

BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Petition of)
HALEKUA DEVELOPMENT CORPORATION)
To Amend the Agricultural Land)
Use District Boundary into the)
Urban Land Use District for)
Approximately 161.1 Acres at)
Waikele and Hoaeae, Ewa, City)
and County of Honolulu, Island)
of Oahu, State of Hawaii, Tax)
Map Key No.: 9-4-02: 46 and)
Portion of 1)

DOCKET NO. A89-640
HALEKUA DEVELOPMENT
CORPORATION

LAND USE COMMISSION
STATE OF HAWAII
JAN 9 1 50 PM '90

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

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FINDINGS OF FACT,
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HALEKUA DEVELOPMENT CORPORATION, a Hawaii Corporation, (hereinafter referred to as "Petitioner"), filed a Petition on April 26, 1989, and amendments to the Petition on July 12, 1989, September 6, 1989 and September 15, 1989, pursuant to Chapter 205, Hawaii Revised Statutes, as amended, and Title 15, Subtitle 3, Chapter 15, Hawaii Administrative Rules, as amended (hereinafter "Commission Rules"), to amend the Land Use District Boundary to reclassify approximately 161.1 acres of land from the Agricultural Land Use District into the Urban Land Use District, situate at Waikele and Hoaeae, Ewa, City and County of Honolulu, Island of Oahu, State of Hawaii, identified as Tax Map Key Nos.: 9-4-02: 46 and portion of parcel 1 (hereinafter referred to as the "Property") to develop a golf course, tennis courts, and ancillary facilities. The Land Use

Commission (hereinafter "Commission"), having heard and examined the testimony, evidence, and arguments of counsel presented during the hearings, the stipulated proposed findings of fact, conclusions of law, and decision and order, do hereby make the following findings of fact and conclusions of law:

FINDINGS OF FACT

PROCEDURAL MATTERS

1. On April 26, 1989, Petitioner filed its Petition for Land Use Boundary Amendment.

2. On September 6, 1989 the Petitioner amended the acreage in the petition area from 163.4 acres to 161.1 acres, in conformance with Petitioner's amended metes and bounds description of the Property.

3. On September 15, 1989 the Petitioner amended the Petition by including the Planning Commission in the Certificate of Service for this Petition.

4. The Commission held hearings on the Petition on September 21, 1989 and September 22, 1989, pursuant to a notice published in the Honolulu Star Bulletin on August 7, 1989, a newspaper of general circulation.

5. On July 10, 1989 Elizabeth Ann Stone filed a letter in opposition to the Petition. On September 21, 1989 the Commission admitted Ms. Stone's letter into evidence.

6. The Commission received a letter dated August 17, 1989, from the Department of the Navy requesting that a

representative be allowed to present written and oral testimony to the Commission.

7. On September 5, 1989 a prehearing conference was held.

8. The Commission received into evidence on September 21, 1989, the written and oral testimonies of public witnesses Lieutenant Christopher D. Reiling, Staff Engineer of Naval Magazine Lualualei, Cal Kawamoto, on behalf of the Waipahu Neighborhood Board Number 22 and the Waipahu Community Association, and Deanne Asato, on behalf of the Village Park Community Association.

DESCRIPTION OF PROPERTY

9. The Property is located at Waikele and Hoaeae, Ewa District, Oahu, Hawaii. The Property is bounded by Waikele gulch and stream to the east, the Royal Kunia Phase I residential development to the west, lands leased by Oahu Sugar Company for sugarcane cultivation to the north, and the existing Village Park residential subdivision to the south.

10. Petitioner owns the Property in fee simple. Oahu Sugar Company leases the Property for sugarcane cultivation.

11. Approximately 149 acres of the Property is fallow and has been withdrawn from sugarcane cultivation. The remaining 12 acres of the Property will be withdrawn on or about September of 1990, when the sugarcane is harvested.

12. The Property is part of the Royal Kunia Phase I planned community. The Property is adjacent to the residential

uses in the Phase I development and lies to the east of that development.

13. The Property is approximately rectangular-shaped, running approximately 1,100 linear feet along the north easterly boundary of the existing Village Park Subdivision and 5,400 linear feet along Waikele Gulch.

14. The Property ranges in elevation from approximately 300 to 460 feet above mean sea level.

15. The Property slopes southeasterly at a gradient of approximately four to seven percent.

16. The annual median rainfall in this area is approximately 34 inches.

17. The prevailing wind direction on the Property is from the northeast. Tradewinds prevail approximately 41.5 percent of the time with an average speed of approximately 6.1 knots.

18. Most of the Property is covered with Molokai silty clay loam of three to seven percent slope (MuB). A small area of the Property is covered with the lower-quality Molokai silty clay loam of 15 to 25 percent slope (MuD). Agricultural activities normally associated with the two soil types are sugarcane, pineapple, and pasture. These soils are also suitable for truck crops. The U.S. Department of Agriculture Soil Conservation Service rates MuB, assuming the land is irrigated, with a land capability rating of IIe, which indicates that the soils have moderate limitations that reduce

the options on plants that can be grown successfully, or indicates that moderate conservation practices are required. This type of soil has good suitability for topsoil and roadfill. Soil type MuD has a soil classification of IVe which indicates that the soils have very severe limitations that reduce the options on plants, require very careful management, or both. The workability of MuD soil is difficult because of the slope.

19. The State Department of Agriculture's Agricultural Lands of Importance to the State of Hawaii (ALISH) classifies the soils in most of the Property as "Prime" agricultural lands.

20. A small portion of the Property consisting of lands in a small gulch along the southeastern portion of the property is classified as "Other Important" agricultural lands.

21. Under the University of Hawaii Land Study Bureau's Overall Productivity Rating classification, most of the soils in the Property are rated "A", with the remainder rated "B" and "E".

PROPOSAL FOR DEVELOPMENT

22. Petitioner proposes to develop the Property as an 18-hole golf course with full support facilities and tennis courts.

23. Support facilities for the golf course would include a clubhouse with a dining establishment and possible

meeting rooms, a driving range, a maintenance shed, and other recreational amenities as well as tennis courts.

24. The proposed golf course will be of a similar quality to the existing golf courses at Mililani, Hawaii Kai and Pearl Country Club.

25. The proposed golf course will be a privately owned course that will offer foreign and local memberships at different rates.

26. The golf course would be open a minimum of 2.5 days per week for public play by non-members at prices similar to other golf courses in the area such as the Mililani Golf Course.

27. Petitioner estimates that it will take approximately two years to design and construct the golf course and clubhouse. Petitioner anticipates that the golf course will be operational by the end of 1991 or the beginning of 1992.

28. Petitioner's revised cost for the golf course and clubhouse development is currently about \$18,000,000. It is anticipated that the golf course construction will cost approximately \$9,000,000, and the clubhouse will be about \$9,000,000.

PETITIONER'S FINANCIAL CAPABILITY
TO UNDERTAKE THE PROPOSED DEVELOPMENT

29. Petitioner's balance sheet as of February 28, 1989 indicates total assets of \$17,982,919. Liabilities and stockholder's equity were listed at \$17,982,919.

30. The combined balance sheet as of February 28, 1989 for Horita Holdings, Inc., which is the parent company of Petitioner, indicates assets of \$81,803,737 and liabilities and stockholder's equity of \$81,803,737.

31. Petitioner obtained Royal Oahu Resort, Inc., as a joint venture partner for the development of the Property subsequent to the filing of the Petition. Royal Oahu Resort, Inc., is a Hawaii corporation that is a wholly owned subsidiary of Shinnihon Estate Co., Ltd., a Japan-based company. Shinnihon Estate Co., Ltd. owns and manages two golf courses in Japan - the Hanno Park Country Club and the Musashi Matsuyama Country Club.

