

ORIGINAL

BEFORE THE LAND USE COMMISSION

OF THE STATE OF HAWAII

In The Matter Of The Petition Of)	DOCKET NO. A04-747
)	
KAMEHAMEHA INVESTMENT)	FINDINGS OF FACT,
CORPORATION, A Hawai'i)	CONCLUSIONS OF LAW, AND
Corporation)	DECISION AND ORDER
)	
To Amend The Agricultural Land Use)	
District Boundary Into The Rural Land)	
Use District For Approximately 487.246)	
Acres Of Land At Keauhou I And II)	
And Kahalu'u, North Kona, Hawai'i,)	
Tax Map Keys: 7-8-05: 1, 6, 27, 28, 37, 38,)	
And 39; 7-8-07: 4; And 7-8-10: 6 And 9)	
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FINDINGS OF FACT, CONCLUSIONS OF LAW, AND
DECISION AND ORDER

KAMEHAMEHA INVESTMENT CORPORATION, a Hawai'i corporation ("Petitioner"), filed a Petition For Land Use District Boundary Amendment ("Petition") on March 12, 2004, as amended on April 26, 2004, pursuant to section 205-4, Hawai'i Revised Statutes ("HRS"), and chapter 15-15, Hawai'i Administrative Rules ("HAR"), to amend the State land use district boundary by reclassifying approximately 487.246 acres of land at Keauhou I and II and Kahalu'u, North Kona, Hawai'i, identified as Tax Map Keys: 7-8-05: 1, 6, 27, 28, 37, 38, and 39; 7-8-07: 4; and 7-8-10: 6 and 9 ("Property"), from the State Land Use Agricultural District to the State Land Use Rural District for the

development of a single-family residential subdivision that incorporates previously permitted golf facilities and related amenities ("Project").

The Land Use Commission of the State of Hawai'i ("LUC" or "Commission"), having heard and examined the testimony, evidence, and arguments of counsel presented during the hearings, and the Fourth Amended Stipulation Of Findings Of Fact, Conclusions Of Law, And Decision And Order For A State Land Use District Boundary Amendment by Petitioner and the County of Hawai'i Planning Department ("Planning Department"), hereby makes the following findings of fact, conclusions of law, and decision and order:

FINDINGS OF FACT

PROCEDURAL MATTERS

1. On March 12, 2004, Petitioner filed the Petition. The Petition included an Environmental Report.
2. On March 17, 2004, Petitioner filed an Affidavit Of Service Of Notification Of Filing Of Petition.
3. On April 8, 2004, Charles G. Bockus filed a Notice Of Intent To Intervene in the proceedings. Mr. Bockus is the recorded fee owner of Tax Map Key: 7-8-07: 3, which is encircled by the Property.¹

¹ Petitioner and Mr. Bockus subsequently agreed to the establishment of a buffer around Mr. Bockus' parcel similar to that previously agreed to by Petitioner and residents of the neighboring Pu'uloa and Ihilani Place Subdivisions. Mr. Bockus did not file any petition for intervention.

4. On April 26, 2004, Petitioner filed an Amendment Of Petition For Land Use District Boundary Amendment (“Amendment Of Petition”)²; an Amended Environmental Report (“AER”); an Affidavit Of Service In Compliance With Section 15-15-48, Land Use Commission Rules; and an Amended Notification Of Petition Filing.

5. On May 3, 2004, Petitioner filed an Affidavit Of Service Of Amended Notification Of Filing Of Petition.

6. By letter dated May 25, 2004, the Executive Officer of the LUC deemed the Petition a proper filing as of May 3, 2004.

7. On June 29, 2004, a prehearing conference was conducted at the University of Hawai`i at Hilo, Main Campus, K Building 333, Room 123, in Hilo, Hawai`i, with representatives of Petitioner, the Office of Planning (“OP”), and the Planning Department present.

8. On June 29, 2004, OP filed its Statement Of Position In Support Of The Project.

9. On July 8, 2004, the Planning Department filed its Testimony In Support Of The Petition. It is the position of the Planning Department that TMK: 7-8-05: 28, 37, 38, and 39, consisting of approximately 31.5 acres in total, should be retained in the Agricultural District and not reclassified because the parcels are at an elevation that

² The Amendment Of Petition, among other things, deleted Tax Map Key: 7-8-07: por. 11 from the Petition. Petitioner had originally included it as part of the Property.

would generally be considered to be within the "Kona Coffee Belt." These parcels are designated by the County of Hawai'i's Land Use Pattern Allocation Guide ("LUPAG") map as Extensive Agriculture.

10. On July 8, 2004, the LUC conducted a hearing on the Petition at the Hapuna Beach Prince Hotel, Hau-Lehua Room, in South Kohala, Hawai'i, pursuant to a Notice Of Hearing published in the Honolulu Star-Bulletin and West Hawaii Today on June 4, 2004. At the hearing, Mikahala Roy, Executive Director of Kulana Huli Honua, Foundation of the Search for Wisdom, a Hawai'i non-profit organization; and Jim Medeiros, Sr., vice-president of Protect Keopuka 'Ohana, orally requested to intervene in the proceedings. Following presentations on their respective oral requests to intervene, the LUC denied Ms. Roy's and Mr. Medeiros' untimely requests to intervene. The LUC subsequently heard public testimony from the following individuals: Jerry Halverson; Jane Bockus; Deborah Wichmann; Richard M. Stewart, Esq.; Jim Medeiros, Sr.; and Harold Olinger. Correspondence from Judith Graham; David K. Roy, Jr.; Jerry Halverson; Lance Foster/Clyde W. Namu`o, Office of Hawaiian Affairs; and Dierdre S. Mamiya, Department of Land and Natural Resources ("DLNR"), was also entered into the record.

11. On July 9, 2004, the LUC took a field trip to the Property and the surrounding lands.

12. On July 21, 2004, OP filed its Testimony In Support Of The Project. OP recommended that the Petition be approved for reclassification from the Agricultural District to the Rural District only for those lands necessary to develop the proposed residential subdivision. OP further recommended that the acreage required for the golf course and related facilities be retained in the Agricultural District based on the LUC's Declaratory Order dated March 16, 1988, in which the LUC had ruled that golf course and golf driving range uses are not permitted in the Rural District.

13. On July 26, 2004, Petitioner filed a Memorandum Concerning Golf Courses In The Rural District and a Memorandum Concerning Native Hawaiian Rights.

14. On August 5, 2004, OP filed a Memorandum Concerning Golf Courses In The Rural District.

15. On August 5, 2004, Petitioner filed a Preliminary Stipulation Of Findings Of Fact, Conclusions Of Law, And Decision And Order For A State Land Use District Boundary Amendment that was signed by Petitioner and the Planning Department.

16. On August 12 and 13, 2004, the LUC continued the hearing on the Petition at the Royal Kona Resort, Ali'i Surf Room, in Kailua-Kona, Hawai'i. At the continued hearing on August 12, 2004, Mahealani Pai; Jim Anderson; Jimmy Trask; Lunakanawai Hauanio; Judith Graham; Violet Leihulu Mamac; Richard Wheelock; Charles G. Bockus; Jack Kelly; David K. Roy, Jr.; Jim Medeiros, Sr.; Marshall Blann;

Kamana Kapele; Alfred Spinney; Virginia Isbell; and Mikahala Roy provided public testimony. Correspondence from Dierdre S. Mamiya, DLNR; John B. Ray; Mark McGuffie; Jack Kelly; Noenoe K. Silva; Mahealani Pai; Makiko Yamaguchi Alspach; Edie Santos; Marni Herkes; Mikahala Roy; Reynolds N. Kamakawiwo`ole; Fleur Weymouth; and Dee Jay Mailer was also entered into the record during these hearings.

17. On September 20, 2004, the LUC issued its Order Denying Jim Medeiros, Sr.'s, Untimely Oral Request To Intervene On Behalf Of Himself And Protect Keopuka `Ohana and Order Denying Mikahala Roy's Untimely Oral Request To Intervene.

18. On September 21, 2004, Petitioner filed a Statement Of Clarification in which Petitioner clarified (i) that it has no objections to the Planning Department's recommendation that Tax Map Key: 7-8-05: 28, 37, 38, and 39 be retained in the Agricultural District;³ (ii) that the Project is a golf/residential community; and (iii) that the West Hawai`i Railroad right-of-way is not within the Property.

19. On October 7 and 8, 2004, the LUC continued the hearing on the Petition at the Hilo Hawaiian Hotel, Moku`ola Ballroom, in Hilo, Hawai`i. At the continued hearing on October 7, 2004, Raynard Soon and William F. Mielcke provided

³ With the retention of TMK: 7-8-05: 28, 37, 38, and 39 in the Agricultural District, the term "Property," when used in the context of the area subject to the reclassification, shall henceforth mean and include the approximately 455.746 acres of land that is identified as TMKs: 7-8-05: 1, 6, and 27; 7-8-07: 4; and 7-8-10: 6 and 9. When used in the context of the consultants' reports, it shall mean and include the approximately 487.246 acres of land that is identified as TMKs: 7-8-05: 1, 6, 27, 28, 37, 38, and 39; 7-8-07: 4; and 7-8-10: 6 and 9.

public testimony. Correspondence from Eric von Platen Luder, Raynard Soon, and William F. Mielcke was also entered into the record.

20. On November 18 and 19, 2004, the LUC continued the hearing on the Petition at the Waikoloa Beach Marriott, Lehua Ballroom, in Waikoloa, Hawai'i.

21. On December 10, 2004, the LUC continued the hearing on the Petition at the Hapuna Beach Prince Hotel, Hau-Lehua Ballroom, in South Kohala, Hawai'i. At the continued hearing, David K. Roy, Jr., and Robert Mist provided public testimony.

22. On January 19, 2005, the LUC issued a subpoena to Patricia Hamamoto, Superintendent of Education, State of Hawai'i, or her designee or authorized representative. Issues to be addressed under the subpoena included (i) the impacts of the Project on public education facilities; (ii) the analysis upon which the conclusion as to impacts is based; and (iii) any recommended conditions to be imposed if the district boundary amendment is approved.

23. On February 4, 2005, Petitioner filed a First Amended Stipulation Of Findings Of Fact, Conclusions Of Law, And Decision And Order For A State Land Use Boundary Amendment that was signed by Petitioner and the Planning Department.

24. On February 10, 2005, the LUC continued the hearing on the Petition at the Waikoloa Beach Marriott, Ali'i Ballroom, in Waikoloa, Hawai'i. At the continued hearing, Rae Loui, Assistant Superintendent, Department of Education,

("DOE") provided testimony on behalf of Patricia Hamamoto pursuant to the LUC's subpoena. Violet Leihulu Mamac; Mikahala Roy; and David K. Roy, Jr., provided public testimony. The written testimony of Rae Loui and correspondence from Patricia Hamamoto, Nancy Matthews, and Violet Leihulu Mamac was entered into the record. Following the receipt of public testimony, the LUC closed the hearing on the Petition.

25. On February 11, 2005, the LUC held an action meeting on the Petition at the Waikoloa Beach Marriott, Ali`i Ballroom, in Waikoloa, Hawai`i. At the meeting, correspondence from Janice Palma-Glennie was entered into the record. Petitioner filed a Second Amended Stipulation Of Findings Of Fact, Conclusions Of Law, And Decision And Order For A State Land Use District Boundary Amendment that was not signed by the parties. Petitioner subsequently requested a continuance of the action meeting.

26. On April 7, 2005, Petitioner filed a Motion For Extension Of Time Pursuant To Section 15-15-51(e), Hawaii Administrative Rules ("Motion For Extension").

27. On April 20, 2005, and by a written Order dated May 24, 2005, the LUC granted Petitioner's Motion For Extension.

28. On July 1, 2005, Petitioner filed a Fourth Amended Stipulation Of Findings Of Fact, Conclusions Of Law, And Decision And Order For A State Land Use District Boundary Amendment signed by the Planning Department.⁴

29. During the 2005 legislative session, the Hawai`i State Legislature passed House Bill No. 109, H.D. 1, S.D. 2, C.D.1. The bill, among other things, allows golf courses, golf driving ranges, and golf-related facilities in the State Land Use Rural District. This bill was signed into law as Act 205, which became effective as of July 1, 2005. Petitioner has requested that Act 205 be applied to the subject Petition.

