BEFORE THE LAND USE COMMISSION

OF THE STATE OF HAWAII

In the Matter of the Petition of STATE OF HAWAII, DEPARTMENT OF TRANSPORTATION, AIRPORTS DIVISION To Amend the Agricultural Land Use District Boundary into the Urban District for Approximately 509.282 acres at Kalulu, Lanai, Hawaii, Tax Map Key Nos. 4-9-02: 1, 41, 46, and 47	DOCKET NO. A90-659 STATE OF HAWAII, DEPARTMENT OF TRANSPORTATION, AIRPORTS DIVISION

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.

AUG 26 1991 by _____
Date Executive Officer

FINDINGS OF FACT,
CONCLUSIONS OF LAW, AND DECISION AND ORDER

BEFORE THE LAND USE COMMISSION

OF THE STATE OF HAWAII

In the Matter of the Petition of STATE OF HAWAII, DEPARTMENT OF TRANSPORTATION, AIRPORTS DIVISION To Amend the Agricultural Land Use District Boundary into the Urban District for Approximately 509.282 acres at Kalulu, Lanai, Hawaii, Tax Map Key Nos. 4-9-02: 1, 41, 46, and 47	DOCKET NO. A90-659 STATE OF HAWAII, DEPARTMENT OF TRANSPORTATION, AIRPORTS DIVISION

FINDINGS OF FACT,
CONCLUSIONS OF LAW, AND DECISION AND ORDER

State of Hawaii, Department of Transportation, Airports Division (hereinafter "Petitioner"), a principal executive department of the State of Hawaii, established by Sections 26-4(15) and 26-19, Hawaii Revised Statutes, filed a petition on August 10, 1990, and a subsequent Amendment (hereinafter collectively "Petition"), pursuant to Chapter 205, Hawaii Revised Statutes ("HRS"), as amended, and the Hawaii Land Use Commission Rules, Title 15, Subtitle 3, Chapter 15, Hawaii Administrative Rules (hereinafter "Commission Rules"), as amended, to amend the land use district boundary to reclassify approximately 509.282 acres of land from the Agricultural to the Urban District at Kalulu, Lanai, Hawaii, Tax Map Key Nos. 4-9-02: 1, 41, 46 and 47 (hereinafter "Property"), for the expansion of the Lanai Airport.

The Land Use Commission of the State of Hawaii (hereinafter "Commission"), having heard and examined the testimony, evidence and argument of the parties presented during the hearings, and the parties' stipulated Proposed Findings of Fact, Conclusions of Law, and Decision and Order, and the County of Maui's exceptions to the stipulated Decision and Order, hereby makes the following findings of fact, conclusions of law and decision and order:

FINDINGS OF FACT

PROCEDURAL MATTERS

1. On August 10, 1990, Petitioner filed a petition for land use boundary amendment. Petitioner filed an amendment to the Petition on December 18, 1990.

2. On October 25, 1990, a Petition for Intervention was filed by Elizabeth Ann Stone. Having considered the Petition for Intervention on January 10, 1991, the Commission denied the Petition for Intervention. The Order denying intervention was filed on January 17, 1991.

3. On November 26, 1990, the notice of hearing was published in the Maui News and Honolulu Advertiser.

4. On December 20, 1990, a prehearing conference was conducted at the Department of Business, Economic Development, and Tourism Conference Room.

5. On January 10, 1991, a hearing was conducted at the ILWU-Union Hall, Lanai City, during which time the Petitioner's attorney requested a continuance of the hearing.

The continuance was requested to finalize the conveyance of Castle & Cooke, Inc. lands to the State and other agreements. Having no objections from the parties, the Commission granted the request for continuance.

6. On April 25, 1991, a hearing was conducted at the Central Services Conference Room, Lanai City.

7. The Commission received two letters from Elizabeth Ann Stone dated December 17, 1990 and February 13, 1991, which were entered into evidence on April 25, 1991.

8. Thomas Mitsunaga and Ron McOmber were permitted to testify as public witnesses at the hearing held on April 25, 1991.

DESCRIPTION OF THE PROPERTY

9. The Property is situated about three miles southwest of Lanai City, and approximately 1/2 mile south of Kaumalapau Highway along the Airport Access Road. Surrounding the Property on all sides are Agricultural District lands, which are under pineapple production. Miki Road, an unimproved dirt road, traverses the Property near its eastern boundary. Another unimproved dirt road, Kaupili Road, traverses the western portion of the Property.

10. The 509.282-acre Property is comprised of the 93-acre existing Lanai Airport facilities, and some 416 acres of pineapple-cultivated land which encircle the existing Airport lands.

11. The existing 93-acre Lanai Airport lands are owned by the State of Hawaii, and consist of one 5,000-foot long runway (Runway 3-21), a passenger terminal building, and other airport-related facilities. The remaining 416 acres are owned by Castle & Cooke, Inc. Acquisition of these 416 acres is needed in order to accommodate the proposed project.

12. Castle & Cooke, Inc. has authorized the Petitioner to file the subject petition for boundary amendment, with the understanding that the State would acquire the Property. Castle & Cooke, Inc. will donate to the State of Hawaii fee simple title to the additional acreage that is being proposed for airport expansion in the subject petition, including the terminal area.

13. The USDA Soil Conservation Service, Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai identifies the soils of the Property as the Molokai silty clay loam--0 to 3 percent slopes (MuA) and 3 to 7 percent slopes (MuB)--and Uwala silty clay loam--2 to 7 percent slopes (UwB).