32. As of June, 1988, Shinnihon Estate Co., Ltd. was capitalized at over \$1,000,000.

COUNTY AND STATE PLANS AND PROGRAMS

33. The Property is located within the State Land Use Agricultural District as reflected on Land Use District Boundary Maps O-5, Schofield Barracks, and O-9, Waipahu.

34. The Property is designated Park (Golf Course) on the Central Oahu Development Plan Land Use Map by the City and County of Honolulu (hereinafter the "City").

35. Petitioner has filed an application for amendments to the Central Oahu Development Plan Public Facilities Map.

36. The Property is currently zoned AG-1. An application has been filed with the City Department of Land Utilization to rezone the Property to P-2, Preservation.

NEED FOR THE PROPOSED DEVELOPMENT

37. Petitioner prepared a market study for the proposed project. The study indicates that the island of Oahu currently has twenty-eight golf courses. Of these, four are private country clubs, nine are military, four are municipal courses, eight are privately owned but open to the public, and three are considered resort courses.

38. After eliminating the military courses and population eligible to use the military courses, the ratio of golf holes to population is one hole to 1,888 persons.

39. Based on a per capital analysis performed by the National Golf Foundation, the State of Hawaii ranks 21st among the states in population per golf hole. However, if this analysis is applied on a county-wide basis, and if military golf courses and population are excluded, the island of Oahu and the City and County of Honolulu would rank 46th out of 50 states in persons per golf hole, ahead of only Maryland, California, Louisiana and Alaska.

40. Municipal golf courses on Oahu are some of the busiest in the world. The average total rounds for municipal golf courses in the United States were 50,000 on 18-hole courses and 18,000 on 9-hole courses. The Ala Wai golf course averaged 197,000 rounds in 1986, 198,000 rounds in 1987 and

188,000 rounds in 1988. Average total rounds on other municipal courses on Oahu, with the exception of Kahuku, were slightly lower than Ala Wai.

41. The popularity of golf has been growing nationwide. Petitioner's market study indicates that in 1986 there were 17,500,000 golfers being accommodated by 12,500 golf facilities. Golf facilities nationwide are in tight supply, and the availability of public golf facilities declined in 23 out of 50 states, including Hawaii.

42. The number of golfers is expected to increase significantly by 1995. In addition, because of the aging population, golf demand is expected to rise at an even faster rate. Today there are approximately 6,000,000 golfers in the 35-to 50-year-old age bracket. By 1990, there will be approximately 7,200,000, and by the year 2000 golfers in that age group will increase to over 9,000,000, a 50 percent increase in 15 years.

43. Golf in the State of Hawaii has exhibited strong growth for many of the reasons identified as golf generators nationally. Hawaii has been identified as one of the states in the nation with high golf intensity.

44. The study projects that the growth of golf in Hawaii is expected to come from two distinct factors: growth in the demand by residents and growth in the demand by tourists. Demand for golf by residents is expected to grow at rates consistent with national trends. The most explosive

growth in golf in Hawaii has been the development of the resort golf industry. Resort golf demand has grown dramatically due to the growth of destination resorts in Hawaii which have fostered a resort golf industry.

45. Golf demand on Oahu will increase by 12 courses by the year 2010 if projected resort and population growth follow estimates made by the City's Department of General Planning which are based upon the State's long range M-K projections.

46. If it is assumed that interest in the sport of golf grows by two percent per year in the City and County of Honolulu, as has been predicted nationally, future demand will grow by approximately 65 percent over current demand by the year 2010. If this growth factor is applied only to the non-military courses, then a total of 32 courses will be required.

47. The Ewa, Central Oahu, and Waianae Development Plan areas currently contain approximately 25 percent of the population and 25 percent of Oahu's golf courses. There are eight golf courses located in this area - three are military, one is municipal, two are daily fee courses and two are resort courses.

48. If the military courses are not considered, the remaining courses - Mililani, Hawaii Country Club, Ted Makalena, Makaha West and Makaha East - are currently well

utilized. Mililani, Hawaii Country Club, and the Ted Makalena courses are all operating at or near capacity.

49. Based on the Department of General Planning and the State Department of Business and Economic Development's M-K projections, approximately two-thirds of the residential growth for all of Oahu between 1985 and 2010 will take place in Ewa, Central Oahu and Waianae. In addition, 75 percent of the growth in resort development proposed for Oahu is also projected to take place in this region.

50. The market study indicates that future demand for golf courses in Ewa, Central Oahu and Waianae is estimated to be ten golf courses. Assuming a two percent annual growth in golf participation is applied, then an additional ten courses will be required. The total demand for golf courses in this region is therefore estimated to range between ten and twenty courses by the year 2010.

51. There are about forty proposed golf courses on Oahu that are being considered for development by various developers. None of the potential sites are located in the Primary Urban Center, which is expected to house 50 percent of Oahu's population by the year 2010. Any increase in demand for golf by residents of the Primary Urban Center will have to be satisfied outside of this area. The most likely areas for this overflow demand will be in Central Oahu and Ewa due to the availability of land and the existing transportation network.

52. The demand in the Central Oahu and Ewa areas could easily total twenty-five courses if the growth in demand from the Primary Urban Center is satisfied in these areas.

53. To date, twenty-four golf courses have been proposed for the Ewa, Central Oahu and Waianae areas. Currently, two of these courses are under construction and another two have already received governmental approvals. The remaining twenty courses are at various stages in the approval process, or are only in the discussion stage.

54. Due to community opposition, concerns regarding impacts on agricultural lands, and other impediments normally associated with the development process, Petitioner's market study estimates that only 50 percent to 75 percent of golf course developments under consideration in this area will be developed within the next twenty years.

55. Hawaii is one of twenty-seven states where the number of private courses is less than 37 percent of the total number of courses. Only four of Oahu's courses are private, for a total of 21 percent of the non-military courses. Honolulu International Country Club closed its membership in August of 1987. The other three clubs, Waialae, Oahu and Mid-Pacific, have closed their membership and waiting lists for a number of years.

56. If the ratio of private clubs to public courses on Oahu is to remain constant at 21 percent, then the demand for private membership facilities in the Central Oahu, Ewa and

Waianae region should be between two to four courses by the year 2010.

57. Resident play at various golf facilities on Oahu varies considerably. Petitioner's market study estimates that resident play at golf courses in the Central Oahu, Ewa, and Waianae region is as follows: 50 plus percent at Mililani; 8 percent at Makaha West; 60 plus percent at Makaha East; 90 percent at Pearl Country Club; and 80 percent at Hawaii Country Club.

58. Some courses will concentrate on attracting tourists while other courses will cater to resident play. There are a number of courses currently being planned that will probably concentrate on tourist play: the destination resorts at Ko Olina and Kuilima; and courses owned and operated by companies with hotel interests, such as the Waikele golf course.

59. The most conducive market for the golf course that is being proposed on this Property is the resident golfer. Petitioner's market study indicates that play in the early years of the course is anticipated to be almost entirely resident play. Over the long term, it is estimated that the mix of play at the proposed course will be 75 percent resident and 25 percent tourist play.

60. The proposed course will be located adjacent to the Royal Kunia and Village Park residential communities that will house an estimated 13,000 to 15,000 persons within a mile

of the proposed course. Residents of these developments are expected to make use of the recreational opportunities afforded by the course.

61. Petitioner's market study indicates that play at the proposed golf course will be similar to play at the Honolulu International Country Club course. That club has approximately 600 resident members and 600 non-resident members. Ninety percent of its play is by residents, with visitors making up the remaining ten percent. Resident members constitute approximately 45 percent of the play on the course.