30. On July 13, 2005, the LUC held an action meeting on the Petition at the Sheraton Keauhou Bay Resort and Spa in Keauhou, Hawai`i. Richard M. Stewart, Esq., and Mikahala Roy provided public testimony. Action on the Petition was deferred to the LUC's July 29, 2005, meeting. On July 29, 2005, the LUC continued its action meeting on the Petition at the Waikoloa Beach Marriott, Alii Ballroom, in Waikoloa, Hawaii.

DESCRIPTION OF THE PROPERTY AND SURROUNDING AREAS

31. The Property is located in the ahupua`a of Keauhou I and II and Kahalu`u in North Kona, Hawai`i.

32. The Property is currently undeveloped, thickly infested in places with alien vegetation, and vacant of any active use.

⁴ Although the Third Amended Stipulation Of Findings Of Fact, Conclusions Of Law, And Decision And Order For A Land Use District Boundary Amendment was circulated to the parties, it was never filed with the LUC, and consequently, is not part of the record in this docket.

33. The Property is bordered by Kuakini Highway on the east, an abandoned railroad right-of-way and vacant land to the west, private residences and vacant land to the north and vacant land to the south.

34. Petitioner is the fee owner of the Property with the exception of TMK: 7-8-07: 4, which is jointly owned by Petitioner and the Trustees of Bernice Pauahi Bishop Estate. By letter dated March 9, 2004, the Estate authorized Petitioner to include said parcel in the Petition.

35. The Property is situated approximately 0.8 to 2.2 miles inland of Keauhou Bay at elevations between 660 feet above mean sea level ("msl") at the railroad right-of-way to 1,160 feet above msl at its highest point. The Property has slopes ranging between 2 percent and 20 percent.

36. The Property is located approximately five miles southeast of the town center of Kailua-Kona.

37. Rainfall on the Property averages about 45 inches per year, with a pronounced summer maximum.

38. The lands makai and to the north of the Property down to the shoreline are in the Urban District, with a small pocket in the Agricultural District at the Royal Holua preservation site.

39. Mauka and directly adjacent to the Property are two residential areas in the Urban District below Māmalahoa Highway. There are some areas in the

Rural District above the Highway. The remaining mauka lands are in the Agricultural District.

40. While the Property and its immediately surrounding area are primarily undeveloped lands, the Keauhou community is a mixture of resort, commercial, multiple-family, and single-family residential developments.

41. Immediately adjacent to and makai of the Property is the Alii Country Club Golf Course zoned Open (O). Within the immediate area are lands zoned Single-Family Residential (RS-15). Mauka of Kuakini Highway to the east are lands zoned Agricultural (A-1a) and Residential Agriculture (RA-.5a).

42. The Property is covered by `ā`ā and pahoehoe lava flows from Hualalaï dating from four different eras, ranging from as young as approximately 700 years to older than 10,000 years.

43. A small area of 10,000-year plus Mauna Loa lava is also present on the Property.

44. Soil types found on the Property include RKED, or Kaimu extremely stony peat, which is found on approximately 124 acres of the Property; KEC, or Kāināliu extremely stony silty clay loam, which is found on approximately 79 acres of the Property; RPYD, or Punalu`u extremely rocky peat, which is found on approximately 270 acres of the Property; rLW, or lava land (pahoehoe), and rLV, lava

land (ʻāʻā), are miscellaneous types and collectively are found on approximately 15 acres of the Property.

45. The agricultural utility of land in Hawaiʻi was assessed in the 1970s by the U.S. Department of Agriculture, Soil Conservation Service, and mapped as part of the *Agricultural Lands of Importance to the State of Hawaiʻi* map series. Three categories of valuable agricultural land are identified: Prime Agricultural Land (“Prime”), Unique Agricultural Land (“Unique”), and Other Important Agricultural Land (“Other”).

46. Island-wide, Prime lands constitute approximately 4 percent of the surface, Unique lands less than 1 percent, and Other lands approximately 18 percent. The remaining 78 percent is “unclassified.”

47. Prime and Unique lands are not found on the Property.

48. Approximately 122 acres in the northern and southern ends of the Property are classified as Other. Other lands is defined as land other than Prime or Unique land that is also of statewide or local importance for agricultural use. The remainder of the Property is “unclassified.”

49. Other lands can be farmed satisfactorily by applying greater inputs of fertilizer and other soil amendments, drainage improvement, erosion control practices, and flood protection, and they produce fair to good crop yields when managed properly.

50. The Land Study Bureau ("LSB") of the University of Hawai'i prepared an inventory and evaluation of the State's land resources during the 1960s and 1970s.

51. The LSB grouped all lands in the State, except those in the Urban District, into homogeneous units of land types; described their condition and environment; rated the land on its over-all quality in terms of agricultural productivity; appraised its performance for selected alternative crops; and delineated the various land types and groupings based on soil properties and productive capabilities. Criteria included various soil characteristics, topography, and rainfall.

52. The highest category is "A," or "very good." This category is not found within the Property. The next best category is "B," or "good," (55-69%) and is not found within the Property. Category "C," or "fair," (55-69%) land comprises 79 acres within the Property. Category "D," or "poor," (30-54%) land comprises 114 acres, and category "E," or "very poorly suited," (0-30%) land accounts for the remaining 293 acres.

53. According to the Flood Insurance Rate Maps, there are no major drainage crossings through the Property.

54. The Property is designated as Flood Zone X, outside of the 500-year floodplain.

55. Under an SMA Use Permit (SMA 413, December 2000) and a Use Permit (UP 183, December 2000) issued by the County of Hawai`i, a 27-hole golf course is permitted on the Property. The County of Hawai`i permits also cover three additional parcels below the railroad right-of-way, which is not included within the Property. The final golf course layout has not yet been designed.

PROPOSAL FOR RECLASSIFICATION

56. Petitioner requests the reclassification of the Property from the Agricultural District to the Rural District to develop the Project. The Project consists of a single-family residential subdivision that incorporates previously permitted golf facilities and related amenities. Between 300-400 single-family residential lots ranging in size from 0.5 acres to 2.0 acres are proposed for development.

57. The Project is a part of Kamehameha Schools' ("KS") master development plan ("Keauhou master plan") for Kahalu`u and Keauhou I and II. Petitioner is charged with implementing the Keauhou master plan adopted by the trustees of KS.

58. The Keauhou master plan incorporates cultural, educational, and economic benefits.

59. KS, through both its Board of Trustees and CEO, is committed to the implementation of the Keauhou master plan. Petitioner represented that neither the

Trustees nor the KS administration are planning any significant changes to the Keauhou master plan.

60. Included in the Keauhou master plan is a complex dedicated to telling the story of the Kamehameha dynasty and the significance and eco-cultural history of their land holdings in Kona and Kohala. This interpretive center will be located at Keauhou Bay.

61. Petitioner represented that it is going to operate in good faith with developing the educational and cultural components of the Keauhou master plan.

62. The educational and cultural facilities that are proposed in conjunction with the implementation of the Keauhou master plan include a graduate-level Hawaiian performing arts academy at Keauhou Bay; a halau with related park-like amenities at the former site of the Kona Lagoon hotel; and an educational center to be located across from the `Ohana Keauhou Beach Resort.

63. The educational center is proposed to be put in place by KS to provide services to the children of West Hawai`i, including those in the public school system. KS plans, through various outreach programs, to build closer partnerships with the public schools that approximately 85 percent of Hawaiian children attend. The programs being planned for the educational center will likely flow through the current Kamehameha Scholars Program, which is an extension education program whereby KS works with Hawaiian public school children. Petitioner is also investigating the DOE's

current curriculum, which is required by the State Constitution to include Hawaiian history and culture, to attempt to design a program that will tie into those curricula that would bring all the children from the public school system to Keauhou to share with them an understanding of the historic and cultural richness of the area.

64. The Project will have a residential density of one lot per 1.2 to 1.6 acres.

65. The projected market is a combination of retirees, second home and vacation home buyers, and local residents. The community will be characterized by low-density rural lots. Archaeological and cultural preservation sites will be buffered and incorporated into the open spaces planned throughout the community.

66. Sale prices for lots are projected to range from \$500,000 to \$1.2 million in 2004 dollars.

67. Final subdivision design is projected to begin in 2006. Commencement of lot sales is projected to begin prior to or in conjunction with the issuance of Final Subdivision Approval.

PETITIONER'S FINANCIAL CAPABILITY TO UNDERTAKE THE PROPOSED DEVELOPMENT

68. Petitioner has the financial capability to complete the Project. Total liabilities and assets of Petitioner and its subsidiaries amounted to \$43,372,390 as of January 2004.

69. Petitioner will finance the Project through a combination of conventional financing, property sales, and venture capital.

STATE AND COUNTY PLANS AND PROGRAMS

70. The Property is entirely within the State Land Use Agricultural District, as reflected on the LUC's official map, H-8 (Kealakekua).

71. The Property is designated on the County of Hawai'i's LUPAG map as a mixture of uses: Urban Expansion, Low Density Urban, Orchards, and Extensive Agriculture.

72. The Property is designated by the *Kona Regional Plan* as Residential (RES 3) and Agricultural (A-5).

73. The Property is zoned Open.

74. The Property is not within the County of Hawai'i's Special Management Area.

NEED FOR THE PROPOSED DEVELOPMENT

75. SMS Research and Marketing prepared a report entitled *Market and Economic Impact Study of Proposed Reclassification and Development of Keauhou Mauka, Keauhou Resort, North Kona, Hawaii County* dated March 2004 for the Project.

76. At Keauhou, both townhomes and home sites have been sold, and the average price per square foot of lot sales has been increasing.

77. In light of demand, competition, and the attractions offered in the near vicinity, a golf-oriented residential development at the Property is expected to capture as much as 30 percent of the market for mid-sized single-family lots.

78. As many as 300 lots are expected to be sold by 2017, and 400 by 2024. Housing construction would likely continue to 2024 (if 300 lots are developed) or to 2030 (for 400 lots).

SOCIO-ECONOMIC IMPACTS

79. The Project will not involve a substantial population increase. It is anticipated that residents of the Project will not be on the Property year-round and will not require governmental assistance, thereby placing little demand on support services.

80. Petitioner has represented that it will adhere to the County of Hawai'i's housing policies with respect to the provision of affordable housing.

81. Lot development and construction at the Project is expected to involve about 90 to 100 full-time direct jobs annually over the entire construction period.

82. The direct construction payroll would total \$78.2 million (for 300 units) to \$93.3 million (for 400 units) in 2003 dollars. Total direct, indirect, and induced jobs associated with construction would involve \$144.7 to \$172.4 million in wages over time, for an average annual construction-related wage total of \$6.9 million to \$7.6 million (in 2003 dollars).

83. Operational jobs at the Project would include the staff for a golf course plus security, landscaping, maintenance, and household staff for the residential area. The Project should support from 90 to 100 direct jobs when fully builtout, and a total of 130 to 140 direct, indirect, and induced jobs statewide.

84. The workers onsite would have wages totaling approximately \$1.8 million to \$2.0 million annually (in 2003 dollars), while the total income of all operations related workers would come to \$3.0 to \$3.2 million annually.

IMPACTS UPON RESOURCES OF THE AREA

Agricultural Resources

85. There is currently no agricultural use on the Property.

86. Given the generally poor or modest classification ratings of the soils on the Property, it is not anticipated that the removal of 455.746 acres of land from the Agricultural District for development of the Project will adversely impact agriculture in Kona, the island of Hawai`i, or the State of Hawai`i.

Flora and Fauna

87. Geometrician Associates, LLC, prepared a report entitled *Botanical Survey, Keauhou Mauka Lands, Keauhou, Kona, Island of Hawai`i* dated February 2004 for the Project.