Molokai Silty Clay (MuA and MuB): The Molokai Series consist of well-drained soils on upland areas of Lanai, among other islands. These soils are nearly level to moderately steep. Elevations range from near sea level to as much as 1,500 feet on Lanai. The annual rainfall associated with this soil type is 20 to 25 inches, most of which occurs between November and April. These soils are used for sugarcane, pineapple, pasture, wildlife habitat, and homesites. The natural

vegetation found on this soil consists of kiawe, ilima, uhaloa, feather fingergrass, and buffelgrass. The MuA soils have a permeability of moderate, with slow runoff and slight erosion hazard. The MuB soils have slow to medium runoff, and slight to moderate erosion hazard.

14. Uwala Silty Clay (UwB): The Uwala Series consist of well-drained soils on the uplands of the island of Lanai, and are gentle to moderate in slope. The elevation range of this soil type is from 500 to 1,500 feet, where annual rainfall is to 15 to 25 inches, most of which occurs between November and April. These soils are used for pineapple and wildlife habitat. The natural vegetation found on this soil type consists of klu, lantana, feather fingergrass, uhaloa, ilima, and piligrass. The UwB soils have a moderate permeability, with slow to medium runoff, and slight to moderate erosion hazard.

15. The Agricultural Lands of Importance to the State of Hawaii (ALISH) rates most of the soils of the Property area as "Unique".

16. The Property has a Land Study Bureau Overall Productivity Rating of "D", poor productivity potential for most agricultural uses. If irrigated, however, the rating becomes "A", very high productivity potential for most agricultural production.

17. Elevations of the Property are approximately 1,298 feet above sea level near the terminal area and 1,305 feet above sea level at the threshold of Runway 3-21. The terrain beyond

the ends of the runways fall at an average slope of 5 percent to the southwest and rises at an average slope of 2 percent to the northeast.

18. Climate on Lanai is generally mild with fairly uniform temperatures throughout the year. The rainfall on Lanai is relatively low due to the shielding effects of the islands of Maui and Molokai on the rain-producing tradewinds.

19. The Federal Insurance Administration does not have a flood insurance study designation for the Island of Lanai.

20. The Property lies atop a flat ridge with naturally sloping terrain on two sides which minimizes the flood hazard potential from off-site stormwater flows. Existing storm drainage systems further mitigate potential storm drainage problems.

21. The 1985 Uniform Building Code rates potential damages to structures from seismic activities by zones on a scale of 0 to 4 ("0" being "No Damage"). Since the entire Island of Lanai is situated within Seismic Zone 1, the potential risk of damages to structures from earthquakes is low.

PROPOSAL FOR RECLASSIFICATION

22. Petitioner proposes to expand the existing Lanai Airport facilities, to accommodate projected aviation activity and facility requirements through the year 2005. The proposed developments include a 2,000-foot runway extension, taxiway improvements, new passenger terminal and cargo facilities,

additional aircraft and vehicular parking, and ground transportation facilities, as well as other airport land uses.

23. The proposed development includes plans for landscaping of several areas within the airport area: 1) along the Airport Access Road, and at the new terminal entrance for area enhancement; 2) around the ground transportation service area, parking lots, and maintenance and support areas to screen off these views; 3) around terminal facilities to reduce the effects of jet blast, as well as for beautification purposes.

24. The proposed project, which is scheduled for completion by 2005, is to be developed in two phases. Phase I (1989 to 1995) would include land acquisition, and development of the airfield, navigational aids, terminal area complex, and airport support and infrastructure. Phase II (1996 to 2005) would include further development of the terminal area complex and airport support and infrastructure.

25. The total capital improvement program cost estimate for the proposed project is $50,340,000 ($45,810,000 for Phase I, and $4,530,000 for Phase II) (in 1989 dollars), as shown below:

	Phase 1 (1989-1995)	Phase 2 (1996-2005)	Total
Land acquisition	$ 0	$ -	$ -
Airfield	29,237,000	-	29,237,000
Navigational aids	3,260,000	-	3,260,000
Terminal area complex	4,560,000	2,420,000	6,980,000
Airport support and infrastructure	8,753,000	2,110,000	10,863,000
Total	$ 45,810,000	$ 4,530,000	$ 50,340,000

This cost estimate assumes the lands needed for the proposed project will be donated by Castle & Cooke, Inc.

NEED FOR THE PROPOSED RECLASSIFICATION

26. The proposed airport expansion is needed to meet projected aviation demands, as well as to improve airport operational efficiency. Currently, the Lanai Airport is classified by the National Plan of Integrated Airport Systems (NPIAS) as a "Commercial/Service Other Airport--Short Haul", which typically serves short haul air carrier routes of less than 500 miles. There is no FAA Air Traffic Control Tower at the Lanai Airport at present. Existing facilities at Lanai Airport (including the 5,000-foot runway) primarily accommodate inter-island passenger and cargo operations.

27. The total number of passengers (enplaned and deplaned) at the Lanai Airport has increased from 36,701 in 1970 to 54,387 in 1978, decreased to 43,552 in 1980, and reached a high of 57,283 in 1987, reflecting an overall increase of 56% from 1970 to 1987. In 1988, the number of passengers flying in and out of Lanai Airport totalled 95,496. This significant increase in passenger activity (a 67% increase from 1987) was primarily due to the planning and construction activity associated with the resorts currently being developed on the island, at Manele Bay and Koele.

