hearing proceedings for the Petition. The County also represented that it has filed stipulations with the Petitioner

with respect to Petitioner's Findings of Fact, Conclusions of Law, and Decision and Order with the exception that it did not place any conditions on the boundary amendment.

6. On April 21, 1994, the Commission allowed letters from Yoshihiko Nakahara, Robert Bethea, Keith Ahue, Lunakanawai Hauanio, Lt. Col. Jerry Matsuda, P.E., Carl Okuyama, Milton Pavao, and Richard Ha, Jr. to be admitted into evidence. The Commission also allowed Jim Albertini, Sandy Bonk, Milton Pavao, Yoshi Nakahara, Paula Helfrich, Carl Okuyama, Richard Ha, and Howard Wright to testify as public witnesses.

7. The Commission received additional letters from the following individuals: Keith Ahue, Bonnie Goodell, Adrian Barber, Ole Fulks, Barbara Bell, Sandy Bonk, Patricia and Francis Jaworski, and James Albertini. Said letters were admitted into evidence on July 14, 1994.

DESCRIPTION OF THE PROPERTY

8. The Property consists of approximately 660 acres of land located in the District of Puna, in the Ahupua'a of Keaau, approximately four miles south of the City of Hilo. The Property is comprised of four Sub-areas surrounding the existing town of Keaau at the intersection of State Highway 11 (Volcano Highway) and State Highway 130 (Keaau-Pahoa Road).

9. Sub-areas A and B are bounded by the existing Urban area of Keaau Village to the north and the Keaau Agricultural Lots to the south. Sub-areas A and B are separated by Keaau-Pahoa Road (State Highway 130). The

proposed Keaau ByPass Highway is anticipated to extend along the eastern or makai edge of sub-area B. These sub-areas consist of approximately 138 and 118 acres, respectively. Sub-area C is west, or mauka, of Volcano Highway (State Highway 11) and surrounds the 9 1/2 Mile Camp and is bounded by the County's Herbert Shipman Park to the north. This sub-area C includes approximately 295 acres. Sub-area D is also west, or mauka, of the Volcano Highway and is adjacent to the W.H. Shipman Industrial Park, which was the subject of an incremental districting approval from the State Land Use Agricultural District to the State Land Use Urban District in 1988. The second increment was reclassified in 1993 under LUC Docket No. A84-570/W.H. Shipman, Limited. Sub-area D encompasses approximately 109 acres.

10. The entire Property is owned by W.H. Shipman, Limited ("Shipman"), of Keaau, Hawaii.

11. Shipman has authorized Petitioner to file the Petition.

12. The Property slopes gently upward towards the summit of Mauna Loa with elevations ranging from approximately 275 to 650 feet above sea level. The site's topography is characterized as being moderately sloping with slopes over the entire Property averaging approximately 3.5 percent, with ranges from less than 1.7 to 13.0 percent. The highest slopes occur in the southern portion, where slopes average 5 percent.

13. The average annual rainfall in the Keaau area is between 9 and 17 inches per month, or 150 to 200 inches per year. Normally, more rain falls in the area between the months of November through April.

14. The Keaau area experiences primarily on-shore trade winds during the day from the northeast with primary low velocity night time gravity winds in the off-shore direction. Typical wind velocities range up to 12 knots, with gentler drainage winds at night. Relative humidity is also generally stable year round, with the daily average ranging from 65 to 85 percent.

15. The United States Department of Soil Conservation Service Soil Survey Report for the Island of Hawaii classifies the soil within the Property as follows:

a. Olaa (0-20%) Series (OID and OaC). The Olaa soils are well-drained silty clay loams typically nine inches thick. OID soil is extremely stony and is classified by the United States Soil Conservation Service in capability subclass VII (severe limitations, considered unsuitable for cultivation). OaC soil has a non-stony surface layer and falls in capability subclass III (requires special conservation practices).

b. Panaewa (0-10%) Series (PeC). The Panaewa soil is similar in properties but is dotted with rock outcrops. Its capability subclass is VI. When enriched with

high fertilizer inputs and treated with special conservation practices, both groups of soil may produce fair sugarcane yields.

c. Keaukaha (6-20% slopes) and Papai (3-25% slopes) Series (rKFD and rPAE). These are young soils developed on lava alone (pahoehoe and a'a respectively). These soils are difficult to cultivate and bear a capability subclass VII rating. Soil permeability is rapid, runoff is medium and erosion hazard slight for both soils. Despite a measure of diversity among these soils, all share certain properties. They are generally mucky, moderately to highly stony, somewhat acidic, highly permeable, moderately corrosive, and highly subject to shrink-swell problems.

16. The University of Hawaii Land Study Bureau's Detailed Land Classification-Island of Hawaii classifies the Property with productivity ratings between "C" and "E", or average/fair to very poorly suited for agricultural productivity.

17. The Property contains lands which are identified as Prime or Other Important Agricultural Land under the State Agricultural Lands of Importance to the State of Hawaii (ALISH) system. Although some valuable agricultural land will be converted to urban uses under the proposed use, most of the Prime agricultural land in the Keaau area is outside of the Property.

18. The Property consists mostly of land formerly cultivated in sugarcane and is presently vacant of any uses except for 7.3 acres planted in papaya, approximately 2 acres of macadamia nuts and several residences. There are nine dwellings situated within the Property, one of which is owned by Shipman. The remaining eight dwellings are situated on lands leased from Shipman. Five of the dwellings are located on the mauka side of the Volcano Highway near the Herbert Shipman Park. These dwellings are over 50 years old and are in dilapidated condition. The existing owners of the units will be required either to relocate or to demolish these dwellings. The four dwellings on the makai side of the Volcano Highway are on relatively short leases ranging between three and ten years. There are no plans to terminate or relocate these uses at the present time.

19. The Property, as is all of the Hilo to Puna region, is susceptible to potential lava inundation from Mauna Loa, one of the five volcanoes comprising the island of Hawaii and one of the three volcanoes which have been active in historic times.