88. Two basic vegetation zones and a miscellaneous type are present on the Property.

89. The “`Ōhi`a-Christmas berry zone” is found on younger lava flows near the northern end and in the central southern area of the Property. The tree canopy is open or even scattered, with a shrub canopy that varies from open to closed. Less recent flows may have a stronger component of Christmas berry than `ōhi`a. Other important plants are the native huehue vine (*Cocculus trilobus*), the Polynesian introduction noni (*Morinda citrifolia*), and the aliens lantana, koa haole, and clusia (*Clusia rosea*). The natives akia (*Wikstroemia sandwicensis*), lama (*Diospyros sandwicensis*), a`ali`i (*Dodonea viscosa*), māmane (*Sophora chrysophylla*) and `ūlei (*Osteomeles anthyllidifolia*) are scattered or present in patches. Individuals of wiliwili (*Erythrina sandwicensis*) and the relatively rare native `ohe makai (*Reynoldsia sandwicensis*) occur here and there.

90. With increasing elevation, clusia becomes more prominent, a number of other aliens appear in an increasingly dense understory, and the native `ala `ala wai nui (*Peperomia leptostachya*), which is found sparingly below, commonly appears as an epiphyte on ledges and in cracks. In these upper areas, coffee patches are also common, and a number of alien trees, including monkeypod, pride of India (*Melia azederach*), and octopus tree (*Schefflera actinophylla*), become more widespread.

91. The “Monkeypod-guinea grass zone” is found on older lava flows, especially areas with a continuous soil cover. This type contains few natives except a few scattered individuals of the relatively rare `ohe makai. Other prominent plants

include the Polynesian introduction kukui (*Aleurites moluccana*) and the aliens Christmas berry, koa haole, pride of India, pokeberry (*Rivina humilis*), and coffee. A grazed variant of this zone is found on the southern end of the Property, where certain other aliens such as air plant (*Kalanchoe pinnata*) and hairy abutilon (*Abutilon grandifolium*) become more prominent in the relatively open understory.

92. The “Miscellaneous disturbed zones” are areas just makai of Kuakini Highway and the farms and subdivisions on the mauka end are often dominated by a mixture of species found in the ‘Ōhi`a-Christmas berry zone and Monkeypod-guinea grass zone and local escapees from cultivation.

93. No rare, threatened, or endangered plant species as listed by the U.S. Fish and Wildlife Service (“USFWS”) are present on the Property, nor are there unique or valuable wildlife habitats on the Property.

94. No existing or proposed federally designated critical habitat is present on the Property.

95. The history of continuous disturbance by alien species invasion and grazing activities coupled with the lowland context indicates that the Property has little value in terms of conserving threatened or endangered native species.

96. The most valuable botanical resource on the Property is `ohe makai (*Reynoldsia sandwicensis*). This rare tree, although not listed as threatened or endangered, is considered a Species of Concern by the USFWS. It is scattered in low

numbers in nearly every sub-environment on the Property. Many trees were somewhat senescent and juveniles were rare, however, indicating that it may not persist for many more decades under existing conditions. Petitioner has agreed to preserve the 'ohe makai on the Property.

97. Reginald E. David and Rana Productions prepared a report entitled *A Survey of Avian and Terrestrial Mammalian Species, Keauhou Mauka Lands, Keauhou, North Kona District, Island of Hawai'i* dated February 2004, and Steven Lee Montgomery, Ph.D., prepared a report entitled *Survey of Terrestrial Invertebrate Resources in Keauhou Mauka, North Kona, Island of Hawai'i* dated March 3, 2004, for the Project.

98. There were sightings or signs of a number of alien mammals, including rats, mongooses, cats, dogs, pigs, domestic cattle, and horses. No Hawaiian Hoary Bats (*Lasiurus cinereus semotus*) were recorded on the Property, although they are known from the area.

99. The principal potential impact that development of the Property poses to the endangered Hawaiian Hoary Bats is during the clearing and grubbing of the Property. Female bats while caring for their young are extremely vulnerable to disturbance. While carrying young and feeding them the adult bats are under immense stress, and move relatively slowly. If a lactating bat carrying young were to be roosting in vegetation that was removed during clearing and grubbing operations, it is possible that she would not be able to flee the vegetation as it was being cleared.

100. In order to reduce the potential for interactions between clearing and grubbing activity and Hawaiian Hoary Bats, clearing and grubbing will not be undertaken during the period that bats are caring for young, namely between the months of June and August.

101. A total of 18 bird species, all alien to the Hawaiian Islands, was recorded on the Property during species counts.

102. Avian diversity was relatively low on the Property, although densities were relatively high. Three species, Japanese White-eye (*Zosterops japonicus*), House Finch (*Carpodacus mexicanus frontalis*), and Spotted Dove (*Streptopilia chinensis*) accounted for 55 percent of the total number of all birds recorded during station counts. The most common avian species recorded was the Japanese White-eye, which accounted for 27 percent of the total number of individual birds recorded. An average of 44 birds were detected per station count.

103. One endangered species, the Hawaiian Hawk (*Buteo solitarius*), was recorded as incidental observations on two separate occasions.

104. The clearing and grubbing phase has at least some potential to also adversely affect the endangered Hawaiian Hawk. If disturbed while sitting on eggs, or caring for young, adult birds may abandon the nest, thus putting their eggs or young at grave risk of harm or death.

105. In order to reduce the potential for interactions between clearing and grubbing activity and nesting Hawaiian Hawks, such activities will not take place during the breeding season, which extends from March through July.

106. If nesting activity is detected, consultation with the USFWS will be required prior to conducting further clearing activity within 100 meters of the nest tree.

107. Although no endangered Hawaiian Petrels (*Pterodroma sandwichensis*) or threatened Newell's Shearwaters (*Puffinus auricularis newelli*) were found in the survey of the Property, they may overfly the Property on their way to colonies on the slopes of Hawai'i's high mountains.

108. The principal potential impact that development of the Property poses to Hawaiian Petrels and Newell's Shearwaters is the increased threat that birds will be downed after becoming disoriented by exterior lighting that may be required in conjunction with the construction and operation of the Project.

109. In order to reduce the potential for interactions between nocturnally flying Hawaiian Petrels and Newell's Shearwaters with external lights and man-made structures, any external lighting planned to be used during construction or within the completed Project will be shielded.

110. As for invertebrates, certain locations on the Property that are dominated by Hawaiian plants in a dryland forest ecosystem contain some common

native insects and other invertebrates. There are no invertebrates on the federal or state endangered and threatened species lists on the Property.

111. Lava tubes were also sampled for invertebrates. The lava tubes on the Property are in relatively young pahoehoe lava flows, situated in an extremely dry environment that has been extensively impacted by man and grazing ungulates. The conditions found within the lava tube complexes, coupled with the young age of the flow and the moderate native plant root systems within the lava tubes, make it very unlikely that the subterranean habitat supports any endangered native arthropod species.

112. The presence of several ant species, which prey on other arthropods, contributed to the low number and densities of native arthropod species remaining on the Property.

113. An `ohe makai leafhopper, which may prove to be a new species, was recorded during the survey of the Property.

114. `Ohe makai trees will be preserved according to recommended preservation measures to protect the habitat of native insects.

Archaeological, Historical, and Cultural Resources

115. The Property has been the subject of several archaeological inventory surveys, beginning with an initial inventory survey of most of the Property (J. Stephen Athens 1991), followed by full survey of an additional small portion (Michel R.

Lutfy and J. Stephen Athens 1991). Greg C. Burtchard (1996) finalized the inventory survey for most of the Property and presented significance evaluations and mitigation recommendations.

116. Greg C. Burtchard's inventory was accepted by the State Historic Preservation Division ("SHPD") by letters of April 10 and June 6, 1996. Mike T. Carson et al. 2004 investigated several caves that were not fully explored in earlier surveys, and the report on such investigation has been found to be acceptable, subject to revisions required by the SHPD. Cultural Surveys Hawaii is currently developing a mitigation plan for data recovery and preservation.

117. Archaeologists have identified a total of 57 archaeological sites within the Property, some of which had already been identified in previous surveys.

118. Among these multiple-feature sites are agricultural complexes, residential complexes, combinations of agricultural and residential complexes, walls and wall complexes, refuge caves, human burials representing at least seven individuals, trails and roads, platforms, and terraces.

119. Twelve sites within the Property have been recommended for preservation and some level of interpretation. The sites have been determined to have value for preservation as excellent examples of site types, and for their potential to provide information about settlement and land use patterns on the *kula* lands of the Keauhou-Kahalu'u vicinity.

120. Some of the archaeological sites on the Property have archaeological value, both for preservation as excellent examples of various types and/or for their potential to provide information about settlement and land use patterns. Some of the sites have cultural value as well. In addition, human burials require proper treatment in coordination with the Hawai`i Island Burial Council and with lineal descendants, if they can be identified.

121. The Burial Treatment Plan ("BTP") has been submitted to the Hawai`i Island Burial Council for review by the Hawai`i Island Burial Council staff. Petitioner agrees to implement the various mitigation plans, once approved, prior to any ground altering activities in the area. Petitioner also agrees to provide design plans prior to the development of specific mitigation measures to ensure that burials and other sites recommended for preservation are adequately protected during future development.

122. In addition to burials, the following sites on the Property have been recommended for preservation: Lava Tube Habitation Cave (50-10-37-15180), Residential Complex (50-10-37-15192), Agricultural and Residential Complex (3) (50-10-37-15195, 50-10-37-15206, and 50-10-37-15213), Lava Tube Refuge Cave (50-10-37-15240), and Keauhou Trail (50-10-37-15243).

123. The SHPD has approved the significance evaluation and the initial selection of sites for preservation.

124. A mitigation plan specifying the treatment of all archaeological sites was provided to the SHPD in October 2004 for review.

125. Kumu Pono Associates LLC prepared a cultural report entitled *A Cultural Synthesis for the Royal Lands of Keauhou and Kahalu`u, District of Kona, Island of Hawai`i* dated January 21, 2004, that synthesizes a collection of oral histories, legends, and archival information for Kahalu`u and Keauhou, much of it translated from Hawaiian. This cultural report has been found to be acceptable by the SHPD.

126. The authors reviewed both published and manuscript accounts in English and Hawaiian – referencing documentation for the Property, as well as those of neighboring lands. Research was conducted in both private and public collections, and focused on several archival resources which have not received much exposure in past studies. Among the literature resources cited are the original land use records of the Land Commission proceedings from the *Māhele`Āina* (Land Division) of 1848 to 1850; Boundary Commission testimonies of native residents from 1873-1883; historical texts authored by native historians and others who resided on, or visited the island; historical notes collected from elder *kama`āina* in the 1930s-1950s; and oral history interviews conducted by Kepā Maly with elder *kama`āina* between 1996 and 2002.

127. In the history of Hawai`i Island, the lands of Kahalu`u and Keauhou I and II have important associations with many *ali`i*. As a result of their

desirability, these lands were noted as chiefly centers, and host to many *heiau* (temples – places of worship) and other sites that were a part of the chiefly center.

128. While no record of a *heiau* within the Property was found, at least twenty-five *heiau* have been named and described in historical texts for Kahalu`u and Keauhou. These *heiau* and other sites are situated both makai and mauka of the Property.

129. In the *Māhele `Āina* (Land Division) of 1848, the lands of Kahalu`u and Keauhou I were retained by Chiefess Victoria Kamāmalu, and the land of Keauhou II was retained by Chief Lot Kapuāiwa (Kamehameha V). It is from those two *ali`i* awardees that Chiefess Bernice Pauahi Bishop inherited her interest in the lands, and subsequently bequeathed them to the Kamehameha Schools.

130. As a result of the *Māhele `Āina*, 14 *kuleana* (native tenant land holdings) were also awarded to *hoa`āina* (native tenants) on lands with soil suitable to sustain agriculture.