28. The total number of passengers (enplaned and deplaned) at Lanai Airport is estimated to increase from 57,283

in 1987 to 200,000 by 2005, an overall increase of 250%. The number of air carrier passengers is forecasted to increase from 17,741 in 1987 to 140,000 by 2005. This growth represents an increasing share of the total passengers at the Lanai Airport (30% in 1987 to 70% by 2005), and the increasing importance of the visitor industry on Lanai. Commuter/air taxi passengers are forecasted to account for a declining share of the total passengers at Lanai Airport. Although the total passenger counts will be increasing from 39,542 in 1987 to 60,000 by 2005, commuter/air taxi passengers will be declining from 70% to 30% of the total passengers.

29. In 1988, 71 tons of cargo were reported as being carried by the air carriers and 50 tons by the commuter/air taxi operators. However, based on discussions with the air taxi cargo operators, it appears that the actual cargo volume flown into and out of Lanai Airport may be closer to 1,000 tons. Such items as milk, bread, produce, and newspapers are flown daily to Lanai, as are construction-related cargo for the ongoing resort development on the island. Air cargo flights are scheduled primarily during the day, with one scheduled at night. The air mail volume, which was reported at 9 tons in 1988, may be under-reported. (Total air mail volume between 1970 and 1978 was 90 to 110 tons.)

30. Total volumes of air cargo and mail are anticipated to increase from an estimated 1,000 tons in 1988 to

2,000 tons by 2005, an overall increase of 100%. This reflects the increased population and daily visitor levels expected on the Island in the future.

31. Air carrier operations by Hawaiian and Aloha Airlines numbered 886 in 1987 and an estimated 1,400 in 1988. Commuter and air taxi passenger and cargo operations totalled 10,490 in 1987 and an estimated 14,500 in 1988. These increases are attributable to the construction and development activity on the island during this time period. General aviation operations are estimated at 4,500 annually, and military aircraft operations at 300 annually. In total, aircraft operations are estimated at 16,000 operations in 1987 and 20,500 operations in 1988.

32. Total aircraft operations are forecast to increase from an estimated 16,000 in 1987 to 21,400 by 2005, an overall increase of 32%. Air carrier operations are expected to increase from 886 operations in 1987 to 2,900 operations by 2005. The total commuter/air taxi operations are forecast to decline from about 10,490 annual operations in 1987 to 10,200 operations by 2005.

33. These projected increases in aviation demand, due to visitor and resident travel to and from Lanai, are expected as a result of the development of two new resorts on the island. The Lodge at Koele opened in early 1990, and Manele Bay Hotel is expected to open in 1991. Given the type and

number of visitors expected, based on the type of resorts being developed, it is anticipated that an increasing share of the passengers will be carried on larger air carrier aircraft, such as the B-737, DC-9, and DHC-7, rather than the smaller commuter aircraft, such as the DHC-6 and Cessna 402. The increased passenger activity in 1987 and 1988 associated with construction of the resorts will level off after the resorts open.

34. In addition to the expected increases in aviation activity, present airport deficiencies (i.e., congestion in airport operations with the present level of activity and limited facilities) have prompted development of the new airport Master Plan.

PETITIONER'S FINANCIAL CAPABILITY TO UNDERTAKE THE PROPOSED DEVELOPMENT

35. Petitioner currently has significant amounts of funds potentially available for new capital improvement projects. As of June 30, 1988, the State had over $150 million of unrestricted funds--including cash, investments, and receivables. In addition, about $96 million of cash and investments were on deposit in the Revenue Bond Construction Fund.

STATE AND COUNTY PLANS AND PROGRAMS

36. The Property is located within the State Agricultural Land Use District as reflected on the Land Use District Map of Lanai, and is designated Agricultural in Maui

County's Lanai Community Plan. The proposed project would necessitate an amendment to the Lanai Community Plan.

37. At the present time, Maui County does not have a Zoning Map for the Property. The Maui County Planning Department has indicated that a change in zoning for the airport will be required. Upon the approval of the State Land Use district boundary amendment to Urban designation and the Community Plan amendment, all zoning matters will be governed by the provisions of the Maui County Interim Zoning Ordinance.

38. The Property is not located within the Maui County Special Management Area.

ECONOMIC IMPACTS

39. The principal economic activity on Lanai has been pineapple production. By 1992, the visitor industry will be the main source of employment for Lanai residents.

40. The visitor industry will become a very significant part of the economic, population and employment growth on Lanai within the next 2 years, with the opening of the Koele and Manele resorts. A major impact has already been created with the employment and economic activity currently generated by the construction of the hotels.

41. With the completion of the 2 hotels, approximately 18,000 visitors will be generated per year with a 50% occupancy rate, and approximately 27,000 visitors per year with a 75% occupancy rate.

42. The expansion of the airport will create some additional jobs. Short-term construction employment and indirect construction-related employment will add to the Island's economy during the course of construction.

43. Some long-term permanent employment for additional airport-related facilities will be generated.

SOCIAL IMPACTS

44. The resident population has remained fairly stable at just over 2,200 residents over the past 26 years. Over 98% of the resident population live in Lanai City. With 2 hotels in full operation, the resident population is forecast to reach approximately 3,000 by 1995. By 2020, with the development of additional hotel units that have been approved by the current Lanai Community Plan, the resident population is forecast to reach approximately 4,500.

45. The Lanai Airport serves as a major transportation facility for both local residents and visitors. Expansion of the airport, as proposed in the Master Plan, will provide for a more efficient, reliable and convenient transportation facility for the movement of passengers and cargo to and from Lanai.