20. The Property is within lava flow hazard zone 3, a zone considered "less hazardous than zone 2" and of "medium" threat risk (the United States Geological Survey ("USGS") has identified 9 volcanic flow hazard zones on the island of Hawaii, with "1" being the highest hazard and "9" being the lowest). Zone 3 includes most of the Hilo to Pahoa area.

21. The entire island of Hawaii is susceptible to earthquakes originating in fault zones under and adjacent to it. The Big Island is classified as a Zone 3 Seismic Probability Rating for the purposes of structural design. The classification system is based on a scale of zones with increasing risk from 0 to 4, due to seismic occurrence and danger.

22. The Federal Emergency Management Agency ("FEMA") classifies the region in which the Property is located as flood hazard zone "X", an area of moderate to minimal flood hazard that is outside the 100-year to 500-year flood plain.

PROPOSAL FOR DEVELOPMENT

23. The Petition is based on a recommendation made by the Petitioner as part of the Hawaii State Land Use District Boundary Review-Hawaii (OSP 1992) ("Boundary Review Report"), which recommends that the Property be reclassified from the Agricultural to Urban District.

24. The purpose of the Five-Year Boundary Review is to conduct a comprehensive, statewide evaluation of State land use districts. Based on this evaluation, there was a recommendation to allocate sufficient land for future urban growth and also to direct urban growth to appropriate areas. The intent is to provide for long-range planning by designating areas for future urban growth rather than reacting to landowner-initiated petitions.

25. To provide a basis for determining the possible land uses, land allocations, and impacts of urbanization of the Property, Shipman consultants prepared the Conceptual Keaau Development Plan for approximately 2,000 acres in and around the Keaau Village area, which included the Property. While broad land use concepts were identified, no specific uses or densities for particular areas within the Property have been determined. The conceptual plan will be further refined during the development and consultation process with governmental agencies and the public. Uses identified as potential uses within the Property include residential, parks and open space, industrial, commercial, schools and other government facilities.

26. Shipman has represented that site constraints such as archaeological remains, transmission line easements, circulation requirements, topographic relief, and other site factors will be taken into account to determine actual land use allocations and achievable densities. Additionally, external constraints such as adequacy of public facilities and services, market support and financial feasibility factors will all heavily influence the actual land plan.

27. Shipman has represented that it intends to implement the overall Conceptual Keaau Development Plan over a period of 20 years or more, with implementation of the initial phase, which covers the Property, within five years from the receipt of zoning from the County for the various areas. More

detailed planning and design will be required to establish the timing of major project phases which in turn will be coordinated with major stages of off-site infrastructure development and market support.

PETITIONER'S FINANCIAL CAPABILITY
TO UNDERTAKE THE PROPOSED DEVELOPMENT

28. Petitioner is a State agency and is not required to submit a statement of current financial condition pursuant to section 15-15-50(c)(8), HAR.

STATE AND COUNTY PLANS AND PROGRAMS

29. The approximately 660 acres which comprise the Property lies within the State Land Use Agricultural District as shown on the Land Use Commission Boundary Maps H-66 (Hilo) and H-67 (Mountain View).

30. Petitioner published the Boundary Review Report in May, 1992. The urbanization of the Keaau area is consistent with, and is supported by the Boundary Review Report. The Boundary Review Report recommends that the Property be reclassified from the State Land Use Agricultural to State Land Use Urban District.

31. The Hawaii County General Plan (Ordinance No. 89-142, as amended) ("General Plan") designates the Property for "Low Density", "Medium Density", and "Urban Expansion" uses. Urbanization of the Property as proposed in the Conceptual Keaau Development Plan is consistent with the applicable designations of the General Plan.

32. The Property is zoned "Agriculture", with a minimum lot size of 20 acres (A-20a) under existing County zoning. Petitioner will seek appropriate zoning changes from the County.

33. Although the Property is within the Coastal Zone Management Area, it does not lie within the Special Management Area, as defined by the County.

NEED FOR THE DEVELOPMENT

34. The petition is based on a recommendation made by Petitioner as part of the Boundary Review Report, which recommends reclassification of the area from the Agricultural District to the Urban District. The basis for the reclassification is stated directly in the report as follows:

With an 83 percent increase in population from 1980 to 1990, the Puna district is the second fastest growing region on the island of Hawaii. This rapid growth is expected to continue and even to accelerate. Due to the youthfulness of the population, the fertility rate is the highest in the State, averaging four children per family. Responding to the needs of this rapidly growing population is all the more difficult with the population so widely dispersed throughout the district and in areas where most of the lots are zoned for agriculture and serviced by inadequate infrastructure. The town of Keaau is located

along a major highway with adequate infrastructure, close to Hilo, and relatively central in its location to other widely dispersed villages. Reclassification of agricultural lands adjacent to the town of Keaau would make it easier for State and County to meet the social and physical infrastructure needs of a rapidly growing population.

The specific land uses, acreages and their locations within the Property have yet to be determined.

In addition:

a. The proposed reclassification area is adjacent to existing Urban District Lands at Keaau Town and the W. H. Shipman Industrial Park.

b. It is served by existing infrastructure including two major highways, water lines and utilities, although infrastructure improvements will be needed to accommodate the proposed urbanization. It is in proximity to existing services including an elementary and intermediate school, fire station, and police substation.

c. Reclassification is in conformance with the County of Hawaii General Plan, which designates the area for low and medium density and urban expansion uses.

d. Puna is second only to West Hawaii in population growth, with 128 percent growth from 1970-1980, and 76 percent growth from 1980-1990.

e. There is a need to establish an urban core in Puna to service the growing population. Keaau is a desirable location for an urban core because it is at lower risk of lava inundation than most of Puna and is relatively central in location with respect to the widely dispersed villages of Puna. Keaau also contains an employment center with the W. H. Shipman Industrial Park and the Keaau Town Center.

IMPACT UPON RESOURCES OF THE AREA

Agricultural Resources

35. The soils of the Property are derived from geologically recent pahoehoe and a'a lava flows, covered in places with layers of Pahala Ash. The United States Soil Conservation Service classifies the soils within the Property in the Olaa, Panaewa, Keaukaha and Papai Series groupings. The University of Hawaii Land Study Bureau classifies the Property with productivity ratings between "C" and "E." In addition, portions of the Property are identified as "Prime" or "Other Important Agricultural Land" under the State ALISH system.