62. The proposed golf course will enjoy a number of locational advantages over the other golf courses that are being proposed on Oahu and in the region as follows: it has excellent freeway access and is centrally located between the Secondary Urban Center and Central Oahu; it is a stand-alone facility which can be designed to maximize playability; it is located on elevated sloping land and offers panoramic views; and, it is located adjacent to the Village Park and Royal Kunia residential communities.

63. There is a strong demand for golf facilities on the Island of Oahu. The proposed golf course would be compatible with surrounding uses. It would have locational advantages and is expected to provide resident golfers with increased recreational opportunities.

IMPACT UPON RESOURCES OF THE AREA

Agricultural Resources

64. Petitioner's agricultural consultant prepared an impact and comparative benefits study for the proposed golf course. The study indicates that in 1988, Oahu Sugar Company cultivated 13,487 acres of sugarcane lands which covered portions of Central Oahu on each side of Kunia Road above Pearl Harbor, and portions of the Ewa Plain to the west of Pearl Harbor. Nearly all of the Oahu Sugar company lands are leased from Campbell Estate, Robinson Estate, the U.S. Navy, and various developers. These leases expire in 1995 and 1996.

65. Even though sugar yields are relatively high, Oahu Sugar Company is regarded as marginally profitable due to low sugar prices and high lease rents.

66. Three dominant factors will determine the future of Oahu Sugar Company: the price of sugar; whether or not leases are renewed at rents acceptable to Oahu Sugar Company; and, over the long term, the loss of cultivated land for housing and other urban developments.

67. The price of sugar is a major factor in determining profitability for the company. Currently, the price of sugar is barely high enough to cover costs. In the world market, the price of sugar is too low to cover Hawaii's production costs. For the U.S. market, sugar prices are supported under the U.S. Food Security Act which expires in late 1990. The most optimistic outlook is that the current 18

cents per pound under the Act will be maintained. If one or more of the new artificial sweeteners prove to be successful, it will add to the downward pressures on sugar prices. The U.S. limits on sugar imports has been found to violate international trade rules contained in the General Agreement on Tariffs and Trade. To bring the U.S. into compliance, the U.S. sugar program may require a major restructuring, allowing a higher volume of imports, and resulting in lower U.S. sugar prices.

68. With the major leases expiring in 1995 and 1996, renewal of leases with acceptable terms is uncertain. Oahu Sugar Company pays the highest lease rents in the State. However, from the landowner's perspective, the land is very valuable, and rents from sugar are very low - on the order of a few hundred dollars per acre per year. Pineapple companies may outbid Oahu Sugar Company. In addition, the Navy is required to put its lands out to competitive bid.

69. Economic forces that are creating urbanization pressures on Oahu Sugar Company are very strong. These lands are well located near to the growing secondary urban center, they are near freeways and other infrastructure, construction costs are low because the lands are flat and already cleared, and the financial returns from development far exceed that from sugar. These economic forces have resulted in much of the land now leased to Oahu Sugar Company being sold by the major

landowners to developers. Planned and proposed developments, if approved, would eventually remove about 5,000 acres of sugarcane land.

70. Petitioner's agricultural consultant estimates that by 1995, 1,800 acres will be developed, leaving approximately 11,700 acres under cultivation by Oahu Sugar Company. Going out further in time, about two decades into the future, about 8,500 acres would remain in cultivation. If Oahu Sugar Company switches to one mill, the land requirements would be reduced by 25 percent. Assuming an average yield of 14.5 to 15 tons per acre, Oahu Sugar Company would require 10,000 to 10,345 acres of land. Sufficient acreage would remain to accommodate planned and proposed developments to the year 1995 when the leases expire. At full development of all planned and proposed projects, yields would have to reach about 17.5 tons per acre for Oahu Sugar Company to survive. The consultant believes that a projection of 17.5 tons per acre by the year 2010, or two decades into the future, is reasonable.

71. The Property constitutes approximately 1.2 percent of Oahu Sugar Company's lands. The soils and climatic conditions are very good for this particular land. One of the fields holds the world record yield. From the perspective of Oahu Sugar Company, the Property would become a remnant parcel because it is long and narrow, and sandwiched between Waikele Gulch on the east and homes on the west and south. Farming

such fields in close proximity to and upwind from homes would result in a number of problems including dust when planting new cane, airborne fertilizers and pesticides from spraying fields, smoke from burning cane, and noise from trucks and harvesting equipment. Most of the land has already been fallowed, and the remaining 12 acres in sugarcane will be harvested in about September of 1990.

72. The Property is irrigated with furrow and drip irrigation systems. Sources of water include Waiahole Ditch, groundwater, recycled water from the sugar mill, and treated effluent.

73. Oahu Sugar Company has a long-term trend of increasing yields. In 1979, yields averaged 11.3 tons sugar per acre (TSA). However, in 1987, yields were 14.05 TSA for a 24 percent increase over an eight-year period. By 1995, Oahu Sugar Company expects yields of 14.5 to 15 tons per year.

The Hawaii Sugar Planters Association expects yield increases of 5 percent to 8 percent tons per decade based on their research.

74. No diversified agricultural farming currently exists on the Property. According to Petitioner's consultant, the site is well-suited for crop production but the close proximity to homes and the problems that make the site unsuitable for cultivating sugarcane also apply to diversified agriculture uses on the Property.

75. According to Petitioner's consultant, the proposed golf course would have minimal effects on Oahu Sugar Company and would not limit the growth of diversified agriculture.

76. In recognition of the existing and potential agricultural productivity of the Kunia area, the State Department of Agriculture (DOA) has strenuously objected to both Royal Kunia Phase I and II development proposals. DOA recommends that these approvals should not be granted so that the overall site which produces world record sugar yields may remain in agricultural use.

77. The Department of Agriculture comments that the projected cumulative intermediate (to the year 1995) impact of multiple project development in Central Oahu and Ewa of about 1,800 acres should not be used to diminish the full impact of the eventual urbanization of sugarcane cultivated lands. The intermediate impact will reduce Oahu Sugar Company acreage under cultivation to 11,700 acres, which is close to the minimum acreage needed for the plantation to remain economically viable in a single mill configuration (estimated to be about 10,669 acres at 14.05 tons of sugar per acre).

78. With respect to the cumulative impact of proposed projects involving Oahu Sugar Company (OSC) lands, the Department of Agriculture indicates that in the long run, the significant impact on OSC will be that the cultivable acreage

available to OSC after full project development (about 8,100 acres) will be far below the minimum acreage needed to remain economically viable in a single-mill operation and much less than the acreage required for the present double-mill configuration. Sugar yields would have to increase by about 32 percent over the 1987 OSC average yield, to 18.5 TSA.

79. The U.S. Department of Agriculture Soil Conservation Service states that almost the entire Property is considered prime agricultural land and the soils are well-suited for cultivation. The Conservation Service states that wherever possible, prime agricultural land should be saved for agricultural uses.

Flora and Fauna

80. Sugarcane production since the early 1900's has resulted in the removal of the original flora from the site.

81. Ninety-seven percent of the plants found on the Property were exotic weeds or deliberately introduced plants. Two plants were presumed to be native plants.

82. None of the flora on the Property are officially listed as endangered or threatened, nor were any species found on the Property proposed for such status.

83. The proposed project will not have a significant impact on the total island populations of the species involved.

84. No rare or endangered fauna were found on the Property. No indigenous endemic resident species of birds were recorded.

85. A total of 15 species of exotic birds and 45 plovers were recorded during a field survey of the Property. Mammal activity was not unusual. Mongooses and feral cats were observed.