46. The new airport facilities will provide greater operational reliability for airlines and airport users and thereby enhance recreational opportunities for visitors and residents and educational opportunities for students on Lanai.

IMPACTS UPON RESOURCES OF THE AREA

Agricultural Resources

47. The proposed project will cause some land to be withdrawn from pineapple production. However, this withdrawal should not have a significant impact on the island's agricultural resources, since Dole has large acreages of uncultivated fields that can be recultivated. In addition, the proposed airport expansion would facilitate the movement of agricultural produce to and from the island.

48. The State Department of Agriculture (DOA) notes that Petitioner's parent company, Castle & Cooke, Inc., recently announced the planned phase-out of pineapple operations on Lanai over a 2-1/2-year period. DOA states that the Petitioner should coordinate land development with Lanai Plantation so as to permit the timely harvest of pineapple from the proposed project site.

49. In regard to the Petitioner's proposed use of landscaping, which would require irrigation, in and around the Airport environs, DOA comments that the Petitioner should make every effort to establish a xeric landscaping environment to reduce the amount of water needed for irrigation.

50. In light of the expected increase in air travel to Lanai, DOA further comments that its Plant Quarantine function--in terms of personnel and facilities--will need to be accommodated at the proposed Airport for plant quarantine inspection.

Flora/Fauna

51. Most of the vegetation on the Property consists of actively cultivated pineapple. Scrub vegetation, usually found on abandoned pineapple fields, covers about 30% of the Property. There is little of botanical interest within the Property. No rare, threatened or endangered plant species were found on the Property.

52. Several bird species, including the Pueo, were observed on the Property. Most of these bird species, however, are foreign. The mammals observed were mongoose, rats, and house mice. No threatened or endangered species were observed on the Property.

Archaeological/Historic Resources

53. An archaeological survey of the Property identified 7 locations containing evidence of traditional Hawaiian basalt artifacts. However, due to the 60+ years of commercial pineapple cultivation, no surface features and probably no subsurface features associated with traditional Hawaiian usage of the Property could have remained intact. As such, no further archaeological work, except for "on-call monitoring" (in the unlikely event that a subsurface feature is unearthed during construction) is recommended.

Groundwater Resources

54. Lanai has no surface water sources of substance. Potable groundwater on Lanai is found only in the island's high-level aquifer system. All basal groundwater is brackish.

55. Existing potable water demand originates from pineapple cultivation and domestic consumption (approximately 2,200 residents). Lanai's high-level aquifer is the only source which supplies these potable demands.

56. Future development in the Manele and Koele project districts will increase potable water demand on Lanai's high-level aquifer.

57. Estimated water usage for the Airport's operations is expected to be approximately 20,000 gallons per day for domestic use, and 100,000 gallons per day for landscaping purposes. This water usage does not represent a major impact on Lanai's water resources.

58. Lanai Company, which owns and operates the Island's existing water distribution system, has committed to the Petitioner up to 20,000 gallons of potable water, and up to 100,000 gallons per day of irrigation water. Due to the existing water distribution system, the 100,000 gallons of irrigation water committed to the Petitioner for landscaping purposes will come from the high-level aquifer.

Scenic/Visual Resources

59. Due to the agricultural use of the land surrounding the Airport, the airport facilities contrast with the green and red pineapple fields. The view from the Airport presents a panoramic view towards the southwest Lanai Coast and the Pacific Ocean across the pineapple fields. To the northeast the view is across the pineapple fields towards Lanai

City and Lanaihale. The aesthetic impact of the Airport will be an incremental increase and the continuation of the present visual contrast between surrounding agricultural uses and the Airport area.

60. The Petitioner's design parameters and the use of landscaping will enhance the visual quality of the Airport.

Coastal/Aquatic Resources

61. The Lanai Airport is not within the Shoreline Management Area (SMA). An SMA permit is therefore not required. The proposed expansion of the Lanai Airport will not impact the coastal resources of the area, nor will the proposed development preclude access to recreational opportunities. However, land within the airport boundary will not be open to the public because of public safety and security reasons.

ENVIRONMENTAL QUALITY

Aural Quality

62. Existing background ambient noise levels (without aircraft noise contributions) in the vicinity of Lanai Airport are estimated to range from 35 to 60 Ldn. Noise levels along the Kaumalapau Highway can exceed 60 Ldn; however, noise levels in areas removed from the roadway corridor are generally 35 to 50 Ldn. In general, background ambient noise levels on Lanai are not high enough to cause beneficial noise masking effects, which would reduce the audibility of aircraft noise events.

63. Base year (1988) aircraft noise contours of 55 Ldn and greater enclose an area of approximately 525 acres in

and around the existing Airport. Of the 525 acres, 93 acres are with the existing Airport boundaries, and the remaining 432 acres are presently used for pineapple cultivation or for public roadways. All existing land uses in the Airport environs are compatible with aircraft noise levels as depicted in the Base Year Noise Exposure Map.

64. Aircraft noise levels are expected to increase as a result of the proposed project. With the completion of the proposed runway extension, large jet aircraft (e.g., B-737, DC-9) arriving on the runway may not be able to avoid overflying portions of Lanai City. Increases of aircraft noise levels are predicted to occur during landings, and may be in the order of 8 to 9 dB above current noise levels. In addition, with the runway extended by 2,000 feet to the northeast, there may be a greater tendency of aircraft to overfly existing residences at Kaumalapau Harbor following departures.