36. A small portion of the Property is currently leased for farming papaya (7.3 acres) on a crop-by-crop basis and macadamia nuts (approximately 2 acres). Over the remainder of the Property, there are no agricultural activities being conducted. As such, the urbanization of the Property will have no significant negative impact on the overall agricultural productivity of the Island of Hawaii and the State of Hawaii.

Drainage and Flooding

37. The existing drainage area affecting the Property extends to the east and west of the Property, and there are no indications of potential flooding within the Property. Existing developed areas in the vicinity have no continuous underground drainage system.

38. Additional runoff as a result of development of the Property can be minimized by installing a system of swales and underground drainage structures which would channel the runoff into a system of dry wells.

Flora

39. A botanical survey of the Property was conducted in July 1992 by Grant Gerrish, Ph.D.

40. The native vegetation on the Property site has been removed by many years of sugarcane cultivation. No rare or endangered native plant species were found on the Property. The botanical survey recorded 8 endemic and 6 indigenous native plant species, mostly located in small, remnant waste areas not previously cultivated. The abandoned cane field areas are producing a secondary growth of primarily alien species.

Fauna

41. An avifauna and feral mammal survey of the Property was also conducted in July of 1992 by Grant Gerrish, Ph.D.

42. The study found no special or unique mammals or birds, including threatened or endangered species, on the

Property during the survey. Although the i'o or Hawaiian hawk and the hoary bat, both of which are endangered species, were not seen during the survey, they have been widely distributed on the island. Consequently, it is anticipated that the urbanization of the Property will not have any adverse impacts to avifauna or feral mammals.

Historic and Archaeological Resources

43. An archaeological assessment reconnaissance study and a literature search were conducted for the entire Property and surrounding Shipman lands in July and November 1992 by Terry L. Hunt, Ph.D.

44. The basic purpose of the assessment study was to generally survey the Property and enable predictions to be made concerning the probable nature and distribution of archaeological resources within the Property. The study was completed as a synthesis of literature review, aerial reconnaissance and a partial intensive ground surface survey of portions of the Property.

45. Five areas or "islands" of vegetation were identified by the survey, only one of which (Area 2) is located within the Property. Areas 1, 2, and 3 were subjected to a complete ground surface survey, while the heavily vegetated Areas 4 and 5 were studied through the use of 100 meter transects. Within Area 2 in the Property's Sub-area C, nine sites were mapped, measured and described. These nine sites are considered significant for their informational content and

may be associated with historic plantation activities. Further research is needed to definitely determine treatment of these sites within the Property. As development plans are finalized in areas where archaeological resources are identified, inventory level surveys must be conducted to provide further documentation. Due to the past sugarcane cultivation over most of the Property, large portions are free of archaeological resources.

Visual and Scenic Resources

46. The existing terrain of the Property provides gently sloping views to and from the Property to many acres of Mauna Loa, Mauna Kea and the sea.

47. Future urbanization of the Property will not alter the scenic views from the Property, although development of the Property from its predominantly natural state to one of urban uses will irretrievably alter the natural open space in the region. Existing public views of the Property are infrequent and transitory, and those views will also be altered by development of the Property.

Air Quality

48. Within the region of the Property, existing air quality is good. Present air quality in the Property is mostly affected by natural particulate sources such as ocean spray, pollen-producing plants and dust from natural, industrial, agricultural and/or vehicular sources. Of these natural sources of pollution, the emissions from Kilauea Volcano are

the most significant when those emissions are blown northwest due to the occasional southerly winds. Emission from this eruption can be seen in the form of volcanic haze (vog) which impacts the area on occasion.

49. Short-term direct and indirect impacts on air quality could potentially occur due to construction in two ways: (1) fugitive dust from vehicle movement and site excavation; and (2) exhaust emissions from on-site construction equipment. Indirectly, there could also be short-term impacts from slow-moving construction equipment traveling to and from the project site and from a temporary increase in local traffic caused by commuting construction workers.

50. After construction is completed, use of the Property will result in increased motor vehicle traffic on nearby roadways, potentially causing long-term impacts on ambient air quality in the project vicinity. Motor vehicles with gasoline-powered engines are significant sources of carbon monoxide.

Noise

51. The Property is currently exposed to relatively low ambient noise levels, primarily at narrow corridors adjacent to the highways, the power plant, and neighboring farms. Short term noise impacts will be generated by construction activities during development of the Property.

52. It is probable that noise generated by vehicular traffic along State Highway 11 (Volcano Highway) and State

Highway 130 (Keaau-Pahoa Road) will increase, both from construction vehicles and subsequently from vehicle trips by residents, employees and visitors to the urbanized Property. The degree to which traffic noise increases as a result of the vehicular trips associated with the urbanization of the Property cannot be projected at this time because specific uses for the Property have not yet been determined.

Socioeconomic Factors

53. Although specific land uses for the Property have not been determined, it is probable that single-family residential, multi-family residential, commercial/industrial, parks/open space and public facility uses will comprise a significant percentage of its acreage. The percentage of gross land set aside for residential uses includes approximately 451 acres, which would support approximately 1,500 residential units. In this respect, the proposed reclassification could positively affect the provision of needed housing for residents of Keaau and East Hawaii.

54. Based on the above number of dwelling units, it is anticipated that the Property could add to the existing resident population approximately 4,365 new residents, assuming a population-to-household ratio of 2.91 (the current figure for occupied houses in Puna, according to calculations based on 1990 Census Data by Community Management Associates) at full buildout.

55. In addition to the proposed reclassification of the Property, the Puna District has shown a phenomenal rate of increase in population of over 128 percent between 1970 and 1980. The increase, has to a large degree, been in subdivisions created without typical urban standard water, electric and roadway systems.

56. The urbanization of the Property will provide jobs and housing for the residents of Puna and East Hawaii and for others who desire to migrate to the island or region. Within the context of population projections contained in the County of Hawaii General Plan, the provision of housing and jobs will serve to support projected population increases, including in-migration.