131. Based on records of the *Māhele `Āina*, it is evident that native tenants in the vicinity of the Property planted traditional crops such as *`uala* (sweet potato), *kalo* (taro), *mai`a* (banana), *uhi* (yam), and *ipu* (gourd), as well as novel crops such as coffee and oranges. Planting techniques—resulting in physical features on the ground—would likely have included mounds, pits, terraces, walled planting areas, and field boundary walls.

132. Large tracts of land, sometimes the entire *ahupua`a*—excluding the smaller *kuleana* holdings—were leased out to both native and foreign residents for grazing and some agricultural activities. The agricultural uses, including the large-scale ranching activities, were generally undertaken further upland from the Property.

133. By the early 1900s, the larger portion of the Property, which was considered marginal for cattle, was leased out to Hawaiian and Japanese tenants for limited grazing. Detailed descriptions of ranching operations in the region have been recorded by Kepā Maly in oral history interviews with elder *kama`āina*, although almost no specific reference to the Property was made in the interviews, as the land was not the focus of ranching or other historic period activities.

134. While the West Hawai`i Railroad right-of-way (SHPD Site No. 7214) delineates the makai boundary of the Property, sugar was not as commonly cultivated on these lands as they were less suitable for that activity.

135. Several “*ala pi`i*” (*mauka-makai* trails) were also described in the *Māhele `Āina*, in association with access to *kuleana* parcels at various elevations. The trails provided native tenants and travelers with access to the mauka lateral trail (Kealaehu; basically what came to be Māmalahoa Highway), cultivating fields at various elevational zones, and to upland forest resources.

136. Several *mauka-makai* trails exist across the lands of the Property, and are marked on historic maps. These include the the Ko`okā Trail, the Keauhou

Trail, the old Keauhou-Kāināliu Road (dating from around the 1850s with historic modifications to improve passage of wagons and goods), and the Kaomilā`ō Trail.

137. The cultural value of the archaeological features has been evaluated in detail by the SHPD through reviews of inventory surveys.

138. Extensive archival research and interviews have not revealed any traditional or ongoing practices or beliefs specifically associated with the Property, such as gathering or ceremonial uses, *wahi pana* (storied places), and reference points for *ko`a* (offshore fishing areas), nor do there appear to be any specific traditional and customary native Hawaiian rights presently being exercised on or in connection with the Property.

139. Elder *kama`āina* who have been interviewed by Maly since 1996 have offered their thoughts pertaining to the significance and care of cultural sites in the lands of Keauhou and Kahalu`u:

- *Iilina* (burial sites) are believed to be sacred and require respect. It is the general wish of all individuals interviewed that *ilina* be protected in place. If *ilina* are discovered while some form of land work is occurring (“Inadvertent discoveries”), such *ilina* should be handled in consultation with native families of the land and in compliance with State law.
- *Heiau* should be protected.

- Kāne`aka (the Royal *Hōlua*) and Pu`u o Kaomilā`ō should be protected from any further impacts.
- *Ala hele* (native trails) are an important part of the cultural landscape and life-way of the people, and valued trailways should be preserved whenever possible. If the *ala hele* are planned for use as modern walking trails, this use should be informed, so as to foster respect of the history, traditional sites, and property rights of present-day owners/residents. The Keauhou Trail and the Mākole`ā-Kahalu`u Trail are believed to be of particular importance to the history of the people and the land. Formulation of treatment and access plans focusing on traditional knowledge and responsibilities should be done in consultation with elder *kama`āina* of the Keauhou and Kahalu`u lands.
- Caves, such as those used for burial practices, refuge, habitation, and other traditional occupations should be protected. Care must be used when using heavy equipment in the vicinity of cave openings, and when over subterranean extensions of the lava tube systems. There is also concern about the intrusion of water and chemicals into the caves from irrigation and other activities.
- Final treatment of *ilina* features and caves, including questions of visitation rights, buffers, and whether to close caves – should be determined in consultation with elder *kama`āina* of the Keauhou-Kahalu`u lands.

- Restoration of sites should only be undertaken with care and in consultation with elder *kama`āina*. It is generally believed by many *kūpuna* that stabilization rather than restoration is a preferred treatment. Once restoration occurs, the signature and hand-work of the people of old is erased, and the story of the place is new.

- Wherever possible traditional sites should be protected and incorporated into the landscape, thus preserving not only those sites which have been determined significant under the law but also those sites which were important to those who came before us.

- When possible, it would be good to use the natural lay of the land and lava flow formations as assets in the development setting, rather than knock everything down, only to build it up again.

- *Mauka-makai* view planes, particularly those associated with the *hōlua*, Kāne`aka and Pu`u o Kaomilā`ō, and the *mauka-makai* trails, should be protected, allowing for an *ahupua`a*-view of the resources in their cultural context.

- Educational and interpretive opportunities should be developed in order to help future generations understand and appreciate the cultural resources protected on the Keauhou-Kahalu`u landscape. A part of such an interpretive program should include the *ahupua`a* concept, looking at the relationship of the elevational zones, to the life-ways of the traditional and historical families of the land.

140. Petitioner's Cultural Advisory Committee, which is composed of *kūpuna* with extensive knowledge of and cultural ties to the region, has convened periodically to discuss issues of cultural importance with Petitioner. On March 5, 2004, Petitioner and its consultants met with members of Petitioner's Cultural Advisory Committee and reviewed the above treatment recommendations. *Kūpuna* Lily Nāmakaokai`a Ha`ani`o-Kong and Josephine Hakaleleponi Nāhale-Kamoku concurred with the above recommendations and summary of treatment proposals.

141. Based on historical research and oral interviews, as well as review of natural and historical resources, there are valued cultural, natural, and historical resources within the Property and within the broader area of Keauhou and Kahalu`u.

142. With mitigation through preservation where recommended, as well as access to and interpretation of certain archaeological sites, there will be minimal adverse effect on these resources.

143. Based upon the limited range of resources and the proposed mitigation to all affected resources, the exercise of native Hawaiian rights related to gathering, access, or other customary activities, although not apparent on the Property, will not be affected, and there will be no adverse effect upon native Hawaiian cultural practices or beliefs.

Groundwater Resources

144. SSFM, Inc., prepared a report entitled *Preliminary Engineering Report for Kamehameha Investment Corporation's "Keauhou Mauka," Kahaluu-Keauhou, North Kona, Hawaii* for the Project dated June 18, 2004. The report included a discussion of groundwater resources.

145. The Property is located within both the Hualalai Hydrologic Unit (809) and the Keauhou Aquifer (80901).

146. According to the Commission on Water Resource Management ("CWRM"), the Keauhou Aquifer has a sustainable yield of 38 million gallons per day ("MGD"). CWRM records indicate that current water use within the Keauhou Aquifer System is approximately 13 MGD, of which 10 MGD is potable and 3 MGD is non-potable and brackish irrigation water.

147. Based on information received from CWRM staff about new wells coming on line, it is anticipated that water withdrawals from the Keauhou Aquifer System will increase by 1.5 MGD within the next two years, bringing the total use to approximately 14.5 MGD by 2006.

148. Within the Keauhou Aquifer System, the Kahalu`u Shaft Well, which pumps 4 MGD on average, is currently affected by saltwater intrusion resulting in high levels of sodium and chloride in the water. This water supplies a coastal

corridor stretching from south of Honokōhau Harbor to Kāināliu and from the ocean several miles inland.

149. Although the elevated levels of sodium and chloride do not constitute an emergency or pose a serious health risk to the general public, the County of Hawai`i Department of Water Supply (“DWS”) is planning to supplement the water supply by tapping into sources located at higher elevations, thereby decreasing the amount of water pumped out of the Kahalu`u Shaft Well.

150. Currently, the DWS plans to develop the Waiaha Well in north Hōlualoa for this purpose, which could be online by mid-2005. The DWS is also considering bringing water down the mountain in an underground pipe from the Honokōhau or Keahuolū Wells.

151. Petitioner owns three high-level wells located mauka of the Property, ranging from 1,620 to 1,664 feet above msl. The Keauhou-Kamehameha 2 Well was drilled in 1991, the Keauhou-Kamehameha 3 Well in 1992, and the Keauhou-Kamehameha 4 Well in 1994.

152. These wells are among 40 wells and test holes that have been part of an ongoing groundwater elevation measurement effort initiated by the CWRM in 1991 for the Districts of North and South Kona and South Kohala.

153. Nine years of measurements recorded for the Keauhou-Kamehameha 2 Well, four years for the Keauhou-Kamehameha 3 Well, and one year for

the Keauhou-Kamehameha 4 Well have yielded promising results, although further study is needed to determine the long-term sustainability of these high-level water sources.

154. Based on the recent rate of growth in withdrawal, it is estimated that water withdrawals from the Keauhou Aquifer System will increase at a rate of .75 MGD per year. Thus, it is estimated that water withdrawals (including those of the Project) will increase to approximately 32.5 MGD by 2030, by which time the Project will be completed. Since estimates were based on current demands, continued monitoring by the CWRM and DWS may be required.

155. There is sufficient water in the aquifer system to accommodate the proposed development. Furthermore, should any of Petitioner's three high-level wells be dedicated to the County to provide additional water to augment the Keauhou Aquifer System, the development's impact on the aquifer system will be reduced proportionately.

156. Petitioner intends to irrigate the proposed golf course with brackish and non-potable water.

Recreational Resources

157. Recreational resources in the Kailua-Kona to Keauhou area include a number of County and State parks and facilities. Regional facilities are present at Old

Kona Airport, which hosts both State and County parks that include surfing beaches, ballfields, a swimming pool, and gymnasium.

158. Within or very near the Keauhou-Kahalu`u area are Kahalu`u Beach Park and Higashihara Park, with playgrounds and a ballfield.

159. The harbor at Keauhou provides facilities for boating, canoeing, and volleyball.

160. Future State parks are planned north of Kahalu`u at Keolonāhihi State Historic Park and south at Kealakekua State Park. Private recreational facilities in Keauhou include two golf courses at Kona Country Club and a tennis club.

161. The Property, which is not adjacent to the shoreline, contains no parks and is not currently used for recreation.

162. Petitioner is developing a comprehensive public access trail system for its Keauhou lands, including the Property. This system will include the old West Hawai`i Railroad right-of-way and other trails.

163. The conceptual alignment of the trail system has been determined, and it includes approximately 10 miles of trail that will lead to areas of interest within Kahalu`u and Keauhou I and II. The West Hawai`i Railroad right-of-way will form the backbone of the mauka portion of the trail system, and it will run to the south and then lead back to the makai portion. The trail system, as envisioned, will contribute to the

restoration and integration of significant cultural sites within Kahalu`u and Keauhou I and II.

164. Petitioner and Na Ala Hele are working towards a Memorandum of Agreement (“MOA”) where Petitioner would agree to develop, manage, maintain, and have oversight of the trail system and provide to the State through the Board of Land and Natural Resources, a perpetual right of access subject to Petitioner’s authority to regulate the trail.

165. The mitigation plan submitted to the SHPD in October 2004 already outlines certain interim protection measures as well as a long-term preservation plan for the historic properties, of which the West Hawai`i Railroad right-of-way is one. The interim buffer zones, described as being five meters from the outer edge of the outermost features of each historic property, will be clearly marked and in place during any data recovery work as well as subsequent construction activity. Long-term preservation measures include provisions for maintenance, including vegetation removal, stabilization of the structure, landscaping and litter control; access; and suggested interpretive signage. Such interim and long-term measures relating to the West Hawai`i Railroad right-of-way would be incorporated into the MOA.

166. No direct adverse impacts to existing recreational resources or uses on the Property would occur as a result of the reclassification. The reclassification, if anything, will create new recreational facilities, including a golf course.

Visual Resources

167. At present, the primary scenic values of the general area are derived from onshore and offshore views of the ocean and shoreline. Within the Property, the steep slopes provide an impressive vantage over a foreground of currently undeveloped land, including the mauka end of the great Hōlua at Keauhou, with a background of hotels, golf courses, condominium complexes, and a winding shoreline.