86. The conversion of the Property from sugarcane monoculture to a more diversified habitat of trees and grasses should have a positive effect on the populations of most bird species found on the Property.

Historical/Archaeological Resources

87. An archaeological reconnaissance survey and literature search was conducted by Chiniago, Inc. The literature search showed that no archaeological or historic sites were previously recorded on the Property. The field work presented only fragments of evidence of past human utilization that were destroyed by sugarcane production long ago.

88. The archaeological consultant concludes that the proposed project is not expected to have adverse impacts on archaeological resources.

Visual Resources

89. According to the Petition, the proposed golf course would provide open space and greenery. When viewed from a distance, this is similar to the open space and greenery that is provided by fields of sugarcane. From nearby, however, a well-manicured golf course offers the eye a large variety of vistas and vegetation, whereas fully-grown sugarcane is high and thereby limits viewplanes much like a high hedge does.

Air Quality

90. The existing air quality in the vicinity of the Property is affected by the existing agricultural use, particularly smoke and particulates which occur during the burning of sugarcane fields.

91. According to Petitioner's environmental impact study of fertilizer, herbicide and pesticide use of the proposed project, the proposed golf course will present no significant adverse effects on air quality from application of herbicides or pesticides provided that appropriate application techniques are used.

92. According to the Petitioner's consultant, the chemicals that will be used on the golf course will be of low toxicity. They are applied in dilute sprays and applied with ground equipment. Studies have shown that the drift from ground equipment is very low. None of the chemicals used on golf courses are highly volatile. Therefore, the chemicals would be applied to open areas and would not have the problem of volatility.

93. According to the study, chemicals will only be sprayed on the proposed golf course in the late afternoon or early morning hours when golfers are not on the course. This reduces the risk of exposure of people to airborne spray particles.

94. According to the Petition, grading and other dirt-moving activity will present the potential for substantial

emission of fugitive dust. Construction equipment will also emit some air pollutants in the form of engine exhausts. Direct air quality impacts from project construction will last only as long as it takes to complete the project and on-site control measures may be employed to substantially mitigate the magnitude of these impacts.

Noise Impact

95. The existing sources of noise in the project site include vehicular traffic along the cane haul road and Kunia Road. Noise, apparently, is not expected to be a concern of residents of the existing Village Park subdivision, located approximately one-mile makai of the site.

96. The noise from the clubhouse operations in the proposed project site would include kitchen equipment, fans, air-conditioning equipment, refrigeration equipment, as well as sound systems for announcements and music. The sounds from these sources should not usually be audible to nearby residents because of the large sound transmission losses involved.

97. The noise from equipment associated with ground maintenance activities, including lawn mowers and leaf blowers, could have an adverse impact, particularly when the equipment is operating near residences. To mitigate ground maintenance-related noise, all equipment powered by internal combustion engines will have exhaust mufflers. Schedules will be developed so noisy maintenance operations do not occur near residences before a reasonable hour.

Hazards

98. According to the Petition, the probabilities for floods and earthquakes are very low for the Property.

99. The flood insurance hazard rating for the Property is Zone D, areas in which flood hazards have not been determined. According to the U.S. Army Engineering District, the site is located outside of the 500-year flood plain.

100. The seismic risk classification for the entire island of Oahu is Zone 1. This zone indicates that the island is subject to minor earthquake damage.

101. Potential hazards associated with sugarcane cultivation include fire hazards from the harvesting activities of nearby fields and safety hazards posed by cane haul trucks.

102. Petitioner proposes to mitigate potential flood, earthquake, and fire hazards as follows: drainage facilities will be constructed to City standards; structural designs will conform to building code requirements; Oahu Sugar Company will comply with Department of Health rules for burning sugarcane; the project design will provide for an adequate fire break between the sugarcane fields and any structures.

103. The Property's eastern boundary is shared with the Naval Magazine Lualualei Waikele Branch. The Naval Magazine handles and stores Department of Defense ordnance, explosives, and ammunition adjacent to the project site.

104. The Navy establishes blast hazard safety zones at practicable limits around the Naval Magazine. The blast hazard safety zone currently extends into the Property.

105. In December of 1988, the Navy stated that, based on recent evaluations of the explosives safety criteria associated with the tunnel magazines at Waikele, the blast hazard safety zone distances would be reduced. The Navy also stated that after the reduction, the proposed golf course would be adjacent to the blast zone, rather than within the blast zone. The golf course area would then be designated as a "buffer zone" area.

106. The Navy has had several opportunities to comment on the proposed golf course. The Navy has consistently stated that it has no objection to the development of a golf course on the Property, and that the development of the proposed golf course is considered to be prudent planning and compatible with Navy operations.

107. The Navy has specific concerns with regards to the proposed golf course: that the golf course be designed to assure that there will be no increase in storm runoff onto Navy land; that the land within twenty feet of the Waikele Gulch boundary be kept clear of trees and any vegetation taller than eight inches to minimize sight obstructions for security purposes; that the existing chain-link fence be extended along the northern portion of the boundary line. Petitioner has no

objection to these proposals and is designing the golf course to address these concerns.

Water Quality

108. According to the Petition, in general, a properly developed and managed golf course should not represent a threat to the quality of either groundwater or surface drainage waters on the Property. The quantities of both fertilizers and herbicides used on a typical 18-hole golf course are less than are used on a comparable area of sugarcane.

109. According to Petitioner's consultant, runoff from golf courses and the impact of transported chemicals would be negligible. Runoff is much greater from sugarcane use since there is a period during the year when sugarcane is cultivated and the soil is bare.

110. Petitioner's consultant stated that the golf course will not represent a threat to the quality of the groundwater or surface drainage waters in this area if the golf course is developed and managed properly.

111. The fertilizers, herbicides and fungicides used in golf course maintenance pose little or no hazard to birds frequenting the grassed areas of ponds associated with golf courses. All herbicides and fungicides used in golf course maintenance in Hawaii are of low to moderate toxicity.

112. According to the Petitioner's consultant, with appropriate golf course development and management practices, there will be no significant adverse environmental or

ecological consequences resulting from the use of herbicides, pesticides and fertilizers on the proposed golf course.

113. According to the State Department of Health (DOH), the Board of Water Supply's Kunia I Wells are situated downgradient of the Property. Due to the potential for contamination of groundwater supplies attributable to golf courses, DOH states that it is essential that a groundwater monitoring program be established and maintained by the owner/developer. DOH is in the process of developing monitoring recommendations for golf course developments in terms of frequency of sampling and parameters sampled. DOH is also consulting with the State Department of Agriculture to ascertain the kinds of biocides and fertilizers that are being applied to golf courses. Murdoch and Green, in Petitioner's Exhibit 6, "Environmental Impact of Fertilizer, Herbicide and Pesticide Use on the Proposed Royal Kunia Phase I Golf Course", stated that only nitrate is considered a potential pollutant of groundwater. They conclude that nitrate monitoring may be sufficient to assess the effects of fertilizer application. According to DOH, monitoring must also be done for the pesticides applied to determine baseline concentrations and develop historical data to measure the impacts of pesticide application.

114. Since April 7, 1989, the Department of Health has recommended that new golf course developments be subject to eight conditions intended to protect our groundwater. These

eight conditions are listed in Office of State Planning (OSP) Exhibit 2.