57. The urbanization and development of the Property will generate short-term employment during the construction period. In addition, long-term employment opportunities will be created by industrial and commercial development. Not only will such action improve the economic diversification of the Puna and East Hawaii economy, it will also generate increased property, sales and income taxes.

58. The supply of residential lots with infrastructure amenities in the Puna area has failed to keep up with demand, thus resulting in an increase in lot prices. The development of residential units within the Property will be of direct benefit to the inventory of available units in this

category because of the proximity to the urban level of services and facilities.

Traffic

59. A preliminary traffic assessment for the Property was prepared by Randall S. Okaneku, P.E. to identify issues and opportunities relative to the probable traffic impacts the reclassification of the Property will have on the region's traffic.

60. In recognition of the existing traffic impacts within the region, the State Department of Transportation ("DOT") is currently in the process of planning the Keaau Bypass Road to divert traffic between Pahoa and Hilo from passing through Keaau Town. The DOT presently projects completion of this bypass road in early 1997.

61. The roadway plan proposed as part of the Conceptual Keaau Development Plan envisions a Shipman Loop Road which would pass through the Property and connect to Volcano Highway/State Highway 11. This Shipman Loop Road would begin between the Pahoa Road/Keaau Bypass Road junction and Keaau Town, continue in the westward direction, and connect to Volcano Highway south/mauka of Keaau Town.

62. The development of the Property will impact on the roadways of the region. The Keaau Bypass Road and the proposed Shipman Loop Road are expected to relieve some of the existing traffic problems at Keaau Town by diverting a portion of the existing through traffic away from the center of the

town. Once the final alignment of the Keaau Bypass Road is chosen and the specific uses of the Property are determined, the actual traffic impacts can be determined through a traffic impact analysis.

Water Supply

63. A preliminary overview of the water resources in the Puna region determined that there is an abundant source of potable groundwater available to serve the Property. The County of Hawaii Department of Water Supply maintains two water systems in the vicinity of the Property: the Hilo City water system and the Olaa water system. The Property rests atop a significant groundwater source designated the Keaau Aquifer System (Code 80402).

64. Potable water in the Keaau area of Puna is provided by the County of Hawaii Department of Water Supply from its Ola'a Water System.

65. The Property is located within the Keaau Aquifer System identified by the Water Resources Research Center of the University of Hawaii. This aquifer is thought to be capable of producing approximately 393 million gallons per day ("mgd") of sustainable yield. The Keaau Aquifer is currently being tapped for approximately 2.34 mgd to 2.50 mgd.

Wastewater Disposal

66. There is presently no municipal wastewater treatment plant in the Keaau area that can accommodate

wastewater that will be generated by the development of the Property.

67. The recently constructed municipal wastewater treatment plant in Hilo at Keaukaha near the airport has the capacity to handle wastewater from the development of the Property. The other option is for the developer/landowner to construct wastewater facilities in Keaau to service the development of the Property.

68. The amount of wastewater generation from the Property would roughly range from 1.5 to 1.6 mgd, including the existing Keaau Village connections.

69. Assuming that adequate wastewater treatment facilities can be constructed to service the Property, the disposal of the treated effluent may be used for landscape irrigation and agricultural uses located to the northeast/makai of the Property. Other disposal methods, such as underground injection, may be needed for the balance of the wastewater not used for irrigation.

Water Quality

70. Although groundwater is probably available within the Property, the potable water well(s) developed to service uses within the Property will be located at higher elevations outside and south/mauka of the Property. The Keaau Aquifer System has more than adequate sources of potable water to service development of the Property.

71. Although the urbanization of the Property may increase the opportunity for pollutants to enter groundwater via storm runoff or as leachate from materials applied to landscaped areas (fertilizers, pesticides, etc.), this would probably be much less than during the past sugarcane operations. According to Petitioner's Environmental Report, groundwater contamination from surface activities is expected to be negligible in relation to the volume and flow rate of the aquifer. Groundwater resources are expected to remain of high quality and within permissible levels for all contaminants of concern.

Electrical Power and Communication

72. Electrical service to the Property, as well as the entire island, is currently provided by Hawaii Electric Light Company (HELCO). HELCO's Kanoelehua and Puna generating stations are located within service range of the Property. It is expected that a new electrical substation will be required to extend electrical service throughout the Property. Given these improvements, urbanization of the Property is not expected to significantly impact on the provision of electrical service by HELCO.

73. GTE Hawaiian Tel serves the Property from its Keaau station.

74. Based on general assumptions made about the acreage and potential uses involved in the proposed boundary

amendment, GTE Hawaiian Tel may need to expand the Keaau station to accommodate development of the Property.

75. Jones Spacelink of Hawaii, Ltd. is licensed to provide cable television service in the Keaau region. There are presently no cable lines servicing the Property.

Therefore, it will be necessary to extend cable television service to the Property upon development.

Police, Fire and Emergency Services

76. Police, fire and emergency medical services are available at Keaau on a limited basis. The increase in population attributable to the development of the Property will increase the demand on existing police, fire and emergency facilities within the region.

Schools and Libraries

77. Current facilities planning projections for the Department of Education (DOE) include projected population increases within the Property. Although the DOE is currently reviewing site selection for an elementary school and conducting preliminary planning for a high school in Keaau, there is a projected additional enrollment associated with the urbanization of the Property that may require new and/or expanded facilities. Land areas for civic and public facility uses such as schools and libraries were allocated within the Property in the Conceptual Keaau Master Plan. Shipman has represented that it will reserve a minimum of 12 acres to accommodate an elementary school and up to 50 acres for a high

school in the event the DOE determines that Keaau is an appropriate location for these facilities.

Recreation Facilities

78. The County of Hawaii Department of Parks and Recreation has determined that urbanization of the Property must be accompanied by additional park facilities, which would be implemented by either the development of separate park sites, or expansion of the existing Herbert Shipman Park in Keaau to a regional park.

79. The urbanization of the Property will increase the resident population and its recreational needs, which can be met by providing a pro rata share of parks and other recreational facilities within the development of the Property.