168. For lands mauka of the Property, the same scenic vantage exists. Depending on the topography, the Project has the potential to affect views of the coastline from these lands. Petitioner is working with the adjacent property owners of these lands to provide no-build buffers that would minimize potential impacts by prohibiting structures or alteration of any kind within the buffer area. As part of the process that entitled the planned golf course on the Property, Petitioner entered into agreements with the Pu`uloa Subdivision Homeowners Association and Ihilani Place Subdivision residents. Petitioner agreed to implement 13 requirements requested by these mauka neighbors, including the requirement that there be a 200-foot-wide "as is" and undisturbed buffer measuring horizontally from the common property lines between the Property and the aforementioned neighboring properties, including any homeowner's property line that has a common property line with the Project. These requirements have been incorporated as conditions of the golf course entitlements.

Petitioner has also agreed to establish a buffer around the boundaries of the parcel owned by Mr. Charles G. Bockus.

169. Development within the Property would not affect the viewplanes from any of the highways listed in the County of Hawai'i General Plan, nor of any other identified visual resource from public areas.

ENVIRONMENTAL QUALITY

Air Quality

170. Air quality over the Property is generally good, although some pollution derived from motor vehicles, industry and natural sources is present.

171. Volcanic emissions of sulfur dioxide ("SO₂") from Kīlauea Volcano convert into particulate sulfate, forming a volcanic haze, locally called "vog." Vog becomes trapped in the Kona atmosphere because of the diurnal wind reversal, which creates a largely closed airshed system.

172. Man-made air pollution sources include oil-fired power plants, which emit SO₂, nitrogen oxides ("NO_x"), and particulate matter, and motor vehicles, which emit carbon monoxide, NO_x, and hydrocarbons (an ozone precursor), as well as small amounts of other pollutants.

173. Kuakini Highway, which borders the Property on the mauka side, is the region's major arterial roadway. Prevailing onshore winds during the daytime,

when traffic is heaviest, tend to carry emissions from motor vehicles traversing this roadway away from the Property.

174. Potential impacts of the Project from clearing, grading, and construction activities include the transport of fugitive dust in the air beyond the boundaries of the Property, and noise disturbances to nearby residents. Site-specific Best Management Practices (“BMPs”) will be developed as part of the Project’s design to address these impacts in compliance with applicable State and County regulations and requirements.

175. A dust control plan will be developed for implementation during construction that would involve watering, limiting disturbed area, applying chemical soil stabilizers, mulching and/or using wind screens as necessary.

176. The air quality of the Property and surrounding areas is not expected to be significantly impacted by the development of the Property.

Noise Impacts

177. Noise on the Property is generally low and is derived from nearby residences, roads, farms, and businesses. In the interior of the Property, natural sources such as wind in trees and birds are dominant.

178. Construction activities associated with the Project may generate noise impacts to nearby residents. In cases where construction noise is expected to exceed the Department of Health’s (“DOH”) maximum permissible property-line noise

levels, contractors will obtain a permit in conformance with chapter 11-46, HAR (Community Noise Control), prior to construction.

179. Long-term impacts are expected to be very minor due to the low-density residential nature of the Project. Petitioner is working with adjacent property owners to provide property buffers that would also minimize such impacts.

Water Quality

180. Groundwater contamination from substances used in the construction and normal operation of residences, agricultural activities, and golf courses can be limited to very minor levels through adherence to applicable laws and regulations and implementation of appropriate BMPs.

181. Handling and storage of petroleum products, hazardous substances, and pesticides are all strictly controlled under State and federal laws. Businesses that deal with these substances are required under law to implement BMPs and are subject to oversight by federal and State agencies.

182. The State's underground injection control program establishes standards that govern the location, construction, and operation of injection wells so that the injected fluids do not migrate or pollute groundwater.

183. Considering the structure of regulated practices set up to prevent contamination, the high elevation and natural hydrogeologic setting which encourages rapid remediation of most substances that manage to migrate into the soil or vadose

zone, and the general record of good groundwater quality in urban Kona, there appears to be minimal risk of toxic substance contaminating groundwater or nearshore waters, given standard mitigation measures as prescribed by law and regulation.

ADEQUACY OF PUBLIC SERVICES AND FACILITIES

Highway and Roadway Facilities

184. The Traffic Management Consultant prepared a report entitled *Traffic Impact Analysis Report for the Proposed Keauhou Mauka ("TIAR")* dated May 17, 2004, for the Project.

185. The Property is located along the mauka boundary of Keauhou. Site access is proposed on Kamehameha III Road via Keali'i Street, Ali'i Highway via Kaluna Street, and a future subdivision road located along the south boundary of Keauhou.

186. Keauhou is located at the junction of three major regional highway improvements that are in various stages of development by State and County government agencies and a private developer. The three highway projects combine to double the number traffic lanes in the regional transportation corridor.

187. Keauhou-Nāpō'opo'o Bypass Road (also known as the Māmalahoa Bypass Road) is a two-lane, two-way highway, which is under construction by the developer of the Hokulia project. Keauhou-Nāpō'opo'o Bypass Road is assumed to be completed and open to the public within the timeframe of the TIAR.

188. Keauhou-Nāpō`opo`o Bypass Road is currently 60 percent complete, but construction has been suspended pending resolution of land use issues on the Hokulia Subdivision development.

189. Kahului-Keauhou Parkway (formerly known as Ali`i Highway) is a two-lane, two-way roadway, which is in the design stage of development by the County of Hawai`i. Kahului-Keauhou Parkway will be constructed mauka of, and generally parallel to, Ali`i Drive, between Ali`i Drive/Ali`i Highway in Keauhou and Queen Ka`ahumanu Highway, between Kuakini Highway and Hualālai Road.

190. The County of Hawai`i expects to complete the Kahului-Keauhou Parkway by 2010. The initial phase of the Parkway is pending determinations on mismapped archaeological sites and could be delayed indefinitely should federal funds lapse in the meantime.

191. The State Department of Transportation ("DOT") is in the planning stage of development for the widening of Kuakini Highway/Queen Ka`ahumanu Highway from two lanes to four lanes from Kamehameha III Road to Henry Street. Although the DOT has not scheduled the implementation of the Kuakini Highway project at this time, the TIAR assumed that the widening project will be implemented within the timeframe of this Project.

192. For the purposes of the TIAR, the potential traffic impact from 400 single-family dwelling units, along with the 18-hole golf course, was analyzed.

193. Of the proposed 400 single-family dwelling units, 70 percent of the buyers were assumed to be non-residents; 25 percent of the buyers were assumed to be primary residents; and the remaining 5 percent were assumed to be vacant, i.e., for sale or resale at any given time.

194. The trip generation characteristics for the Property were based upon the buyer profile developed from the marketing study.

195. One hundred primary residences were analyzed as single-family detached housing.

196. Two hundred eighty dwelling units, assumed to be purchased by non-resident buyers, were analyzed as recreational homes, i.e., second homes located within a resort, which would be used by the owner or rented out on a seasonal basis.

197. The Project is expected to generate a total of 199 vehicles per hour ("vph"), with 92 vph entering the Property and 107 vph exiting during the AM peak hour of traffic.

198. During the PM peak hour of traffic, the Project is expected to generate a total of 238 vph - 124 vph entering the Property and 114 vph exiting the Property.

199. In addition to the regional highway improvements discussed in the previous section, the following roadway improvements are recommended to mitigate the traffic impacts expected by 2030 without the Project:

Kuakini Highway and Kamehameha III Road/Walua Road Intersection

- Mauka-bound Kamehameha III Road should be widened to provide an exclusive left-turn lane to northbound Kuakini Highway, in addition to the existing shared left-turn/through lane.
 - The traffic signal system should be modified to accommodate the proposed highway and intersection improvements.
 - Interim Improvement – Northbound Kuakini Highway should be widened to provide a merging lane north of its intersection with Kamehameha III Road/Walua Road to accommodate the proposed double left-turn movement from Kamehameha III Road (if the Kuakini Highway widening project is delayed beyond the timeframe of this Project).

Kamehameha III Road and Keali`i Street Intersection

- The intersection of Kamehameha III Road and Keali`i Street should be signalized when it becomes warranted.
 - Mauka-bound Kamehameha III Road should be restriped/widened to provide an exclusive left-turn lane to the Keali`i Street Extension.
 - Makai-bound Kamehameha III Road should be restriped/widened to extend the length of the existing left-turn lane to accommodate the increase in projected traffic.

Ali`i Highway and Kamehameha III Road Intersection

- Northbound Ali`i Highway should be widened to provide an exclusive right-turn lane to mauka-bound Kamehameha III Road.
- Makai-bound Kamehameha III Road should be widened to provide an exclusive left-turn lane to southbound Ali`i Highway, in addition to the existing shared left-turn/through lane.
- The traffic signal system should be modified to accommodate the proposed highway and intersection improvements.

Kahului-Keauhou Parkway/Ali`i Highway and Ali`i Drive/Keauhou Shopping Center Driveway Intersection

- The southbound Kahului-Keauhou Parkway approach should be widened from one through lane to two through lanes at Ali`i Drive/Keauhou Shopping Center Driveway.
- The exclusive left-turn lane on northbound Ali`i Highway at Ali`i Drive/Keauhou Shopping Center Driveway should be extended to accommodate the increase in the projected traffic.
- The traffic signal system should be modified to accommodate the proposed highway and intersection improvements.

Ali`i Highway and Kaluna Street Intersection

- Southbound Ali`i Highway should be widened to provide an exclusive left-turn lane to Kaluna Street.
- Southbound Ali`i Highway should be widened to provide a median shelter lane for left-turn traffic from Kaluna Street.
- Kaluna Street should be widened to provide an exclusive right-turn lane at Ali`i Highway.

Keauhou-Nāpō`opo`o Bypass Road at South Access Road Intersection

- Southbound Māmalahoa Highway should be widened at the South Access Road to provide an exclusive left-turn lane.
- Southbound Māmalahoa Highway should be widened to provide a median shelter lane for left-turn traffic from South Access Road.
- The South Access Road should be stop-controlled at Keauhou-Nāpō`opo`o Bypass Road. The South Access Road should provide separate left-turn and right-turn lanes.

200. It is also recommended that Ali`i Highway be widened from two lanes to four lanes between Ali`i Drive/Keauhou Shopping Center Driveway and Kaleiopapa Street (access road to the Sheraton Keauhou Bay Resort & Spa, formerly the Kona Surf Hotel), and that traffic signals at the Ali`i Highway intersections at Ali`i

Drive/Keauhou Shopping Center Driveway and at Kamehameha III Road be coordinated.

201. The recommended traffic improvements and the construction of the regional highway improvements are expected to accommodate the increase in traffic resulting from the development of the Project and buildout of the surrounding developments.

Water System

202. SSFM, Inc., prepared a report entitled *Preliminary Engineering Report for Kamehameha Investment Corporation's "Keauhou Mauka," Kahaluu-Keauhou, North Kona, Hawaii* for the Project dated June 18, 2004. The report included a discussion of the water system.

203. Existing water systems adjacent to the Property are owned and operated by the DWS. Water is currently provided to the Keauhou Resort community by DWS water tanks located onsite and within adjacent areas.

204. According to the South Kona Water Master Plan (SKWMP), there are two sub-systems serving the Property. Within these two sub-systems are reservoirs and water transmission and distribution systems. Sub-system 788 is located at an elevation of 840 feet, while Sub-system 790 is located at an elevation of 1,442 feet.

205. Sub-system 788 contains reservoirs identified as Kahalu`u 0.1 million gallons (“MG”), Kahalu`u 0.05 MG, Kahalu`u 0.3 MG, and Kahalu`u 0.2 MG. Sub-system 790 contains one reservoir identified as Keauhou 0.25 MG.

206. The water reservoir system for Sub-system 788 does not adequately accommodate the current needs of the service area. Sub-system 790, however, does adequately accommodate the current needs of the service area.