115. State agencies expressed additional concerns relating to the development of a golf course at this site and the use of water diverted from Waikele Stream for golf course irrigation. According to the Office of Environmental Quality Control (OEQC), the U.S. Department of the Interior monitors water quality at a gauge site at Waikele Stream. Readings indicate that the level of fecal coliforms at Gauge #1621300, near the point of diversion, was very high. In fact, in April, June, and August of the 1985-1986 water year, the counts were 18,000/100 milliliters (ml), 19,000/100 ml, and 16,000/100 ml, respectively. The records of the 1986-1987 water year, which are the most recent records available, show counts ranging from 2200/100 ml to 8400/100 ml. These counts are very high--about nine to seventy-nine times the level (240/100 ml of coliform) allowed in secondary-treated sewage effluent used for irrigation in other locales. OEQC points out that large numbers of individuals could be exposed to a potential health hazard at the golf course. In the interest of public health, OEQC recommends that the Waikele Stream water be disinfected prior to use as an irrigant.

116. According to the State Department of Health, Hawaii's streams routinely have high fecal-coliform counts due to the contributions of native birds and other animals. Although the risk of human disease from animal-generated

coliforms is unknown, these organisms are used to indicate the presence of disease-causing bacteria and viruses. The bacteria that causes leptospirosis is also commonly found in Hawaii's streams and poses a greater health threat to anyone who may come into direct contact with this water. In addition, the spraying of stream water out of sprinklers may create airborne bacteria which are unpredictable but possible hazards to those exposed to spray drift downwind.

117. The Department of Health (DOH) concurs with Office of Environmental Quality Control's recommendation to disinfect the stream and "water hazard" ponds. This action will minimize the exposure of the surrounding community and golfers to possible bacterial health hazards. As a general guide for disinfection, the DOH requires that sewage-treatment works which use effluent irrigation systems must reduce the total coliform organisms in the effluent to an average of 23 per 100 milliliters or less, with no single grab sample exceeding 240 per 100 milliliters (DOH, Hawaii Administrative Rules, Title 11, Chapter 62, paragraph 26(b)). DOH does not currently administer any rules pertaining to diverted stream water used for irrigation.

ADEQUACY OF PUBLIC SERVICES AND FACILITIES

Water Service

118. The irrigation water required for sugarcane cultivation on the Property is estimated at over 1.6 million gallons per day (gpd).

119. Petitioner estimates that approximately 15,000 gpd of potable water will be required for clubhouse uses and approximately 800,000 gpd of non-potable water will be required for golf course irrigation. The entire Royal Kunia Phase I development will require approximately 1.27 million gpd of potable water.

120. Petitioner received approval from the Water Commission on July 19, 1989, to use 1.45 million gpd of potable water from a proposed well to be drilled at the Board of Water Supply's Kunia Well II site.

121. The Board of Water Supply has allocated potable water for all of Royal Kunia Phase I.

122. Petitioner will be responsible for the cost of developing the new well.

123. An activated carbon filter system will be installed in the new well to ensure adequate water quality.

124. A new booster station at the Kunia Well II site and a 1.0 million gallon concrete reservoir will be developed by Petitioner.

125. Grading of the golf course would begin in 1990 and would overlap with the potable water source development.

126. The potable water source for this project is reliable since Petitioner will be drilling at a known and proven source, and has already received an allocation from the State.

127. Petitioner has filed applications for a stream channel alteration permit, a stream diversion work alteration permit, a petition to amend Interim Instream Flow Standard, and an Environmental Assessment with the Department of Land and Natural Resources to provide non-potable water from Waikele Stream for golf course irrigation.

128. Pumps would be installed within Waikele Stream at the Waipahu Cultural Gardens Park approximately 450 feet north of the Farrington Highway Bridge. Approximately 18,000 linear feet of 16-inch water transmission main would be installed along Waipahu, Honowai, and Loaa Streets, the Cane Haul Road, through Village Park and through the golf courses at the Royal Kunia Development.

129. The Aquatic Resources Division of the Department of Land and Natural Resources concluded that the quantity of water to be withdrawn is relatively small and will not affect conditions in Pearl Harbor. Further, the water may be supplemented by sugar irrigation discharge upstream of the withdrawal site.

130. The State Office of Environmental Quality Control (OEQC) has examined the daily readings from the U.S. Department of the Interior Gauge #1621300 at Waikele Stream from 1977 to the present, and has noted that there generally is sufficient flow to provide the irrigation requirements for the golf course. However, OEQC points out that Waikele Stream did go

dry for a period in 1978, and that there are short, isolated periods of low flow.

131. According to the Department of Health (DOH), Drinking Water Program, the diversion of water from Waikele Stream for golf course irrigation, also poses a definite cross-contamination problem. In order to minimize the potential for contamination, DOH recommends that the irrigation system be physically separated from all other water lines, both potable and non-potable. This could be done by incorporating air gaps or reduced pressure principle backflow prevention devices. Even wells expressly designated for irrigation should be similarly protected against contamination by Waikele Stream water.

132. Petitioner is negotiating with Oahu Sugar Company to utilize its irrigation water as an alternative source for golf course irrigation water.

133. The Office of State Planning expressed concerns about the use of water from Waiahole Ditch, an important source of agricultural water for Oahu Sugar Company, for non-agricultural purposes and about the adverse impacts this may have on Oahu Sugar Company and other agricultural activities.

134. Petitioner has filed a request with the City Department of Finance to cancel county irrigation easements that currently cross the Property. The irrigation easements are no longer used.

Sewage Treatment and Disposal

135. Petitioner estimates that approximately 15,000 gallons per day of wastewater will be discharged from clubhouse operations.

136. Wastewater from the existing Village Park Subdivision is collected by a network of pipes and is conveyed through 12-inch and 18-inch trunk lines to the Kunia Pump Station, Waipahu Pump Station and into the Honouliuli Wastewater Treatment Plant.

137. The new system that will service the Property will connect to either the existing Village Park Subdivision or the Royal Kunia Phase I project.

138. The City Department of Public Works has indicated that the Waipahu Wastewater Pump Station will have to be expanded before the clubhouse can be connected. The Department of Public Works has programmed funds in the Fiscal Year 1990 Capital Improvements Budget and construction funds are tentatively scheduled for fiscal year 1992 for the expansion of this facility.

139. The Department of Public Works has indicated that connection may not be allowed to the Honouliuli Wastewater Treatment Plant until the plant is expanded to 38 million gallons per day. If the Environmental Protection Agency is agreeable, connections to the Honouliuli Wastewater Treatment Plant may be allowed before the expansion of the plant is completed.

Solid Waste

140. The proposed project will generate approximately 200 pounds of solid waste per day.

141. Collection of solid waste will be provided by both government and private work forces.

142. Refuse will be taken to the Waipahu incinerator and Waimanalo Gulch landfill.

143. The implementation of the City's garbage to energy recovery project at Barber's Point and the landfill at Waimanalo Gulch should be able to accommodate the proposed project and handle the future growth in Leeward Oahu.

Drainage and Grading

144. The proposed project site slopes southeasterly at a gradient of four to seven percent towards Waikele Gulch and Waikele Stream. The preliminary drainage report that was approved by the Department of Public Works indicates that this area presently discharges storm water towards Waikele Stream.

145. The project site will be graded so that no storm water will be discharged into Waikele Stream.

146. The flow levels and water quantity of Waikele Stream will not be altered.

147. It is estimated that approximately 1,200 cubic feet per second of storm runoff will be discharged onto the Property. This storm runoff will be used for golf course irrigation.

148. The grading at the proposed project site will be performed in accordance with Chapter 23, Grading, Soil Erosion and Sediment Control, of the Revised Ordinances of Honolulu, 1978, as amended. Erosion control measures will be implemented as outlined in the City Grading Ordinance. Petitioner will comply with City ordinances to minimize any potential environmental impacts from grading operation.

Electrical Power and Communications

149. Electric and telephone facilities will be extended from the Village Park Subdivision and Royal Kunia Phase I onto the Property.