65. Petitioner proposes measures to mitigate aircraft noise impacts, including development of a preferential runway use system, monitoring of aircraft flight tracks and noise levels to minimize overflights of Lanai City, and annual monitoring of aircraft operations and noise levels at the Lanai Airport.

66. The State Department of Education (DOE) comments that since the orientation of the proposed runway is in the general direction of Lanai High and Elementary School, DOE is

concerned that flight paths of larger aircraft may create excessive noise levels at the school. If future noise levels are determined to be a problem by the State Department of Health, DOE will seek mitigation of any noise pollution.

Air Quality

67. The present air quality on the Island of Lanai is considered to be very good. Contributions to emission levels due to Airport operations are not considered significant due to the limited number of aircraft operations combined with favorable meteorological conditions. Air quality monitoring or measurement data are presently not available.

68. Air quality impacts of construction-related activities would be short-term, and limited to the immediate area of the project site.

69. Long-term air quality impacts would be attributable to airport operational related emissions, as well as automobile emissions. The long-term impact of aircraft emissions is not considered significant, due to anticipated pollutant levels being well within the State Air Quality Standards parameters, and to favorable meteorological conditions.

Water Quality

70. The current quality of water from operating high-level wells is generally very good. For comparison, American Water Works Association limits chloride concentrations

for potable uses at 250 mg/1. Chloride concentrations measured at all but one of the shafts were well below this standard.

71. The Property is situated below the State Department of Health's Underground Injection Control (UIC) Line. Land areas below the UIC line are generally not considered to contain underground sources of drinking water.

ADEQUACY OF PUBLIC SERVICES AND FACILITIES

Highway and Roadway Services and Facilities

72. The only major roadway on Lanai is Kaumalapau Highway, which is a State Highway. Kaumalapau Highway extends from Kaumalapau Harbor in a northeasterly direction to Lanai City. The existing Lanai Airport facilities are situated off of Kaumalapau Highway, approximately three miles east of Kaumalapau Harbor. In the future, a second road may be built to the south of the Airport for direct access to the resort development currently underway at Manele.

73. The present condition of Kaumalapau Highway is good, with adequate capacity for present traffic demand. The 1988 average daily traffic counts at the intersection of the Kaumalapau Highway and Lanai Airport Access Road are as follows:

Direction	Total
From Lanai City	601
To Lanai City	551
	1,152
From Kaumalapau Harbor	298
To Kaumalapau Harbor	276
	574

From Lanai Airport	262
To Lanai Airport	260
	522

74. Traffic volumes are expected to increase in proportion to the increase in air passenger traffic. Based on air passenger traffic projections, the increase in traffic volumes is estimated to be 250 percent over the 1988-2005 planning period, or an average of 5.5 percent annually. The resulting two-directional traffic on the Airport Access Road is estimated at 1,800 vehicle trips per day, compared to 522 in 1988. The peak-hour traffic is expected to increase to about 360 vehicle trips per hour.

75. The existing intersection can provide acceptable levels of service (LOS "A") for the projected 2005 traffic.

76. To mitigate anticipated increases in traffic volume, the Airport Access Road will be widened and improved to improve traffic safety. In addition, a left-turn storage lane is proposed at the Kaumalapau Highway/Airport Access Road intersection for traffic leading into the Airport from Lanai City. This measure would provide safer left-turns and enhance the flow of traffic through the intersection.

Water Service

77. Lanai's water system is owned and operated by Dole Company. The water system at the Lanai Airport is part of the island's domestic water supply system. Water is transmitted to the Airport through an existing 6-inch pipeline

along Kaumalapau Highway and a 2-1/2 inch pipe from the Kaumaulapau Highway to the Airport. The capacity of these lines is adequate for the present domestic demands, but not for fire protection.

78. The proposed expansion is expected to increase the water demand at the Airport. In terms of the average domestic water requirements, the demand will increase to about 0.3 million gallons per day (the actual demand will depend upon irrigation requirements for landscaping). In addition to the domestic demand, there will be a greater need for an adequate supply of water for fire protection.

79. The following mitigation measures will be considered in the design of the terminal facilities to minimize the impact on groundwater resources:

- Installation of flow restriction and/or pressure regulating devices.
- Use of drip irrigation for the landscape irrigation system where possible.
- Use of landscaping plant materials that require less water.

Wastewater Treatment and Disposal

80. Presently, Airport-generated wastewater is treated and disposed of in two cesspools located near the main terminal building. Although current wastewater volumes are not provided, Petitioner's Final Environmental Impact Statement states that future flows are expected to increase in proportion to the increase in air passenger traffic.

81. Due to recent State Department of Health regulations prohibiting the use of cesspools, other methods of treatment and disposal will be required. Given expected increases in wastewater volumes, a wastewater facility capable of treating flows at an estimated peak rate of approximately 60,000 gallons per day will be required. A design based on soil absorption technology will be investigated, and other treatment methods which are acceptable to the State Department of Health will be considered as necessary.

Drainage

82. The Lanai Airport is ideally situated on relatively high ground along the western rim of Miki Basin. The natural terrain of the surrounding area generally slopes away from the Airport in a westerly direction towards Kalamaiki Gulch or to the southeast towards Miki Basin.

83. The airfield drainage system consists of pipe culverts that cross the runway and longitudinal swales constructed along the edges of the grassed shoulders. Storm water from the terminal area drain by surface flow to the pipe culverts within the airfield. In general, most of the storm runoff from the Airport flows into Miki Basin.