207. Based on a maximum of 400 house lots and an estimated demand of 400 gallons per day (“GPD”) per house lot, development of the Property will generate a maximum daily demand (including fireflow requirements) of approximately 300,000 GPD.

208. One water commitment from the DWS equates to one single-family residential lot lateral, or 400 gallons per unit per day. Full development within the Property will require approximately 400 water commitments.

209. Petitioner has a sufficient amount of water commitments from the DWS to meet this requirement. Petitioner is working with the DWS to use water from Petitioner’s three high-level wells to supplement the municipal system serving the region. If successful, Petitioner may acquire additional water commitments in exchange for dedicating the wells to the County.

210. Petitioner may be required to explore the construction of another reservoir for Sub-system 790 to provide adequate water storage and fire flow to the 400

lots within the Property. If another reservoir for Sub-system 790 were deemed feasible, its development within the Property would provide flexibility for future expansions. Additional mains would be required and the water system would need to be dedicated to the DWS.

211. The Project is not anticipated to have an adverse effect on the DWS water systems currently serving the Keauhou area.

Wastewater System

212. SSFM, Inc., prepared a report entitled *Preliminary Engineering Report for Kamehameha Investment Corporation's "Keauhou Mauka," Kahaluu-Keauhou, North Kona, Hawaii* for the Project dated June 18, 2004. The report included a discussion on the wastewater system.

213. The Property is currently undeveloped and has no existing wastewater systems.

214. Wastewater from developed areas downstream is conveyed by gravity-fed wastewater mains (8-inch and 15-inch lines), force mains (4-inch to 10-inch lines), and lift stations for treatment in He`eia Wastewater Treatment Plant ("He`eia WWTP"), which is owned and operated by Petitioner.

215. The He`eia WWTP is located approximately 1.25 miles west of the Property and within the Kona Country Club Golf Course. It was designed and

constructed to collect, convey, and treat the sewage generated by many future developments in the Keauhou Resort community.

216. The capacity of the existing He`eia WWTP is 1.8 MGD. It currently operates at 55 percent capacity. The He`eia WWTP has been designed and constructed for expansion as necessary to 3.6 MGD.

217. The proposed wastewater system will be composed of gravity mains to the existing developed areas downstream. Depending on site conditions, a force main may be used to transmit wastewater uphill in some areas. Additional facilities including collection and transmission pipelines, pump stations, and sewer trunk mains will be required.

218. It is anticipated that the proposed 400 house lots within the Property will generate approximately 0.8 MGD on a design flow average.

219. Since the sewage generated by the Project may have an effect on the existing wastewater facilities, engineers have recommended that a design of the He`eia WWTP's expansion be initiated when the existing flow of wastewater reaches 75 percent of its capacity. When the existing flow of wastewater reaches 90 percent of the He`eia WWTP's capacity, construction of the expansion should be under way.

Drainage

220. SSFM, Inc., prepared a report entitled *Preliminary Engineering Report for Kamehameha Investment Corporation's "Keauhou Mauka," Kahaluu-Keauhou, North Kona,*

Hawaii for the Project dated June 18, 2004. The report included a discussion of storm drainage, erosion, and construction impacts.

221. The existing drainage within the Property sheet flows downstream into the developed areas of the Keauhou Resort development. Based on calculations using the rational method per County of Hawai`i Department of Public Works ("DPW") standards, the Property currently generates approximately 709 cubic feet per second during the 10-year storm.

222. The proposed drainage system consists of drainage inlets, drainage pipes, and injection wells (drywells). According to DPW standards, no increase in drainage runoff from the Property will be allowed.

223. Developed runoff from the Property will be calculated, and any increase in drainage runoff will be contained onsite via injection wells. Drywells will be required within the Property. Since all increase in runoff will be kept within the Property, no impact is expected to the downstream development.

224. All injection wells will be required to meet DOH requirements.

225. Potential impacts associated with the Project include an increase in the amount of storm runoff. The additional development also increases the potential of the conveyance and deposit of silt, debris, oil, and other waste material in drainage channels and discharge into the sea.

226. The Project is not expected to significantly alter the current overall drainage patterns of the Property as it is anticipated that drainage will be contained in multiple onsite drywells.

227. These drywells and the landscaping of exposed surfaces will also reduce onsite erosion and transport of sediment to downstream facilities.

228. The proposed lots will be graded to a 2 percent slope. The Property will be balanced so that imported or exported earthwork material will not be required.

229. A site-specific geotechnical investigation will be required during the design phase.

230. Grading activities will be constructed in accordance with the applicable provisions of the County of Hawai`i's Grading Ordinance (chapter 10, Hawai`i County Code); the Water Pollution Control Rules (chapter 11-55, HAR); the Water Quality Standards (chapter 11-54, HAR); the National Pollution Discharge Elimination System Permit; and the recommendation of the Project's geotechnical report.

Solid Waste Disposal

231. SSFM, Inc., prepared a report entitled *Preliminary Engineering Report for Kamehameha Investment Corporation's "Keauhou Mauka," Kahaluu-Keauhou, North Kona, Hawaii* for the Project dated June 18, 2004. The report included a discussion on solid waste disposal.

232. Because the Property is currently undeveloped, no solid waste management systems are present.

233. Surrounding developed areas are either periodically serviced by a private solid waste collector (existing commercial areas) or by homeowners who utilize the County-operated transfer stations.

234. During the development of the Property, it will be the responsibility of individual contractors to haul and dispose of solid waste at the Pu`uanahulu Landfill located approximately 24 miles north of the Property.

235. Subsequent to the development of the Property, individual homeowners will be responsible to dispose of solid waste at County-operated waste transfer stations.

236. The Keauhou Transfer Station is the closest transfer station to the Property. It is located immediately east of the Property on the mauka side of Kuakini Highway.

237. The County has recently revised its solid waste management policy in an update to its *Integrated Solid Waste Management Plan* (ISWMP – Hawai`i County DEM 2002). Among the main goals is an effort to increase island-wide waste recycling and diversion to protect the life of the Pu`uanahulu Landfill, which is likely to be the only operating County landfill after 2006.

238. Under current projections (Hawai'i County DEM 2004), the Pu'uana'hulu Landfill is expected to have capacity until sometime between 2037 and 2049. The projected maximum of 325 occupants of the Project is a miniscule component of the islandwide growth – approximately 200,000 in additional de facto population – that will be accommodated by this landfill in the next 50 years.

Schools

239. According to enrollment figures from the DOE, enrollment in the main public schools in Kona has been fairly steady, although individual schools have fluctuated as much as 10 percent.

240. Kahakai Elementary, Kealakehe Elementary, Kealakehe Intermediate, Kealakehe High, Konawaena Intermediate, and Konawaena High Schools serve the area.

241. With respect to impact on the education system, it appears that significant additions to facilities are not warranted.

242. New schools (a regional high school in 1997 and a local elementary school in 2000) recently added facilities and classrooms to the pool of available education facilities in North and South Kona.

243. The district boundary separating the Kealakehe and Konawaena School districts is in the vicinity of Keauhou (it appears portions of the Keauhou Resort area are in the Kealakehe District and portions are in the Konawaena School District).

244. Over the past 3+ decades (1970 to 2000), the population growth in Hawai'i County has been 29,000 additional people each decade; recently, 10,000 as a result of net gains of resident births versus deaths and 19,000 due to net migration gains.

245. History suggests (1990-2000 correlation of population change and building permit activity) an average net population gain of approximately 1.78 people per building permit issued for a new residential unit.

246. Based on a recent survey of West Hawai'i resort-residential properties commissioned by the Hawaii Leeward Planning Conference and conducted by Decision Analysts Hawaii, Inc., it appears that approximately 6 percent of residential units will be owner-occupied and 84 percent will be for vacation or second-home use (the balance are either vacant or unbuilt).

247. Based on testimony by the DOE, it is unclear whether more than one dwelling would be permitted on any or all of the 300-400 lots being sold. In addition, there is some confusion regarding the Project's potential impact on schools since it was described in one part of the AER as being marketed to a combination of "retirees, second home buyers, and vacation buyers" and again as being marketed to a combination of "retirees, second home buyers, vacation buyers and local residents."

248. DOE data indicates that enrollment at Kahakai Elementary was 567 and 591 in 2001 and 2002, respectively, without including the students at Innovations

Charter School located on the same campus. The Innovations enrollment would be an additional 94 students in 2001 and 95 students in 2002.

249. There has been an addition of at least 1,597 Kona high school students attending Kealakehe High School; West Hawai'i Explorations, a charter school; and Ke Kulo O Ehunuikaimalino, a Hawaiian language school in the Kona area since 1980.

250. According to the market study for the Project, the buyers would largely be non-residents, so the average population living onsite would be modest, reaching a total of 245 persons (for 300 houses) to 326 persons (for 400 houses). Of those, 165 to 220 would be residents, i.e., in households that might include schoolchildren.

251. The DOE provided anecdotal information from the superintendent of schools on the island of Kaua'i that school enrollments do increase each year when part-time resident families return to the Hanalei and Po'ipū areas where luxury, second-home developments have existed for ten to twenty years.

252. The population of full-time, year-round residents from the Project is anticipated to range from 165 to 220 persons that reside in 75 to 100 homes. The average household size is expected to consist of 2.2 persons. If all full-time, year-round households consisted of two adults, there could be between 15 and 20 additional people that may be children living in these homes.

253. Assuming a 61 percent vacancy rate for all units in the Project at any given time, the DOE review of the 2000 Census Data indicates that the total number of 5-19 year olds would be 22 to 29. Of this group, 20 to 27 children could be expected to attend public schools, based on public school attendance for the Kahalu`u-Keauhou CDP.

254. The current facilities capacity of the schools serving the Project will be sufficient to accommodate the projected enrollments up to the 2009-2010 school year. The enrollment projections provided do not go any further than six years into the future. Sales for the Project are projected to start in 2007 with housing construction to start soon thereafter and possibly continuing to 2024 to 2031.

255. Although a low estimate of school-age children may be appropriate for the short-term, over time as the Project ages, there may be more families moving in with school-age children.

256. The DOE has begun discussions with Petitioner concerning a fair-share contribution for the potential impact of the Project on the area's public schools.

257. Petitioner acknowledged that it had reached a conceptual agreement with the DOE whereby portable classrooms would be constructed as Petitioner's fair-share contribution for the impact of the Project on the area's public schools.

Police and Fire Protection

258. Kealakehe Police Station is located on Queen Ka`ahumanu Highway, approximately 8 miles north of the Property. Eight patrol units with over 50 officers are assigned in three-watches, providing 24-hour service to North and South Kona.

259. The Keauhou Fire Station is located at Pu`u Loa, directly mauka of the Property and approximately 3 miles away by road.

260. The main Kailua-Kona Fire Station is located approximately 5 miles away from the Property at the intersection of Palani Road and Queen Ka`ahumanu Highway. The station provides service for all of North Kona, and assists with fire emergencies in adjacent districts. Ladder trucks, tankers, a rescue boat, and an ambulance are available. Three 24-hour shifts with nine firefighters each provide service, and they can be assisted by crews and equipment from other stations in Kona and Kohala.

261. As the Project will not involve a substantial population increase, the demand for police and fire protection services is not expected to be significant.

Medical Services

262. Kona Community Hospital, located approximately 5 miles to the south in Kealahou, has 75 beds and provides basic hospital services for all of Kona,

including the Property. North Hawai`i Community Hospital, Hilo Hospital, and Honolulu hospitals also serve specialty needs.

263. Because the Project will not involve a substantial population increase, the increase in demand for medical services is not expected to be significant.

Electricity and Telephone Service

264. Electrical power is provided by Hawai`i Electric Light Company ("HELCO"), a privately owned utility company regulated by the State Public Utilities Commission. HELCO's Keahole generating plant, along with generating facilities in East Hawai`i, provides electrical capacity to West Hawai`i.