Solid Waste Disposal

80. The County of Hawaii presently maintains a solid waste transfer station 1.75 miles southeast of the Property off State Highway 130. The Hilo Landfill, which presently serves the East Hawaii District, is reaching its maximum capacity and is expected to close by 1998. The Hilo Landfill will be replaced by the newly opened landfill at Puu Anahulu, south of Waikoloa. Refuse from the Property would be accepted by the municipal landfill at Puu Anahulu.

Civil Defense Services

81. The property is not affected by flood hazard and is within USGS Lava Flow Hazard Zone 3, a zone of medium threat. Should a natural disaster affect the Property after it

has been urbanized, the added population and urban improvements would add to the responsibilities of the various civil defense agencies.

Health Care Facilities

82. The increase in resident population that is probable as a result of the urbanization of the Property will place additional demands on health care services in the region.

COMPLIANCE WITH STANDARDS FOR DETERMINING DISTRICT BOUNDARIES

83. The Petitioner has conducted a "Five Year Boundary Review" pursuant to section 205-18, HRS, to comprehensively examine the State Land Use District classifications for all lands in the State.

84. Petitioner has recommended as part of its Five-Year Boundary Review Report that the Property be reclassified from the State Land Use Agricultural to the State Land Use Urban District. This recommendation is made within the context of existing State and County land use policies for the Property and the region as a whole. The Hawaii County General Plan specifically designates the Keaau area for Urban Expansion, for residential, commercial, industrial and other uses. This area has been identified for the urban growth necessary to accommodate the future population of Puna and East Hawaii.

85. The proposed reclassification of the Property meets the standards for the Urban District. The Property is adjacent to existing Urban District lands which include

employment generators in the W.H. Shipman Industrial Park and the Keaau Town Center. Furthermore, development in the Property will generate a new center of trading and employment, providing opportunities for residents throughout the Puna district.

86. All lands in the Property are reasonably free from environmental hazards and adverse topographic constraints such as flooding ,tsunami, unstable soil, and other adverse environmental effects. Although some risk of lava inundation is present, this situation is shared with nearly all existing urban land on the island.

87. Although the Property does not presently include land characterized by "city-like" concentration of people, structures, streets, urban level of services and other uses, the lands are adjacent to State Land Use Urban District lands having these "city-like" characteristics. Keaau is located at the junction of the two major highways in Puna, and is thus centrally located. The proposed reclassification will favorably impact the provision for employment opportunities, economic development and housing opportunities for all income groups. The Property also has existing infrastructure or the ability to easily extend and develop infrastructure required for quality growth, unlike any other region in Puna. Partly in recognition of the ideal situation of the Property amid the fast-growing district, the General Plan of the County of Hawaii has identified the area around Keaau as "Urban Expansion."

88. Urbanization of the Property does not contribute to scattered spot urban development, as it is adjacent to an existing urban area, proximal to existing urban facilities and is identified for urban uses by adopted State and County land use plans.

CONFORMANCE WITH THE HAWAII STATE PLAN

89. The proposed reclassification of the Property is consistent with the following objectives and policies of the Hawaii State Plan:

Section 226-5, HRS: Objectives and policies for population.

Section 226-5(b)(1): Manage population growth statewide in a manner that provides increased opportunities for Hawaii's people to pursue their physical, social, and economic aspirations while recognizing the unique needs of each county.

Section 226-5(b)(2): Encourage an increase in economic activities and employment opportunities on the neighbor islands consistent with community needs and desires.

Section 226-5(b)(3): Promote increased opportunities for Hawaii's people to pursue their socio-economic aspirations throughout the islands.

Section 226-5(b)(7): Plan the development and availability of land and water resources in a coordinated manner so as to provide for the desired levels of growth in each geographic area.

Section 226-6, HRS: Objectives and policies for the economy - in general.

Section 226-6(a)(1): Increased and diversified employment opportunities to achieve full employment, increased income and job choice, and improved living standards.

Section 226-6(a)(2): A steadily growing and diversified economic base that is not overly dependent on a few industries.

Section 226-7, HRS: Objectives and policies for the economy - agriculture.

Section 226-7(b)(10): Assure the availability of agriculturally suitable lands with adequate water to accommodate present and future needs.

Section 226-10, HRS: Objectives and policies for the economy - potential growth activities.

Section 226-10(b)(6): Provide public incentives and encourage private initiative to attract new industries that best support Hawaii's social, economic, physical, and environmental objectives.

Section 226-11, HRS: Objectives and policies for the physical environment - land-based, shoreline, and marine resources.

Section 226-11(a)(2): Effective protection of Hawaii's unique and fragile environmental resources.

Section 226-11(b)(3): Take into account the physical attributes of areas when planning and designing activities and facilities.

Section 226-12, HRS: Objectives and policies for the physical environment - scenic, natural beauty, and historic resources.

Section 226-12(b)(1): Promote the preservation and restoration of significant natural and historic resources.

Section 226-13, HRS: Objectives and policies for the physical environment - land, air, and water quality.

Section 226-13(b)(2): Promote the proper management of Hawaii's land and water resources.

Section 226-13(b)(3): Promote effective measures to achieve desired quality in Hawaii's surface, ground, and coastal waters.

Section 226-15, HRS: Objectives and policies for facility systems - solid and liquid wastes.

Section 226-15(b)(1): Encourage the adequate development sewerage facilities that complement planned growth.

Section 226-16, HRS: Objectives and policies for facility systems - water.

Section 226-16(b)(1): Coordinate development of land use activities with existing and potential water supply.

Section 226-17, HRS: Objectives and policies for facility systems - transportation.

Section 226-17(b)(6): Encourage transportation systems that serve to accommodate present and future development needs of communities.

Section 226-19, HRS: Objectives and policies for socio-cultural advancement - housing.

Section 226-19(b)(1): Effectively accommodate the housing needs of Hawaii's people.

Section 226-19(b)(3): Increase homeownership and rental opportunities and choices in terms of quality, location, cost, densities, styles, and size of housing.

Section 226-21, HRS: Objectives and policies for socio-cultural advancement - education.