150. The Hawaiian Electric Company has an existing 46 kv line near the southern tip of the Property and has indicated that its facilities will not impact the proposed project.

151. The Hawaiian Telephone Company will require a 6,000-square foot parcel in Royal Kunia Phase I for the installation of a remote switching unit. Existing aerial and direct buried cable facilities along Kunia Road will be relocated underground.

Roadway and Highway Services and Facilities

152. The existing Village Park Subdivision is served by Kupuna Loop, which connects to Kunia Road at two signalized intersections. Kunia Road varies in width from two lanes along the frontage and widens to five lanes at the southern end of Village Park. Kunia Road forms the Kunia Interchange with the

H-1 Freeway. Beyond the interchange, the roadway continues to the south as the four-lane Fort Weaver Road.

153. According to Petitioner's traffic consultant, the existing traffic conditions at the intersections of Kupuna Loop and Kunia Road are very good. Peak hour conditions at these intersections currently run at a Level of Service B, as defined by the Highway Capacity Manual. Traffic volumes are fairly low along the highway, with peak hour volumes at approximately seventy percent of capacities.

154. The proposed golf course is anticipated to generate approximately 790 vehicle trips with 395 vehicles entering the golf course and 395 vehicles exiting the golf course on an average weekday. This compares with a total trip generation of the entire Royal Kunia Phase I development of about 25,000 vehicles per day. The vehicle trips that are generated by the proposed golf course constitute approximately three percent of the total number of trips that would be generated by the entire Royal Kunia Phase I development.

155. On Saturdays and Sundays, the peak hour vehicle trips are expected to be 104 and 94, respectively.

156. The traffic impacts from the proposed golf course will be mitigated by implementing the following roadway improvements that are being recommended to meet the peak hour traffic for the entire Phase I development: construct a four lane collector road; signalize the intersection with Kunia Road

when warranted; widen Kunia Road to four lanes; and widen the existing westbound off-ramp from H-1 to northbound Kunia Road.

157. It is anticipated that if the recommended roadway improvements are implemented, the Level of Service at the three signalized intersections along Kunia Road would be C or better at full development of the entire Royal Kunia Phase I project.

158. The proposed project would have a very small impact on regional traffic. Traffic from the entire Royal Kunia Phase I development, would constitute only about 10 percent of the entire regional traffic. The traffic from the proposed golf course is only a small percentage of the traffic from the entire development, and the flow of traffic from the proposed golf course runs opposite to that of the normal commuting traffic during peak hours.

159. The roadway and highway improvements that will be necessary for the Royal Kunia Phase I development will be adequate to accommodate the traffic generated by the proposed golf course.

Police and Fire Services

160. The proposed project will be serviced by the Pearl City Police Station which currently serves Waipahu, Ewa and Waianae, the latter of which has a substation. The proposed project is not expected to be a major user of police protection, given its extremely low density and recreational nature.

161. The primary fire protection for the proposed project area is provided by the Waipahu Fire Station located in the Waipahu Industrial Park. Secondary service is provided by the Pearl City, Waiiau and Makakilo Fire Stations. A new fire station to house an engine company will be constructed by the Fire Department in the Kunia area. This will upgrade manpower and apparatus for the area.

Schools

162. The schools in the vicinity of the project site include Hoaeae Elementary School, Waipahu Intermediate School and Waipahu High School. Royal Kunia Phase I has reserved a school site. The proposed project will not impact schools in the area.

Parks

163. The Waipahu Neighborhood Board area currently has the following types and numbers of parks: one regional, one district, two community, four neighborhood and one mini park.

164. Village Park currently has the Hoaeae Park within its boundaries and Royal Kunia Phase I includes 9.5 acres for public parks and 12.1 acres for a private recreation area.

165. Petitioner believes the proposed project will not negatively impact parks in the area.

Health Care Facilities

166. There are five health facilities that are available to serve the proposed project - Kahi Mohala, a psychiatric treatment facility nearest the proposed project

site; St. Francis Medical Center - West, soon to be a full service medical center with a five story hospital being added, located at the intersection of Farrington Highway and Fort Weaver Road; Pali Momi Medical Center, near the Pearl Ridge Shopping Center; Kaiser Hospital in Moanalua, and Punawai Clinic in Waipahu.

167. The Waipahu Fire Station would respond to emergencies at the proposed site, and backup would be provided by City ambulance in Aiea.

168. Facility visitors and users can be adequately served by existing and proposed medical facilities. The proposed project is not expected to significantly impact these services and facilities.

SOCIAL AND ECONOMIC CONSIDERATION

169. To process the sugar from this site, Oahu Sugar Company was estimated to provide a total of six field and mill jobs. The development of the proposed golf course is not expected to displace the six sugar workers since some of the workers may still be required to run field and mill equipment. Further, the company's policy has been to reduce employment through attrition.

170. The proposed golf course is expected to increase employment in the area by an estimated 50 jobs as follows: 15 jobs for grounds and maintenance needs; 15 jobs for the pro shop; 20 jobs for the snack bar and restaurant.

171. Current State revenues from sugar grown on the Property are minimal since sugar is exempt from excise taxes. Current annual property taxes paid to the City and County of Honolulu and based on the agricultural value of the land is \$1,200.

172. The State would derive an estimated \$640,000 in general excise taxes from construction expenditures for the proposed golf course. At full development, general excise tax revenues from golf course operations, the pro shop and the snack bar/restaurant are estimated at \$130,000 per year. Additional taxes and other revenues would accrue to the State from corporate income taxes, taxes paid by suppliers and miscellaneous taxes and user fees. Employees would also provide State revenues through income taxes.

173. Development of the Property would trigger rollback taxes which are estimated at \$150,000. Upon full development the property assessment would amount to approximately \$16,000,000. Property taxes on the golf course would exceed \$140,000 per year. Additional revenues to the City would be derived from the increased value of homes sited along the golf course, revenues from City taxes paid by golf course employees, miscellaneous taxes, and user fees.

INCREMENTAL DISTRICTING

174. Petitioner proposes to develop the proposed project over a two year period, beginning in 1990. Petitioner

anticipates that the golf course and clubhouse will be operational by the end of 1991 or the beginning of 1992.

CONFORMANCE TO STATE LAND USE POLICIES AND CONTROLS

Hawaii State Plan

175. The proposed reclassification conforms with the objectives and policies set forth in the Hawaii State Plan, Chapter 226, Hawaii Revised Statutes, as follows:

Sec. 226-23(b) "Provide a wide range of activities and facilities to fulfill the cultural, artistic, and recreational needs of all diverse and special groups effectively and efficiently."

The proposed project will help to fulfill some of the recreational needs of residents and visitors on Oahu.

Sec. 226-104(a)(3) "Ensure that adequate support services and facilities are provided to accommodate the desired distribution of future growth throughout the State."

The proposed golf course is an integral part of the Royal Kunia residential community. It will provide some of the recreational support facilities for the residents in the community and for others on Oahu.

Sec. 226-104(b)(6) "Seek participation from the private sector for the cost of building infrastructure and utilities, and maintaining open spaces."

The proposed project will be privately funded and will contribute to the open spaces and recreational amenities in this region.

Sec. 226-7(1) "Continued viability in Hawaii's sugar and pineapple industries."

Sec. 226-103(c)(1) "Provide adequate agricultural land to support the economic viability of the sugar and pineapple industries."