265. Hawaiian Telcom provides telephone service for the region from the switching facilities in Kailua-Kona.

266. It is expected that all electrical and telephone service facilities can be readily made available to the Project through facilities on Kuakini Highway, and that the demands of the Project are within the capacity of the existing electrical generation system.

COMMITMENT OF STATE FUNDS AND RESOURCES

267. The Project is expected to generate additional tax contributions for the State of Hawai`i that would compensate for any potential increase in governmental outlays required as a result of the Project. It is anticipated that these additional taxes would enable State agencies to improve and expand their services.

CONFORMANCE TO THE RURAL DISTRICT STANDARDS

268. The Project involves the development of 300 to 400 low-density rural residential lots ranging in size from 0.5 acres to 2.0 acres, with a density of one lot per 1.2 acres to 1.6 acres.

269. The Property is currently undeveloped. Vacant lands surround the Property to the north, south, and west.

CONFORMANCE WITH THE GOALS, OBJECTIVES, AND POLICIES OF THE HAWAII STATE PLAN; RELATIONSHIP WITH APPLICABLE PRIORITY GUIDELINES AND FUNCTIONAL PLANS

270. The reclassification of the Property and the development of the Project are in general conformance with the following goals, objectives, policies, and priority guidelines of the Hawai`i State Plan, chapter 226, HRS:

Section 226-4 State goals

Section 226-4(1): "A strong, viable economy, characterized by stability, diversity, and growth, that enables the fulfillment of the needs and expectations of Hawai`i's present and future generations."

Section 226-5 Objective and Policies for Population

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 Hawai`i's people to pursue their socio-economic aspirations throughout the islands."

Section 226-6 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 for Hawai`i’s people.”

Section 226-6(a)(2): “A steadily growing and diversified economic base that is not overly dependent on a few industries, and includes the development and expansion of industries on the neighbor islands.”

Section 226-6(b)(8): “Encourage labor-intensive activities that are economically satisfying and which offer opportunities for upward mobility.”

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

Section 226-11(a)(2): “Effective protection of Hawai`i’s unique and fragile environmental resources.”

Section 226-11(b)(2): “Ensure compatibility between land-based and water-based activities and natural resources and ecological systems.”

Section 226-11(b)(8): “Pursue compatible relationships among activities, facilities, and natural resources.”

Section 226-12 Objective 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 Objectives and Policies for the Physical Environment – Land, Air, and Water

Section 226-13(b)(2): “Promote the proper management of Hawai`i’s land and water resources.”

Section 226-104 Population Growth and Land Resources Priority Guidelines

Section 226-104(b)(11): "Identify all areas where priority should be given to preserving rural character and lifestyle."

The Project is consistent with maintaining a viable, diverse economy in Kona. It will increase employment opportunities, income, and job choice without degradation of the natural and social environment. The Project will improve and diversify the Keauhou area by providing a rural, low-density development that is sensitive to neighboring communities and activities. The Project will serve as a buffer between the existing and proposed urban developments makai of the Property and agricultural and low-density residential uses mauka of the Property. The natural resources of the Property have been inventoried and considered as part of the planning of the Project. The Project will not have a substantial adverse effect on the environment and will not diminish the valuable natural resources of the region. Water quality effects will be limited to levels that do not cause adverse impacts through the implementation of BMPs during the construction of the Project. Biological impacts will be mitigated through preservation of selected areas containing `ohe makai and landscaping with this species. An archaeological inventory survey has been conducted for the Property. Historic resources will be protected by following the recommendations of the archaeological inventory surveys, and ensuring that known burials and all significant

historic sites will be preserved in coordination with the SHPD and the Hawai'i Island Burial Council.

271. The reclassification of the Property generally conforms to the functional plans in the following areas: housing and employment.

CONFORMANCE WITH COASTAL ZONE MANAGEMENT OBJECTIVES AND POLICIES

272. The proposed reclassification of the Property generally conforms to the objectives and policies of the Coastal Zone Management Program, chapter 205A, HRS. The Property is approximately 0.8 to 2.2 miles inland of Keauhou Bay, with an elevation ranging from 660 to 1,160 feet above msl. The Project is not anticipated to adversely impact the coastal zone management objectives for beach protection, coastal ecosystems, marine resources, economic uses, or coastal hazards. Historic resources on the Property will be protected and preserved under a plan approved by the SHPD. Impacts to scenic and open space resources will be minimized as the Project will consist of low-density residences and open space corridors. The objectives for managing of development and public participation have been addressed through the review process of the Petition and will be further addressed through additional permitting prior to any development.

CONFORMANCE WITH THE COUNTY OF HAWAI'I GENERAL PLAN

273. The reclassification of the Property generally conforms to the goals, objectives, policies, standards, and principles of the County of Hawai'i General Plan.

The LUPAG map designates the Property as Urban Expansion, Low Density Urban, Orchards, and Extensive Agriculture. TMK: 7-8-05: 28, 37, 38, and 39, consisting of approximately 31.5 acres in total, will be retained in the Agricultural District and not reclassified because they are at an elevation that would generally be considered to be within the "Kona Coffee Belt." The LUPAG map designates these parcels as Extensive Agriculture.

RULING ON PROPOSED FINDINGS OF FACT

Any of the proposed findings of fact submitted by Petitioner or the other parties to this proceeding 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 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.

CONCLUSIONS OF LAW

1. Pursuant to chapter 205, HRS, and the Commission's Rules under chapter 15-15, HAR, and upon consideration of the Commission's decision-making criteria under section 205-17, HRS, this Commission finds upon the clear preponderance of the evidence that the reclassification of the Property, consisting of approximately 455.746 acres of land at Keauhou I and II and Kahalu`u, North Kona, Hawai`i, and

identified as Tax Map Keys: 7-8-05: 1, 6, 27; 7-8-07: 4; and 7-8-10: 6 and 9, from the State Land Use Agricultural District to the State Land Use Rural District for development of residential, golf course, and related uses, and subject to the conditions in the Order below, conforms to the standards for establishing the Rural District boundaries, is reasonable, not violative of section 205-2, HRS, and is consistent with the policies and criteria established pursuant to sections 205-16, 205-17, and 205A-2, HRS.

2. Article XII, Section 7, of the Hawai`i Constitution requires the Commission to protect native Hawaiian traditional and customary rights. The State reaffirms and shall protect all rights, customarily and traditionally exercised for subsistence, cultural, and religious purposes and possessed by ahupua`a tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778, subject to the right of the State to regulate such rights.

3. Based upon the findings of fact and conclusions of law stated herein, it is hereby determined that the evidence in this case does not establish the exercise of specific customarily and traditionally exercised native Hawaiian rights on the Property. Nevertheless, customary and traditional native Hawaiian practices will be adequately protected by the conditions of this decision and order.

4. With mitigation through preservation where recommended, as well as access to and interpretation of certain archaeological sites, there will be minimal adverse effect on valued cultural, natural, and historical resources on the Property.

5. Article XI, Section 1, of the Hawai'i Constitution requires the State to conserve and protect Hawai'i's natural beauty and all natural resources, including land, water air, minerals, and energy sources, and to promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State.

6. There are no rare, threatened, or endangered plant species as listed by the USFWS present nor are there unique or valuable wildlife habitats on the Property. In addition, there is no existing or proposed federally designated critical habitat present on the Property. The `ohe makai, which is considered a Species of Concern by the USFWS, will be preserved according to the recommended preservation measures.

7. Although most of the mammal and bird species recorded on the Property are introduced species, the endangered Hawaiian Hawk was previously observed on two separate occasions. In addition, the endangered Hawaiian Petrel and threatened Newell's Shearwater may overfly the Property. The Hawaiian Hoary Bat is also known from the area. In order to avoid disturbing the Hawaiian Hawk and Hawaiian Hoary Bat when they are breeding or caring for their young, clearing and grubbing of the Property will not be undertaken between the months of March and August, the period during which such activities are likely to be occurring. External lighting used during construction or within the completed Project will be shielded to

reduce the potential of the Hawaiian Petrel and Newell's Shearwater from becoming disoriented.

8. There are no invertebrates on the federal or state endangered and threatened species lists on the Property. The 'ohe makai trees, which provide a habitat for native insects, will be preserved according to the recommended preservation measures.

9. The air quality of the Property is not expected to be significantly impacted by the Project. Petitioner will develop a dust control plan to address construction-related activities. Site-specific BMPs, including frequent watering, a limitation on the amount of area that is disturbed at any one time, the application of chemical soil stabilizers, mulching, and the use of wind screens, will be implemented to address potential fugitive dust impacts from clearing, grubbing, and other construction activities in compliance with State and County regulations and requirements.

10. The Project is not expected to generate significant noise impacts to the surrounding areas. Site-specific BMPs will be implemented to minimize potential short-term construction noise in compliance with State and County regulations and requirements.

11. The Project's water demands are not expected to adversely impact the integrity of the Keauhou Aquifer system.

12. Article XI, Section 3, of the Hawai`i Constitution requires the State to conserve and protect agricultural lands, promote diversified agriculture, increase agricultural self-sufficiency, and assure the availability of agriculturally suitable lands.

13. The Property consists of marginal agricultural land and is not currently used for agriculture. The Project will not have a significant impact on agriculture on the island of Hawai`i or in the State as the reduction of these agricultural lands in comparison to the total acreage of agricultural lands on the island of Hawai`i and in the State is minimal.

14. Act 205 (formerly House Bill 109) has been signed into law and became effective as of July 1, 2005. Under Act 205, golf courses and golf driving ranges are a permissible use in the State Land Use Rural District. Petitioner requested that Act 205 apply to this docket. The County of Hawai`i and OP did not object. The amendment to chapter 205 does not add any burdens or obligations or liabilities upon Petitioner. In this case, applying the amendment contained in Act 205 to the Petition is not manifestly unjust or unfair to Petitioner; rather it is an advantage.

DECISION AND ORDER

IT IS HEREBY ORDERED that the reclassification of the Property, consisting of approximately 455.746 acres of land in the State Land Use Agricultural District at Keauhou I and II and Kahalu`u, North Kona, Hawai`i, identified as Tax Map Keys: 7-8-05: 1, 6, 27; 7-8-07: 4; and 7-8-10: 6 and 9, and approximately shown on Exhibit

“A,” attached hereto and incorporated by reference herein, shall be and is hereby reclassified to the State Land Use Rural District, and the State land use district boundaries shall be amended accordingly.

Based upon the findings of fact and conclusions of law stated herein, it is hereby determined that the reclassification of the Property will not significantly affect or impair the preservation or maintenance of natural systems and habitats or the valued cultural, historical, agricultural, and natural resources of the area.

IT IS HEREBY FURTHER ORDERED that the reclassification of the Property from the State Land Use Agricultural District to the State Land Use Rural District shall be subject to the following conditions:

1. **Affordable Housing.** Petitioner shall provide affordable housing opportunities for residents in the State of Hawai`i in accordance with applicable affordable housing requirements of the County of Hawai`i. 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 Petitioner and the County of Hawai`i.

2. **Drainage Improvements.** Petitioner shall prepare a drainage study of the Property and the recommended drainage system shall be constructed, meeting with the approval of the State and County agencies.

3. **Transportation.** Petitioner shall submit a revised TIAR for review and approval by the DOT and the DPW prior to submittal of a change of zone application with the County. The TIAR shall identify the local and regional traffic impacts attributable to the Project and recommend mitigation measures. The report shall also evaluate the existing and potential future developments in the Keauhou area. Based on an analysis of traffic-related impacts, Petitioner shall fund, design, construct, and/or make fair-share payments toward the construction of necessary local and regional roadway improvements necessitated by the Project in designs and schedules accepted by the DOT and the County of Hawai'i.

4. **Water System Facilities and Improvements.** Petitioner shall fund and construct adequate potable and non-potable water source, storage and transmission facilities and improvements as required by the DWS to accommodate the Project.

5. **Wastewater Facilities.** Petitioner shall fund and construct adequate wastewater treatment, transmission and disposal facilities, as determined to be necessary by the County and the DOH.