Section 226-21(b)(2): Ensure the provision of adequate and accessible educational services and facilities that are designed to meet individual and community needs.

Section 226-23, HRS: Objectives and policies for socio-cultural advancement - leisure.

Section 226-23(b)(6): Assure the availability of sufficient resources to provide for future cultural, artistic, and recreational needs.

90. The proposed reclassification of the Property is generally consistent with objectives and policies of the following State Functional Plans: Housing, Education, Agriculture, Recreation, and Transportation.

CONFORMANCE WITH COASTAL ZONE
MANAGEMENT OBJECTIVES AND POLICIES

91. Although the Property is within the Coastal Zone Management area, it is not located within the Special Management Area; therefore, no Special Management Area permit is required. The Petition is in general compliance with chapter 205A, HRS.

RULING ON PROPOSED FINDINGS OF FACT

Any of the proposed findings of fact submitted by the Petitioner or the other parties not already ruled upon by the Commission by adoption herein, or rejected by clearly contrary findings of fact herein, are hereby denied and rejected.

Any conclusion of law herein improperly designated as a finding of fact shall be deemed or construed as a conclusion of law; and finding of fact herein improperly designated as a conclusion of law shall be deemed or construed as a finding of fact.

CONCLUSIONS OF LAW

Pursuant to chapter 205, HRS, and the Hawaii Land Use Commission Rules under chapter 15-15, HAR, and upon consideration of the Land Use Commission decision-making criteria under section 205-17, HRS, this Commission finds upon a clear preponderance of the evidence that the reclassification of the Property, identified as Hawaii Tax Map Key Nos.: 1-6-03: por. 3, por. 7, por. 8, por. 11, por. 12, por. 13, por. 14, por. 15, por. 68, 76 and 84, consisting of approximately 660

acres of land situated at Keaau, District of Puna, Island of Hawaii, State of Hawaii, from the State Land Use Agricultural District to the State Land Use Urban District, subject to the conditions provided in this Order, is reasonable, nonviolative of section 205-2, HRS, and is consistent with the Hawaii State Plan as set forth in chapter 226, HRS, and chapter 205-A, HRS.

ORDER

IT IS HEREBY ORDERED that the Property, being the subject of this Docket No. BR93-699 consisting of approximately 660 acres of land situated at Keaau, District of Puna, Island and County of Hawaii, State of Hawaii, and identified as Tax Map Key Nos: 1-6-03: por. 3, por. 7, por. 8, por. 11, por. 12, por. 13, por. 14, por. 15, por. 68, 76 and 84, and approximately shown on Exhibit "A" attached hereto and incorporated by reference herein, shall be and is hereby reclassified from the State Land Use Agricultural District to the State Land Use Urban District and the State Land Use District Boundaries are amended accordingly, subject to the following conditions:

1. The developer and/or landowner of the Property shall fund and construct adequate civil defense measures as determined by the County and State Civil Defense agencies.

2. The developer and/or landowner of the Property shall contribute to the development, funding and/or construction of school facilities, on a pro rata basis, as determined by and to the satisfaction of the Department of

Education (DOE). Agreement by DOE on the level of funding and participation shall be obtained prior to the developer and/or landowner applying for County zoning or prior to the developer and/or landowner applying for County building permits if County rezoning is not required.

3. The developer and/or landowner of the Property shall participate in the funding and construction of adequate wastewater transmission and disposal facilities, on a pro rata basis, as determined by the State Department of Health and the County Department of Public Works.

4. The developer and/or landowner of the Property shall provide affordable housing opportunities for low, low-moderate, and gap group income residents of the State of Hawaii to the satisfaction of the State Housing and Finance Development Corporation (HFDC) in accordance with the Affordable Housing Guidelines, adopted by the Housing Finance and Development Corporation, effective July 1, 1992, as periodically amended. The location and distribution of the affordable housing or other provisions for affordable housing shall be under such terms as may be mutually agreeable between the developer and/or landowner of the subject Property and the State Housing Finance and Development Corporation and the County of Hawaii. Agreement by the HFDC on the provision of affordable housing shall be obtained prior to the developer and/or landowner applying for County zoning or prior to the

developer and/or landowner applying for County building permits if County rezoning is not required.

5. The developer and/or landowner of the Property shall have an archaeological inventory survey conducted by a professional archaeologist prior to submitting an application to the County of Hawaii for rezoning or prior to applying for a building permit if county rezoning is not required. The findings of this survey shall be submitted to the State Historic Preservation Division, Department of Land and Natural Resources ("HPD-DLNR") in report format for adequacy review. The HPD-DLNR must verify that the survey report is acceptable, must approve significance evaluations, and must approve mitigation commitments for significant historic sites prior to the landowner and/or developer submitting an application to the county for rezoning or prior to applying for a building permit if county rezoning is not required.

6. If significant historic sites are present, then the developer and/or landowner of the Property shall agree to develop and execute a detailed historic preservation mitigation plan prior to any ground altering construction in the area. The HPD-DLNR must approve this plan, and must verify in writing to the Land Use Commission that the plan has been successfully executed.

7. Should any human burials or any historic sites such as artifacts, charcoal deposits, or stone platforms, pavings or walls be found, the developer and/or landowner of

the Property shall stop work in the immediate vicinity and contact the HPD-DLNR. The significance of these finds shall then be determined and approved by the HPD-DLNR, and an acceptable mitigation plan shall be approved by the HPD-DLNR (if needed). The HPD-DLNR must verify that the fieldwork portion of the mitigation plans has been successfully executed prior to work proceeding in the immediate vicinity of the find. Burials must be treated under the specific provisions of Chapter 6E, HRS.

8. The developer and/or landowner of the Property shall conduct a flora and fauna survey and prepare and agree to execute a mitigation plan which meets the requirements of the Department of Land and Natural Resources. The Department of Land and Natural Resources must approve the plan and a copy of the approved plan must be submitted to the Land Use Commission prior to the developer and/or landowner applying for county zoning or prior to the developer and/or landowner applying for county building permits if county rezoning is not required.