The Petition states that the size and location of the project site are not crucial to the operation of Oahu Sugar Company. The Property represents one percent of the total acreage under cultivation by Oahu Sugar Company and is located in a region which already contains extensive sugar lands. The Property's proximity to and contiguity with urban uses may eventually hamper continued agricultural use. Most of the site has already been fallowed, and Oahu Sugar Company will eventually fallow the remaining acreage under cultivation because of problems associated with farming this narrow strip of land that is directly adjacent to and upwind from the homes that will be constructed in Royal Kunia Phase I. The reclassification, nonetheless, will result in the loss of this productive area for agricultural purposes.

Sec. 226-7(2) "Continued growth and development of diversified agriculture throughout the State."

According to the Petition, the proposed project is too small to affect the growth of diversified agriculture. Diversified farming would also generate incompatibility problems similar to large-scale agriculture.

Sec. 226-103(a)(8) "Provide public incentives and encourage private initiative to develop and attract industries which promise long-term growth potentials and which have the following characteristics:
(A) An industry that can take advantage

of Hawaii's unique location and available physical and human resources;
(B) A clean industry that would have minimal adverse effects on Hawaii's environment."

The proposed golf course provides greenery and open space and supports the visual and aesthetic qualities of the natural landscape. The course supports the recreational needs of Hawaii's resident and visitor golfers by providing a new course for play and reducing the demands on other Oahu courses.

Sec. 226-16 "Reclaim and encourage the productive use of runoff water and waste water discharges."

The drainage plan for the proposed golf course proposes to redirect runoff away from Waikele Gulch, and to retain storm runoff which will be used for golf course irrigation.

Sec. 226-23 "Ensure opportunities for everyone to use and enjoy Hawaii's recreational resources."

The golf courses that are available to resident golfers are extremely busy and there is a high demand for additional playing time. The proposed golf course is intended primarily to meet resident golf demand.

Sec. 226-26 "Assurance of public safety and adequate protection of life and property for all people."

The proposed golf course serves as a buffer between nearby residential uses and the Naval Magazine Lualualei Waikele branch station facilities. No residential units will be constructed on the Property.

State Functional Plans

176. The proposed project conforms with implementing actions in the State Recreation Plan:

Policy A(2) "Ensure that intended uses for a site respect community values and are compatible with the area's physical resources and recreation potential."

Policy A(3) "Emphasize the scenic and open space qualities of physical resources and recreation areas."

The proposed golf course incorporates the Property's natural features in its drainage and grading improvements, and general course layout. The project will serve as valuable, permanent open space for nearby residents in the Village Park and the Royal Kunia Phase I communities.

Conformance with Urban District Standards

177. The proposed reclassification conforms to the Commission Rules for determining Urban District Standards as follows:

A. The proposed project conforms to the policies of the Hawaii State Plan and the applicable functional plans.

B. The Property is located near several existing employment centers, including Pearl Harbor and the Honolulu Airport, Schofield and Wahiawa. In addition, the site is conveniently located near Ewa, the designated secondary urban center. The project site abuts the urban areas of the already-approved Royal Kunia Phase I development and the Village Park subdivision, which contain commercial and industrial areas which will generate new employment

opportunities. The proposed project will also generate new employment opportunities.

C. Petitioner has presented evidence in support of the economic feasibility of the development of the Property.

D. Basic services such as major transportation systems, police and fire protection, and medical services already exist in proximity to the project. Services such as water, sanitation and roadway improvements will be provided by Petitioner. The proposed project will not impact nearby schools and parks.

E. The Property is highly suitable for a golf course and is reasonably free from the danger of floods, tsunami, unstable soil conditions and other natural hazards.

F. The Property is contiguous with the urban areas of the already-approved Royal Kunia Phase I and Village Park residential subdivision. The site is already appropriately designated Park (Golf Course) on the City and County of Honolulu's Central Oahu Development Plan.

G. The Property does not contain any rare or endangered flora or fauna. The conversion of the Property from a sugarcane monoculture to a more diversified habitat should have a positive effect on the populations of most bird species found on the Property.

H. There is no evidence of past utilization in the form of structural or midden remains, and no previously-recorded archaeological or historical sites on the Property.

No unusual or unique geological features or scenic landmarks are at or near the Property.

I. No significant State or City expenditures will be required for infrastructure development, facilities or services for the proposed golf course.

J. The proposed golf course will generate long-term jobs and will result in a significant increase in revenues to the State and the City in the form of taxes and user fees.

Conformance to Coastal Zone Policies and Objectives

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

RULING ON STIPULATED AND PROPOSED FINDINGS OF FACT

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

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

CONCLUSIONS OF LAW

Pursuant to Chapter 205 of the Hawaii Revised Statutes, as amended, and the Hawaii Land Use Commission Rules, the Commission finds upon a preponderance of the evidence that the reclassification of the Property, as approximately shown on Exhibit "A" attached hereto and incorporated by reference herein, consisting of approximately 161.1 acres of land situate at Waikele and Hoaeae, Ewa, City and County of Honolulu, Island of Oahu, State of Hawaii, from the Agricultural Land Use District to the Urban Land Use District, subject to the conditions in the Order, is reasonable, non-violative of Section 205-2, Hawaii Revised Statutes, as amended, and is consistent with the Hawaii State Plan as set forth in Chapter 226, Hawaii Revised Statutes, as amended.

ORDER

IT IS HEREBY ORDERED that the Property, consisting of approximately 161.1 acres, being the subject of this Docket No. A89-640 by Halekua Development Corporation, situate at Waikele and Hoaeae, Ewa, City and County of Honolulu, Island of Oahu, State of Hawaii, and identified as Hawaii Tax Map Key Numbers: 9-4-02: 46 and Portion of Parcel 1, and approximately identified on Exhibit "A", attached hereto and incorporated by reference herein, for reclassification from the Agricultural Land Use District to the Urban Land Use District, shall be and is hereby approved subject to the following conditions:

1. No on-site construction activity shall be permitted prior to the Petitioner obtaining approval from the Board of Water Supply and the Commission on Water Resource Management of the Department of Land and Natural Resources for development of its potable water source; and approval of the necessary permits from the Department of Land and Natural Resources for the development of its non-potable water source or the execution of a written agreement evidencing its non-potable water source commitment.

2. Should the water from Waikele Stream be diverted and used for golf course irrigation, Petitioner shall conduct water quality tests to measure levels of fecal coliform in the stream water as recommended by the State Department of Health. If coliform levels surpass the Department of Health's acceptable levels, Petitioner shall disinfect the stream water before using it for irrigation and landscape features in accordance with Department of Health guidelines. In addition, the Petitioner shall separate the irrigation system from all other water lines, both potable and non-potable, to avoid cross-contamination.

3. Petitioner shall establish and maintain a groundwater monitoring plan and program, and shall comply with other requirements for golf course developments, in accordance with requirements of the Department of Health.

4. Petitioner shall participate in the funding and construction of transportation improvements at project access

points and at downstream locations as identified by the State Department of Transportation.

5. Petitioner shall provide drainage improvements for the subject project and shall coordinate off-site improvements with adjoining landowners and developers, and/or other Federal, State, or City agencies.

6. Petitioner shall immediately stop work on the impacted area and contact the State's Historic Sites Section of the Department of Land and Natural Resources should any archaeological resources such as artifacts, shell, bone or charcoal deposits, human burial, rock or coral alignments, pavings or walls be encountered during the project's development.

7. Petitioner shall complete the project in substantial compliance with the representations made before the Land Use Commission. In addition, the Petitioner shall coordinate the development with the Department of the Navy to insure that no residential units are constructed within the Property.

8. Petitioner shall provide a reasonable amount of playing time at reasonable rates for non-member local residents.

9. Petitioner shall extend the existing chain link fence located along portion of the eastern boundary of the Property that is common with the Waikele Branch northward, such that the entire eastern boundary is demarcated by a chain link fence.