6. **Intergrated Solid Waste Management Plan.** Petitioner shall develop and shall implement or cause to be implemented a solid waste management plan in conformance with the Integrated Solid Waste Management Act, chapter 342G, HRS. The solid waste management plan shall be approved by the County of Hawai'i Department of Environmental Management.

7. **Historic Preservation Mitigation Plan.** Petitioner shall implement the mitigation plans contained in the BTP prior to any ground altering activities on the Property. Design plans shall be submitted to the SHPD prior to the development of specific mitigation measures to ensure that the burials and other sites recommended for preservation are adequately protected during future development. Petitioner shall confirm in writing to the LUC that the SHPD has found Petitioner's mitigation commitments, if any, to be acceptable and has determined that any historic preservation mitigation plan and archaeological data recovery sub-plan has been successfully implemented.

8. **Previously Unidentified Burial/Archeological/Historic Sites.** Without limitation to any other condition found herein, if any burials or archaeological or historic sites, such as artifacts, marine shell concentrations, charcoal deposits, stone platforms, pavings, and walls not previously identified in studies referred to herein, are discovered during the course of construction of the Project, then all construction activity in the vicinity of the discovery shall stop until the issuance of an archaeological clearance from the SHPD that mitigative measures have been implemented to its satisfaction.

9. **Public School Facilities.** Petitioner shall contribute to the development, funding, and/or construction of school facilities, on a fair-share basis relating to the projected impacts of Petitioner's development upon regional public

school facilities, as determined by and to the satisfaction of the DOE. Terms of the contribution shall be agreed upon in writing by Petitioner and the DOE prior to obtaining final subdivision approval.

10. **Civil Defense.** Petitioner shall fund and construct adequate solar-powered civil defense measures serving the Property as determined by the State of Hawai'i Department of Defense, Office of Civil Defense, and County Civil Defense Agency.

11. **Air Quality Monitoring.** Petitioner shall participate in an air-quality monitoring program for the Project as specified by the DOH.

12. **Provisions of the Hawai'i Right to Farm Act.** Petitioner shall notify all prospective buyers and/or lessees of the Property or any lot in the Project that the Hawai'i Right to Farm Act, chapter 165, HRS, limits the circumstances under which pre-existing farm activities may be deemed a nuisance.

13. **Preservation of Access Rights.** Petitioner shall preserve access rights of native Hawaiians who customarily and traditionally have used the Property for access to other areas for subsistence, cultural, and religious practices.

14. **Soil Erosion and Dust Control.** Petitioner shall implement BMPs applicable to each proposed land use on the Property to reduce or eliminate soil erosion and groundwater pollution, and effect dust control measures during and after the development process in accordance with the DOH guidelines.

15. **Water Conservation Measures.** Petitioner shall implement water conservation measures and BMPs on the Property, such as use of indigenous and drought tolerant plants and turf, and incorporate such measures into common areas landscape planting.

16. **Energy Conservation Measures.** Petitioner shall implement energy conservation measures such as use of solar energy and solar heating and incorporate such measures into the Project on the Property.

17. **Updates to the Commission.** In its annual report, Petitioner shall include updated information relating to:

- a. the Mitigation Plan for data recovery and preservation;
- b. the BTP; and
- c. the MOA between Petitioner and Na Ala Hele regarding the trail system.

The terms of the MOA shall be agreed upon in writing by Petitioner and Na Ala Hele prior to obtaining final subdivision approval. Petitioner shall provide a copy of the fully executed MOA to the Commission.

18. **Flora and Fauna.** Petitioner shall preserve the `ohe makai on the Property in accordance with the recommended preservation measures. Petitioner shall not conduct any clearing and grubbing on the Property between the months of March

through August to prevent any impact to the endangered Hawaiian Hoary Bat and the Hawaiian Hawk when they are breeding or caring for their young.

19. **Compliance with Representations to the Commission.** Petitioner shall develop the Property in substantial compliance with the representations made to the Commission. Failure to so develop the Property may result in reversion of the Property to its former classification, or change to a more appropriate classification.

20. **Notice of Change to Ownership Interests.** Petitioner 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 development of the Property.

21. **Annual Reports.** Petitioner shall timely provide without any prior notice, annual reports to the Commission, the OP, and the Planning Department in connection with the status of the Project and Petitioner's progress in complying with the conditions imposed herein. The annual report shall be submitted in a form prescribed by the Executive Officer of the Commission.

22. **Release of Conditions Imposed by the Commission.** The Commission may fully or partially release the conditions provided herein 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 Petitioner.

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

24. **Recording of Conditions.** Petitioner shall record the conditions imposed herein by the Commission with the Bureau of Conveyances pursuant to section 15-15-92, HAR.

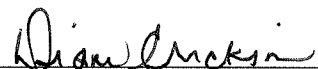
IT IS FURTHER ORDERED that the approximately 31.5 acres of land originally within the Property, identified as Tax Map Key: 7-8-05: 28, 37, 38, and 39, land identified to be in the "Kona Coffee Belt," and also approximately shown on Exhibit "A," attached hereto and incorporated by reference herein, shall remain within the State Land Use Agricultural District, and to that extent, the application for reclassification is DENIED.

ADOPTION OF ORDER

The undersigned Commissioners, being familiar with the record and proceedings, hereby adopt and approve the foregoing ORDER this 29th day of July, 2005. This ORDER and its ADOPTION shall take effect upon the date this ORDER is certified and filed by this Commission.

Done at Waikoloa, Hawai'i, this 29th day of July, 2005, per motion on July 29,, 2005.

APPROVED AS TO FORM


Deputy Attorney General

LAND USE COMMISSION
STATE OF HAWAII

By 
RANDALL SAKUMOTO
Chairperson and Commissioner

By (absent)
STEVEN LEE MONTGOMERY
Vice-Chairperson and Commissioner

By 
LISA M. JUDGE
Vice-Chairperson and Commissioner

By Thomas Contrades
THOMAS CONTRADES
Commissioner

By Michael D. Formby
MICHAEL D. FORMBY
Commissioner

By _____
KYONG-SU IM
Commissioner

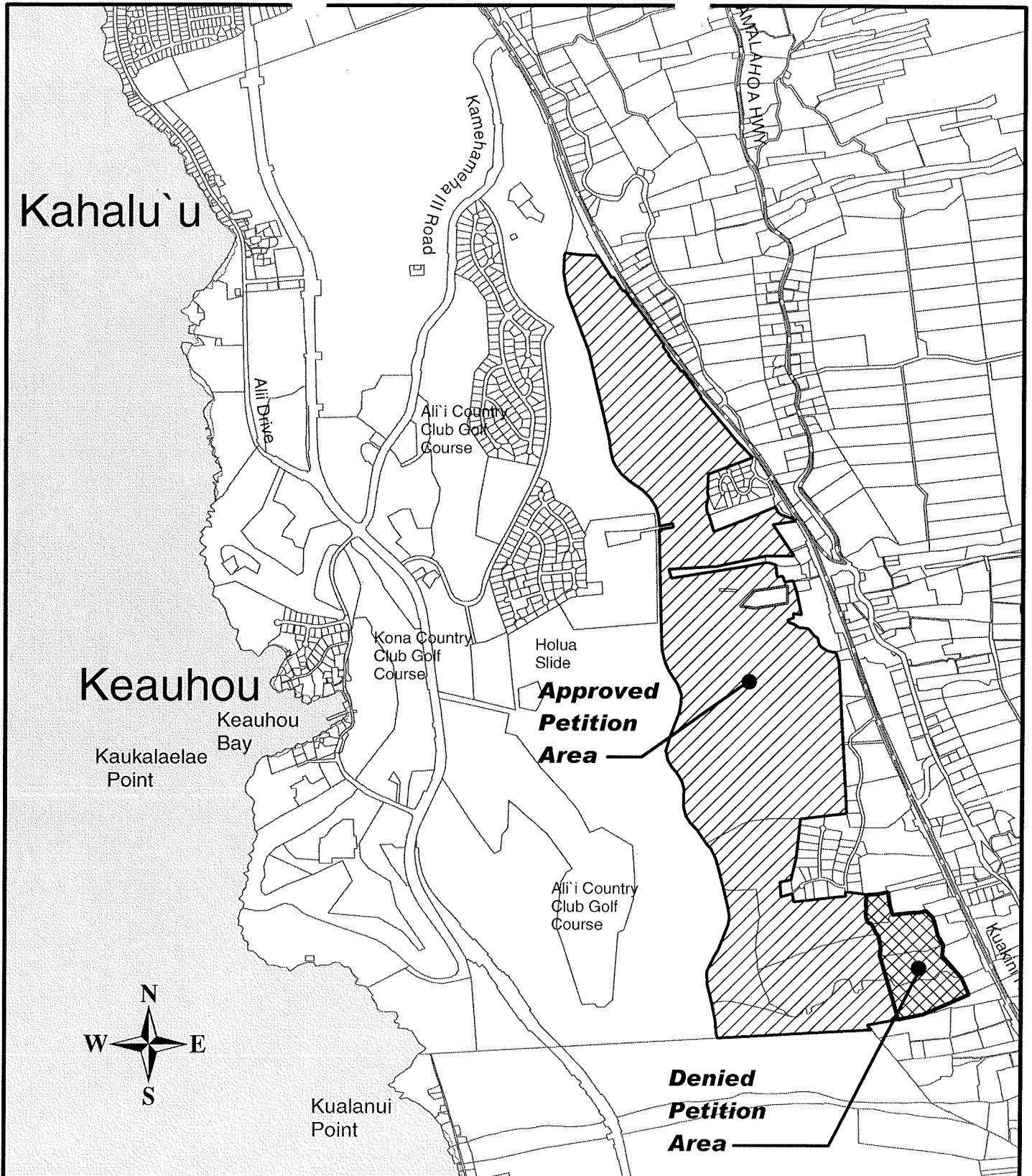
By Duane Kanuha
DUANE KANUHA
Commissioner

Filed and effective on
AUG 1 2005

Certified by:

Anthony J. H. Ching
ANTHONY J. H. CHING

By Ransom Piltz
RANSOM PILTZ
Commissioner



A04-747 KAMEHAMEHA INVESTMENT CORPORATION, a Hawai'i Corporation
MAP LOCATION

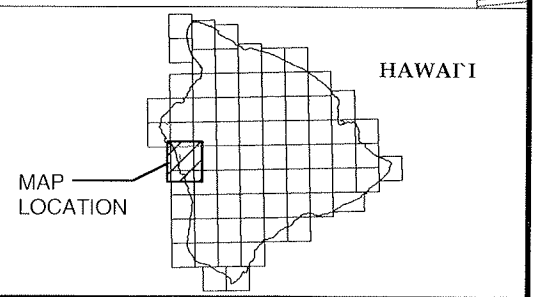
Approved Petition Area - Tax Map Key: 7-8-05: 1, 6, and 27, 7-8-07: 4, and 7-8-10: 6 and 9

Denied Petition Area - Tax Map Key: 7-8-05: 28, 37, 38, and 39

Keauhou I and II and Kahalu'u, North Kona, Hawai'i

Scale = 1" = 2,000 ft.

EXHIBIT "A"



BEFORE THE LAND USE COMMISSION

OF THE STATE OF HAWAII

In The Matter Of The Petition Of) DOCKET NO. A04-747
)
KAMEHAMEHA INVESTMENT) CERTIFICATE OF SERVICE
CORPORATION, A Hawai`i)
Corporation)
)
To Amend The Agricultural Land Use)
District Boundary Into The Rural Land)
Use District For Approximately 487.246)
Acres Of Land At Keauhou I And II)
And Kahalu`u, North Kona, Hawai`i,)
Tax Map Keys: 7-8-05: 1, 6, 27, 28, 37, 38,)
And 39; 7-8-07: 4; And 7-8-10: 6 And 9)
_____)

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 regular or certified mail as noted:

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Dated: Honolulu, Hawai'i, AUG 1 2005 .



ANTHONY J. H. CHING
Executive Officer