9. The developer and/or landowner of the Property shall prepare a Traffic Impact Analysis Report prior to applying for County zoning or prior to the developer and/or landowner applying for County building permits if County rezoning is not required. The landowner and/or developer shall also participate in the funding and construction of local and regional transportation improvements and programs including

dedication of rights-of-way as determined by the State Department of Transportation and the County Department of Public Works. Agreement by the State Department of Transportation on the level of funding and participation shall be obtained prior to the developer and/or landowner applying for County zoning or prior to the developer and/or landowner applying for County building permits if County rezoning is not required.

10. The developer and/or landowner of the Property shall monitor the traffic attributable to the proposed project at on-site and off-site locations and shall undertake subsequent mitigative measures that may be reasonably required. These activities shall be coordinated with and approved by the State Department of Transportation.

11. The developer and/or landowner of the Property shall fund the design and construction of drainage improvements required as a result of the development of the property to the satisfaction of the appropriate State and County agencies.

12. The developer and/or landowner shall coordinate with the County of Hawaii and the State Department of Health regarding the establishment of appropriate systems to contain spills and prevent materials associated with industrial and commercial uses such as petroleum products, chemical or other pollutants, from adversely affecting the groundwater resources of the area.

13. The developer and/or landowner of the Property shall participate in an air quality monitoring program as specified by the State Department of Health.

14. The developer and/or landowner of the Property shall cooperate with the State Department of Health and the County of Hawaii Department of Public Works to conform to the program goals and objectives of the Integrated Solid Waste Management Act, Chapter 342G, Hawaii Revised Statutes, and the County's approved integrated solid waste management plans in accordance with a schedule and timeframe satisfactory to the Department of Health.

15. The developer and/or landowner of the Property shall be responsible for implementing sound attenuation measures to bring noise levels from vehicular traffic in the Property down to levels acceptable to the State Department of Health and the State Department of Transportation.

16. The developer and/or landowner of the Property shall notify all prospective buyers of property of the potential odor, noise, and dust pollution resulting from surrounding Agricultural District land.

17. The developer and/or landowner of the Property shall notify all prospective buyers of property that the Hawaii Right-to-Farm Act, Chapter 165, Hawaii Revised Statutes, limits the circumstances under which preexisting farming activities may be deemed a nuisance.

18. The Petitioner has represented that no golf courses will be developed within the Property by the developer and/or landowner. Any plans by the developer and/or landowner to include a golf course within the Property shall be subject to review and approval by the Land Use Commission. The developer and/or landowner shall: (a) file an appropriate motion or petition, whichever is appropriate; (b) provide the necessary evidence to justify its proposed use; and (c) seek prior approval from the Commission for golf course use on the Property.

19. The developer and/or landowner of the Property shall develop the Property in substantial compliance with the representations made to the Land Use Commission. Failure to so develop the Property may result in reclassification of the Property to its former land use classification, or change to a more appropriate classification.

20. The developer and/or landowner shall promptly provide without any prior notice, annual reports to the Land Use Commission, the Office of State Planning, and the County of Hawaii Planning Department in connection with the status of the subject project and the developer's and or landowner's progress in complying with the conditions imposed.

21. The developer and/or landowner of the Property shall give notice to the Commission of any intent to sell, lease, assign, place in trust, or otherwise voluntarily alter

the ownership interests in the Property, prior to the completion of the development of the Property.

22. The Land Use Commission may fully or partially release these conditions as to all or any portion of the Property upon timely motion and upon the provision of adequate assurance of satisfaction of these conditions by the developer and/or landowner of the Property.

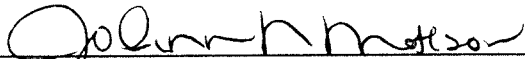
23. Within 7 days of the issuance of the Land Use Commission's Decision and Order for the subject reclassification, the Petitioner shall (a) record with the Bureau of Conveyances a Statement to the effect that the Property is subject to conditions imposed by the Land Use Commission in the reclassification of the Property, and (b) shall file a copy of such recorded statement with the Commission.

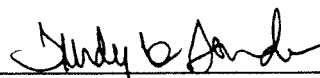
24. The Petitioner shall record the conditions imposed by the Land Use Commission with the Bureau of Conveyances pursuant to section 15-15-92, HAR.

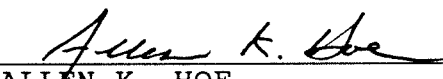
DOCKET NO. BR93-699 - OFFICE OF STATE PLANNING

Done at Honolulu, Hawaii, this 18th day of July 1994,
per motion on July 14, 1994.

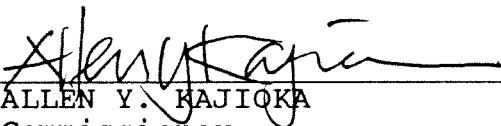
LAND USE COMMISSION
STATE OF HAWAII

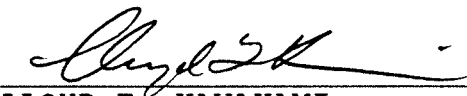
By 
JOANN N. MATTSON
Chairperson and Commissioner

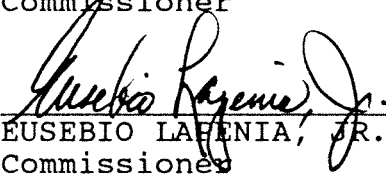
By 
TRUDY K. SENDA
Vice Chairperson and Commissioner