84. The existing drainage ditches to the northeast of Runway 3-21 have a drainage area of approximately 700 acres that is tributary to Miki Basin. The construction of the runway extension will remove some of these ditches, which will

cause storm water from the upper reaches to flow into the lower basin and aggravate the flooding and ponding conditions in the low-lying areas. The existing drainage ditches that are affected by the proposed development will be reconstructed.

Police and Fire Protection

85. Police protection services at the Lanai Airport which are provided by the Maui County Police Department are on a limited basis only. Security in areas closed to the public (e.g., aircraft parking apron) is handled by State Department of Transportation, Airport Operations Control personnel. With the increase in activity at the Airport, there will be a need to enhance Airport security. Additional personnel and equipment, and more stringent security measures and procedures will be required. Petitioner indicates that a security plan in accordance with Federal regulations and guidelines will be prepared.

86. Fire protection services are currently provided by Aircraft Rescue and Firefighting (ARFF) equipment and facilities located at the Lanai Airport. The Maui County Fire Department is also available to respond to airport emergencies, although there is no formal mutual aid agreement currently in effect. With the expansion of the Airport, additional personnel and equipment will be required. The proposed project will provide ample space for future expansion of the ARFF facilities. In addition, there will be a greater need for an adequate supply of water for fire protection.

Electrical and Telephone Service

87. Electrical power for Lanai is provided by the Maui Electric Company (MECO). MECO is presently constructing a new power plant in Miki Basin, situated just southeast of the Property. MECO also plans to upgrade the electrical distribution system along Kaumalapau Highway. The proposed project is expected to increase electrical power requirements at the Airport. These improvements would provide sufficient capacity to the demands of the Airport.

88. Telephone service to Lanai is provided by Hawaiian Telephone Company (HTCO). Due to the resort and related developments on the island, HTCO is increasing the capacity of its telephone facilities in Lanai City and in Miki Basin. The proposed project is expected to increase the Airport's telephone service requirements. The improvements planned by HTCO will provide sufficient capacity to meet the increase in telephone service requirements.

Solid Waste Disposal

89. Solid waste is presently accommodated at the Maui County landfill situated approximately 3/4 mile from the Airport. This landfill is nearing its capacity, and must be replaced in the near future. Maui County has tentatively selected a new site to the north of the existing landfill. The proposed project will increase the volume of Airport-generated solid waste materials significantly, and Petitioner indicates

that additional staff, equipment and space will be provided as required.

Schools

90. The State Department of Education comments that the proposed project will have negligible enrollment impact on Lanai High and Elementary Schools.

CONFORMANCE WITH THE HAWAII STATE PLAN

91. The proposed reclassification generally conforms with the objectives and policies of the Hawaii State Plan, particularly those for the economy in general, and transportation, as set forth in §226-6 and §226-17, respectively. With regard to the economy in general, the proposed project would create both short- and long-term employment, as well as serve the growth of the visitor industry and other industries on the island of Lanai. With regard to transportation, the proposed development would provide for a more efficient and convenient transportation facility for the movement of both passengers and cargo, as well as accommodate the present and future air transportation needs of the island.

CONFORMANCE WITH THE STATE LAND USE COMMISSION RULES

92. The proposed reclassification generally conforms with the standards for determining "U" urban district boundaries as set forth in section 15-15-18 of the Commission Rules.

CONFORMANCE TO COASTAL ZONE POLICIES AND OBJECTIVES

93. The proposed reclassification of the Property for the development of the project conforms to the policies and objectives of the Coastal Zone Management Program, Chapter 205A, HRS, as amended.

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 should be deemed or construed as a conclusion of law; any finding of fact herein improperly designated as a conclusion of law should be deemed or construed as a finding of fact.

CONCLUSION OF LAW

Pursuant to Chapter 205, Hawaii Revised Statutes, as amended, and the Hawaii Land Use Commission Rules, the Commission finds upon the preponderance of the evidence that the reclassification of the Property consisting of approximately 509.282 acres of land from the Agricultural Land Use District into the Urban Land Use District at Kalulu, Island of Lanai, State of Hawaii, identified as Tax Map Key Nos. 4-9-02: 1, 41, 46 and 47, subject to the conditions stated in the Order, for the expansion of the Lanai Airport facilities, is reasonable and nonviolative of Section 205-2 and 205A-2 of

the Hawaii Revised Statutes, as amended, and is consistent with the Hawaii State Plan as set forth in Chapter 226, HRS, as amended, and the Hawaii Land Use Commission Rules.

ORDER

IT IS HEREBY ORDERED that the Property, being the subject of this Docket No. A90-659 by the State of Hawaii, Department of Transportation, Airports Division, consisting of approximately 509.282 acres of land situate at Kalulu, Island of Lanai, State of Hawaii, Tax Map Key Nos. 4-9-02: 1, 41, 46 and 47, and approximately identified on Exhibit "A", attached hereto and incorporated herein by reference, shall be and is hereby reclassified from the Agricultural District to the Urban District and the District Boundaries are amended accordingly, subject to the following conditions:

1. Petitioner shall obtain unconditional fee title for airport and ancillary airport purposes to the land for expansion at no cost to the State of Hawaii from Dole Foods, Inc., formerly known as Castle & Cooke, Inc.

2. There shall be no residential construction on any portion of the property subject to noise levels greater than 60 Ldn.