10. Petitioner shall clear and maintain the land situated within 20 feet of the eastern boundary of the Property, free of trees and vegetation taller than eight inches high.

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

12. Petitioner shall submit an annual report to the Land Use Commission and the Office of State Planning in connection with the status of the project and Petitioner's progress in complying with the conditions imposed.

13. The Commission may fully or partially release these conditions as to all or any portion of the Property upon timely motion and upon the provision of adequate assurances of satisfaction of these conditions by the Petitioner.

Done at Honolulu, Hawaii, this 9th day of January 1990,
per motion on December 14, 1989.

LAND USE COMMISSION
STATE OF HAWAII

By *Renton L. K. Nip*
RENTON L. K. NIP
Chairman and Commissioner

By *Lawrence F. Chun*
LAWRENCE F. CHUN
Vice Chairman and Commissioner

By *Sharon R. Himeno*
SHARON R. HIMENO
Commissioner

By *Allen K. Hoe*
ALLEN K. HOE
Commissioner

By (conflict)
ALLEN Y. KAJIOKA
Commissioner

By *Eusebio Lapenia, Jr.*
EUSEBIO LAPENIA, JR.
Commissioner

By *James M. Shinno*
JAMES M. SHINNO
Commissioner

By *Elton Wada*
ELTON WADA
Commissioner

By *Frederick P. Whittemore*
FREDERICK P. WHITTEMORE
Commissioner

Filed and effective on
January 9, 1990

Certified by:

Ethel Wada
Executive Officer

A89 - 640 / HALEKUA
DEVELOPMENT CORPORATION

T.M.K. : 9 - 4 - 02 : por. 1 , & 46
HOAEAE - WAIKELE, EWA, OAHU
SCALE : 1" = 2000' ±



APPROVED AREA

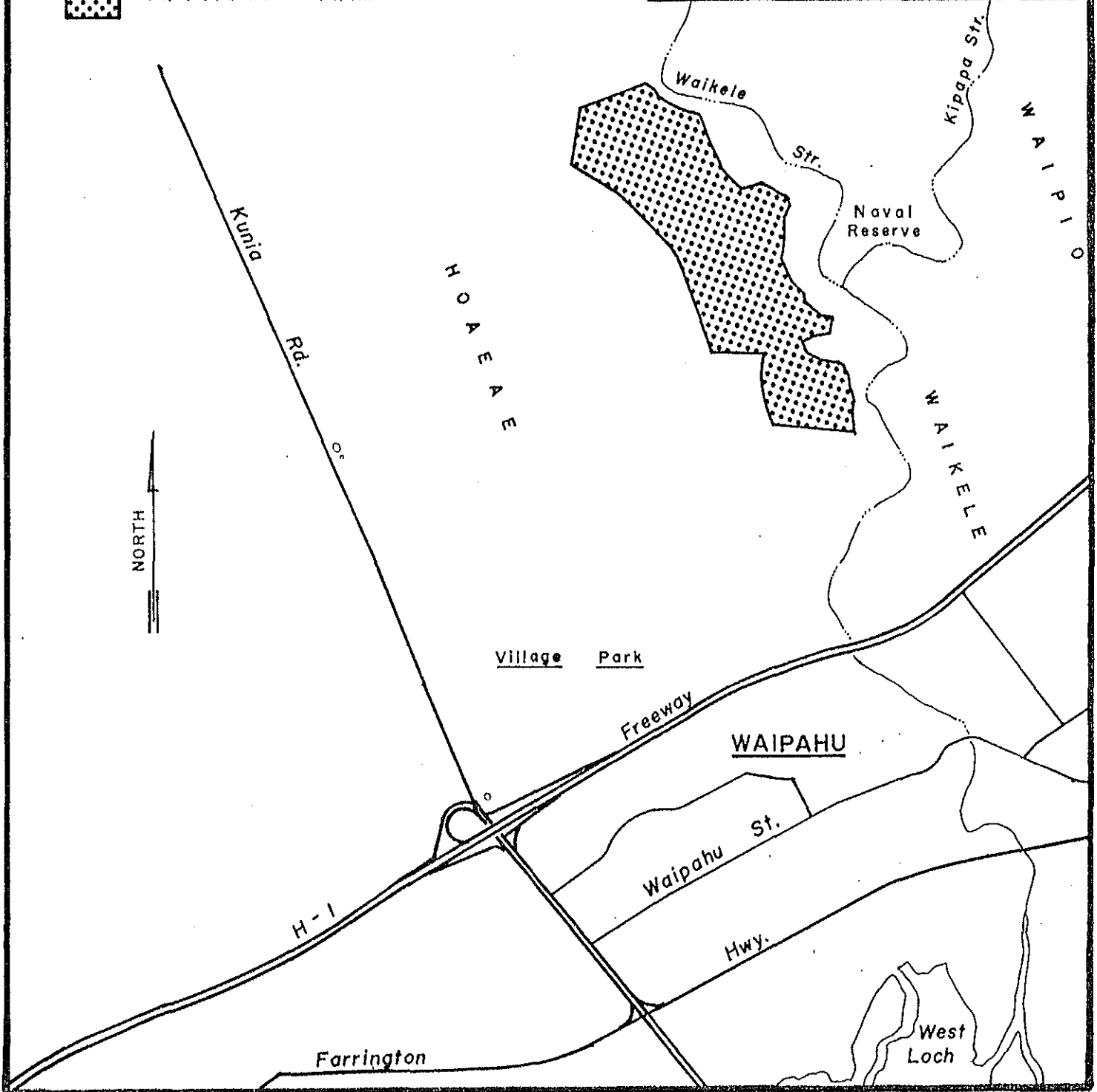
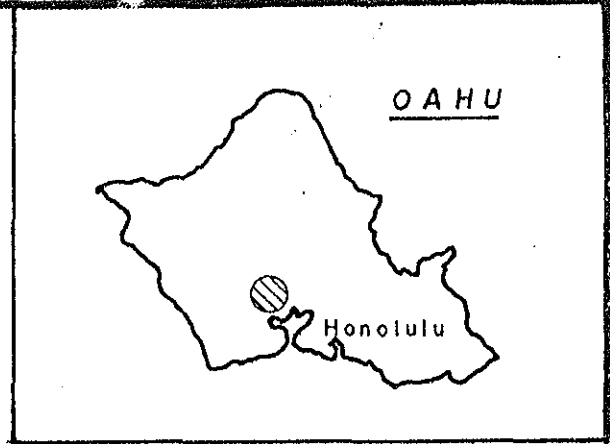


EXHIBIT "A"

BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Petition of)	DOCKET NO. A89-640
HALEKUA DEVELOPMENT CORPORATION)	
To Amend the Agricultural Land)	HALEKUA DEVELOPMENT
Use District Boundary into the)	CORPORATION
Urban Land Use District for)	
Approximately 161.1 Acres at)	
Waikele and Hoaeae, Ewa, City)	
and County of Honolulu, Island)	
of Oahu, State of Hawaii, Tax)	
Map Key No.: 9-4-02: 46 and)	
Portion of 1)	

CERTIFICATE OF SERVICE

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

HAROLD S. MASUMOTO, Director
Office of State Planning
State Capitol, Room 410
Honolulu, Hawaii 96813

CERT. DONALD A. CLEGG, Chief Planning Officer
Department of General Planning
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

CERT. JAN NAOE SULLIVAN, ESQ., Attorney for Petitioner
Takeyama and Sullivan
1188 Bishop Street, Suite 1411
Honolulu, Hawaii 96813

DATED: Honolulu, Hawaii, this 9th day of January 1990.



ESTHER UEDA
Executive Officer