By 
ALLEN K. HOE
Commissioner

By (absent)
M. CASEY JARMAN
Commissioner

By 
ALLEN Y. KAJIOKA
Commissioner

By 
LLOYD F. KAWAKAMI
Commissioner

By 
EUSEBIO LAOPENIA, JR.
Commissioner

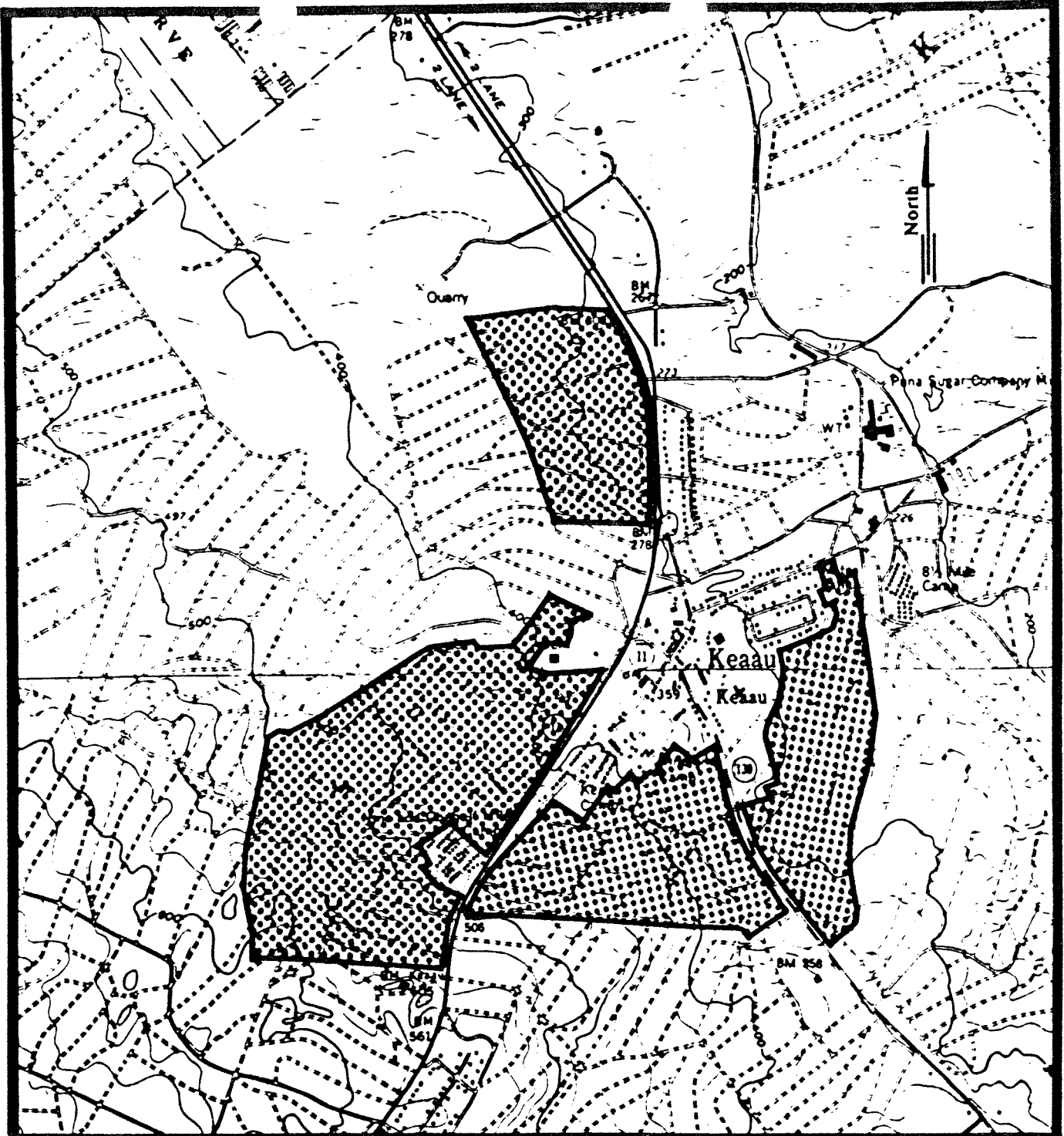
Filed and effective on
July 18, 1994

Certified by:


Executive Officer

By (absent)
RENTON L. K. NIP
Commissioner

By (absent)
ELTON WADA
Commissioner



LOCATION MAP

BR93-699 / OFFICE OF STATE PLANNING,
STATE OF HAWAII

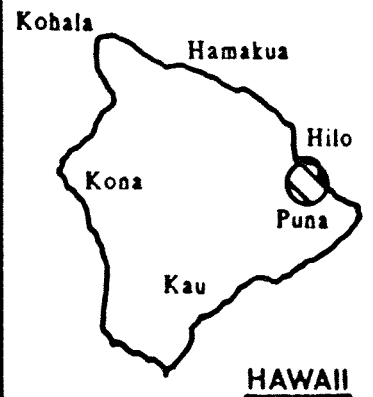
TAX MAP KEY: 1 - 6 - 03: por. 3, por. 7, por. 8, por. 11, por. 12,
por. 13, por. 14, por. 15, por. 68, 76, & 84

KEAAU, PUNA, HAWAII

SCALE: 1" = 2,000 ft ±



PETITION AREA



HAWAII

BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Petition of)
OFFICE OF STATE PLANNING,)
STATE OF HAWAII)
DOCKET NO. BR93-699
CERTIFICATE OF SERVICE
To Amend the Agricultural Land Use)
District Boundary into the Urban)
Land Use District for Approximately)
660 Acres at Keaau, Puna, Island of)
Hawaii, State of Hawaii, identified)
by Tax Map Key Numbers 1-6-03:)
por. 3, por. 7, por. 8, por. 11,)
por. 12, por. 13, por. 14, por. 15,)
por. 68, 76 and 84)

CERTIFICATE OF SERVICE

I hereby certify that a copy of the Findings of Fact, Conclusions of Law and Decision and Order was served upon the following by either hand delivery or depositing the same in the U. S. Postal Service by certified mail:

HAROLD S. MASUMOTO, Director
Office of State Planning
P. O. Box 3540
Honolulu, Hawaii 96811-3540
Attention: Mary Lou Kobayashi

CERT. RICK J. EICHOR, ESQ.
JAMES F. NAGLE, ESQ., Attorneys for Petitioner
Department of the Attorney General
425 Queen Street
Honolulu, Hawaii 96813

CERT. VIRGINIA GOLDSTEIN, Planning Director
Planning Department, County of Hawaii
25 Aupuni Street
Hilo, Hawaii 96720

DATED: Honolulu, Hawaii, this 18th day of July 1994.



ESTHER UEDA
Executive Officer