3. Petitioner shall insure that the necessary water source, storage and transmission facilities are available to adequately serve the proposed project.

4. Petitioner shall monitor the traffic attributable to the development proposed in the Property at on-site and off-site locations, and shall undertake subsequent mitigative measures that may be required.

5. Petitioner shall provide the necessary wastewater treatment and disposal facilities as may be required by the State Department of Health to adequately service the proposed project.

6. Petitioner shall immediately stop work on the impacted area and contact the State's Historic Preservation Division should any archaeological resources, such as artifacts, shell, bones, or charcoal deposits, human burial, or rock or coral alignments, paving or walls of historic or prehistoric significance be encountered during the development in the Property.

7. Petitioner shall implement effective soil erosion and dust control measures during all phases of the development.

8. Petitioner shall develop the Property in substantial compliance with representations made to the Land Use Commission in obtaining the reclassification of the Property.

9. Petitioner shall provide annual reports to the Land Use Commission, the Office of State Planning, and the Maui County Planning Department in connection with the status of the

project and Petitioner's progress in complying with the conditions imposed.

10. Petitioner shall give notice to the Land Use Commission of any intent to sell, lease, assign, place in trust, or otherwise voluntarily alter the ownership interest or development interest in the Property covered by the approved Petition prior to visible commencement of construction on the Property.

11. A Lanai Community Plan Amendment and Change in Zoning shall be obtained from the County of Maui.

12. Night operations for passenger flights shall be limited to the extent practicable.

13. Flight patterns over Lanai City shall be avoided to the extent practicable.

14. Petitioner shall comply with the attached exhibit "B", dated August 20, 1990, from the Department of Public Works, County of Maui, containing seven (7) comments regarding development improvements.

15. Unless prior consultation occurs between the County of Maui and the Petitioner, no runway expansion at Lanai Airport shall be allowed.

DOCKET NO. A90-659 - STATE OF HAWAII, DEPARTMENT OF TRANSPORTATION, AIRPORTS DIVISION

Done at Honolulu, Hawaii, this 26th day of August 1991, per motion on August 22, 1991.

LAND USE COMMISSION
STATE OF HAWAII

By _____
RENTON L. K. NIP
Chairman and Commissioner

By _____
ALLEN K. HOE
Vice Chairman and Commissioner

By (conflict)
ALLEN Y. KAJIOKA
Vice Chairman and Commissioner

By _____
KAREN S. AHN
Commissioner

By _____
EUSEBIO LAPENIA, JR.
Commissioner

By _____
JOANN N. MATTSON
Commissioner

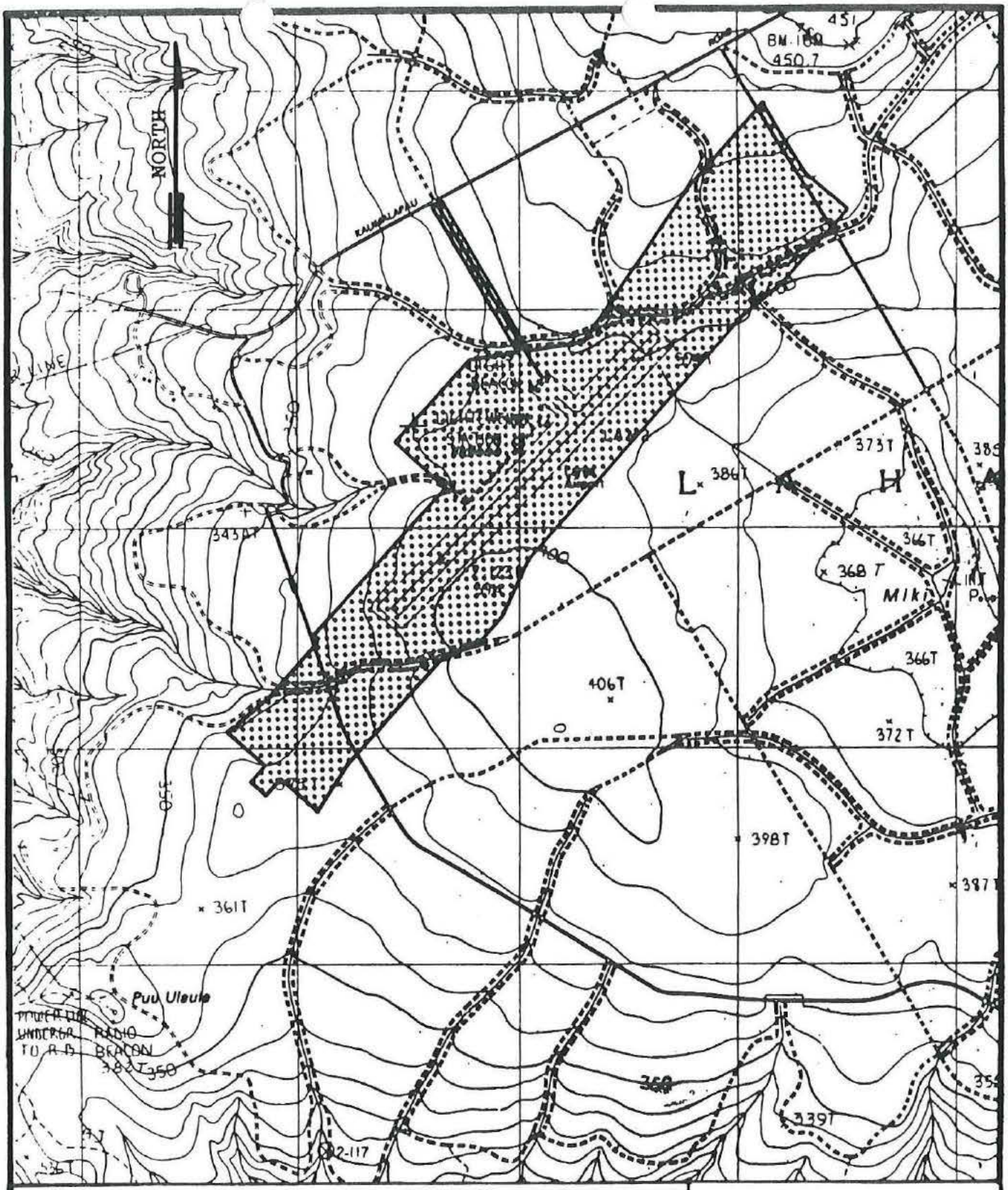
By _____
ELTON WADA
Commissioner

By _____
DELMOND J. H. WON
Commissioner

Filed and effective on
August 26, , 1991

Certified by:

_____
Executive Officer



DOCKET NO. A90-659/STATE OF HAWAII, DEPARTMENT OF TRANSPORTATION, AIRPORTS DIVISION

LOCATION MAP

T.M.K.: 4-9-02: por 01, 41, 46, & 47
LANAI, MAUI, HAWAII
SCALE: 1" = 2083 ft. ±

APPROVED AREA

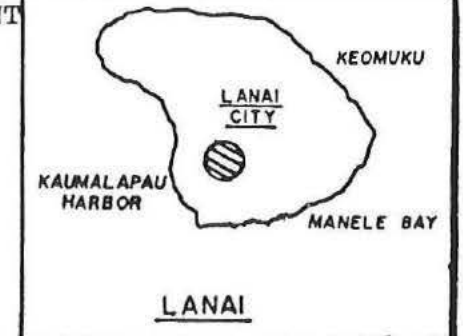


EXHIBIT "A"

August 20, 1990

State of Hawaii
Department of Transportation
Attn: Mr. Owen Miyamoto
Airports Administrator
869 Punchbowl Street
Honolulu, Hawaii 96813-0597

Gentlemen:

SUBJECT: DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) FOR THE LANAI AIRPORT MASTER PLAN IMPROVEMENTS (AIR-EP, 90.26)

We have reviewed the above request and offer the following comments:

1. That the existing airport access road does not meet our latest design standards and should be upgraded.

2. That a final detailed drainage and erosion control plan including, but not limited to, hydrologic and hydraulic calculations, and scheme for controlling erosion and disposal of runoff water, and an analysis of the soil loss using the HESL erosion formula, be submitted for our review and approval. The plan shall provide verification that the grading and runoff water generated by the project will not have an adverse effect on the adjacent and downstream properties.

3. That the Lanai Airport master plan be revised to include forecasting to the year 2010 to be consistant with the State Department of Transportation, Highways Division Year 2010 Island Wide Transportation Study.

4. That a separate left-turn lane on Kaunalapau Highway with its intersection with the airport access road be constructed during the first phase of the airport expansion.

5. That no clearing and grubbing material shall be disposed of at the County sanitary landfill. The developer shall submit a solid waste management plan acceptable to the Department of Public Works. For additional information, the developer is requested to contact the Solid Waste Division.

EXHIBIT B

6. That the proposed landfill site stated in the Lanai Airport master plan improvements report dated July 1990 has been rejected by the County of Maui due to possible destruction of endangered plant species. The report should be amended to address this concern.

7. That the existing airport area is not serviced by a County wastewater system. Therefore, appropriate private facilities should be planned.

If you have any questions, please contact the Land Use and Codes Administration at 243-7373.

Very truly yours,

Alvin K. Fukunaga
Director of Public Works

AS:sn

cc: Engineering Division
Wastewater Reclamation Division
Solid Waste Division
Planning Department

BEFORE THE LAND USE COMMISSION

OF THE STATE OF HAWAII

In the Matter of the Petition of STATE OF HAWAII, DEPARTMENT OF TRANSPORTATION, AIRPORTS DIVISION To Amend the Agricultural Land Use District Boundary into the Urban District for Approximately 509.282 acres at Kalulu, Lanai, Hawaii, Tax Map Key Nos. 4-9-02: 1, 41, 46, and 47	DOCKET NO. A90-659 STATE OF HAWAII, DEPARTMENT OF TRANSPORTATION, AIRPORTS DIVISION

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
State Capitol, Room 410
Honolulu, Hawaii 96813

CERT. BRIAN MISKAE, Planning Director
Planning Department, County of Maui
250 South High Street
Wailuku, Hawaii 96793

CERT. GUY A. HAYWOOD, ESQ.
Corporation Counsel
Office of the Corporation Counsel
County of Maui
200 South High Street
Wailuku, Hawaii 96793

CERT. DERWIN HAYASHI, ESQ., Attorney for Petitioner
Deputy Attorney General
465 South King Street, Room 300
Honolulu, Hawaii 96813

Mr. Edward Y. Hirata, Director
Department of Transportation
CERT. State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813

Mr. Owen Miyamoto, Airport Administrator
Department of Transportation
CERT. State of Hawaii
Honolulu International Airport
Honolulu, Hawaii 96819

DATED: Honolulu, Hawaii, this 26th day of August 1991.

ESTHER UEDA
Executive Officer