

BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Petition of)
HOUSING FINANCE AND DEVELOPMENT)
CORPORATION, STATE OF HAWAII)
To Amend the Agricultural Land Use)
District Boundary into the Urban)
Land Use District for Approximately)
830 Acres of Land at Honouliuli,)
Ewa, Oahu, State of Hawaii, Tax)
Map Key Numbers: 9-1-16: 23 and)
Portion of 25)

DOCKET NO. A88-622
HOUSING FINANCE AND
DEVELOPMENT CORPORATION,
STATE OF HAWAII

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

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The Housing Finance and Development Corporation, State of Hawaii (hereinafter "Petitioner"), a public body and a body corporate and politic with perpetual existence placed within the Department of Business and Economic Development of the State of Hawaii, filed a Petition on May 16, 1988, pursuant to Chapters 205 and Section 201E-210 of the Hawaii Revised Statutes, as amended ("HRS"), and the Hawaii Land Use Commission Rules, Hawaii Administrative Rules Title 15, Subtitle 3, Chapter 15, as amended ("Commission Rules") to amend the Land Use District Boundary to reclassify approximately 830 acres of land situate at Honouliuli, Ewa, Oahu, City and County of Honolulu, State of Hawaii, Tax Map Key Numbers: 9-1-16: parcel 23 and portion of parcel 25 (hereinafter "Property"), from the Agricultural

District to the Urban District for a residential community, referred to as "Kapolei Village", for the primary purpose of providing affordable housing. The Land Use Commission (hereinafter "Commission"), having heard and examined the testimony and evidence presented during the hearings, the parties' proposed findings of fact, conclusions of law and decision and order, hereby makes the following findings of fact:

FINDINGS OF FACT

PROCEDURAL MATTERS

1. On March 16, 1988, Petitioner filed its Notice of Intent to File a Land Use District Boundary Amendment Petition, Affidavit of Publication and Affidavit of Mailing in accordance with Subchapter 13 of the Commission Rules.

2. The Commission conducted hearings on this Petition on June 21 and 22, 1988 pursuant to a notice published in the Honolulu Star-Bulletin on May 20, 1988.

3. The Commission received two (2) timely Petitions for Intervention. The Department of Navy (hereinafter referred to as "Navy") filed its Petition to Intervene and Notice for Fee Waiver on June 6, 1988. The Standard Oil Company of California, Inc. (hereinafter referred to as "Chevron") filed its Petition for Intervention on June 6, 1988 and Chevron's Supplemental to Petition for Intervention on June 13, 1988. The Commission allowed both the Navy and Chevron to intervene as parties in this proceeding on June 21, 1988. The Commission also waived the filing fee requirement for the Navy.

4. The Commission received three (3) untimely requests to appear as public witnesses. The letters of Teruo Kawata, and Donald P. Hart were accepted into evidence by the Commission on June 21, 1988 and the letter of Elizabeth Ann Stone was accepted into evidence by the Commission on June 28, 1988. The Commission also allowed a letter from Oswald Stender to be accepted into evidence on June 21, 1988.

DESCRIPTION OF THE PROPERTY

5. The Property is located near the center of the Ewa Plain, approximately 22 miles west of Honolulu, directly north of the Naval Air Station Barbers Point (NASBP), south of the Makakilo residential community and directly east of the proposed Kapolei Town Center.

6. The Property is currently in sugarcane cultivation by the Oahu Sugar Company. The Property consists of five (5) cane fields with net field acreage estimated at about 775 acres. All fields are currently planted in cane with harvesting dates ranging from November 1987 to November 1989.

7. The Property is owned by the Estate of James Campbell and is leased to Oahu Sugar Company.

Easements on the Property include: Chevron's 15-foot wide easement for pipeline use runs along the southern boundary of the Property and the Navy's easement for potable water transmission runs from north to south through the Property.

8. The Property ranges in elevation from approximately 50 feet above mean sea level at the southern

boundary rising to approximately 115 feet above mean sea level at the northeast corner adjacent to Farrington Highway.

9. The average slope of the Property is less than one percent.

10. The Property and the surrounding Ewa Plain area experience relatively light rainfall estimated at 20 inches per year.

11. The U.S. Soil Conservation Service Soil Survey classifies soils on the Property as (1) Ewa silty clay (EaB, EmA, EwA) with 0 to 6 percent slopes which is used for sugarcane, truck crops and pasture; (2) Honouliuli clay (HxA, HxB) with 0 to 6 percent slopes which is used for sugarcane, truck crops and pasture; (3) Waialua silty and stony silty clay (WkA, WIB) with 0 to 8 percent slopes which is used for sugarcane, pineapple and pasture; (4) Waipahu silty clay (WzA) with 0 to 2 percent slopes which is used for sugarcane; (5) Molokai silty clay loam (MuC) with 0 to 3 percent slopes which is used for sugarcane, pineapple and pasture; (6) Mamala stony silty clay loam (MnC) with 0 to 12 percent slopes which is used for sugarcane, truck crops and pasture; (7) Kawaihapai stony silty clay loam (KlaB) with 2 to 6 percent slopes which is used for sugarcane, truck crops and pasture; and (8) Coral Outcrop (CR). The majority of crop capability classifications (i.e., general suitability for most kinds of crops) for these soils range from I (soils with few limitations) to IIIe (soils with severe erosion hazard), when irrigated.

12. The Land Study Bureau's Detailed Land Classification designates land within the Property as having Overall Master Productivity ratings and land types of A69i (249 acres), All1 (329 acres), B16i (254 acres) and E115. These designations indicate that most of the Property has good to very good productivity potential for agricultural activities, if irrigated.

13. The Agricultural Lands of Importance to the State of Hawaii (ALISH) system classifies land on the Property as Prime (591 acres), Other Important (209 acres), and Unique. Approximately 30 acres of the Property, which include areas of coral outcrop, are not classified under the ALISH system.

14. The Property is designated within Zone D by the Flood Insurance Rate Map for the City and County of Honolulu prepared under the Federal Insurance Administration Study. Zone D represents areas of undetermined but possible flood hazard.

DESCRIPTION OF THE PROPOSED DEVELOPMENT

15. Petitioner proposes to develop the Property as a master-planned residential community, under and in accordance with Chapter 201E, HRS to be known as Kapolei Village. Approximately 60 percent of the residential units are targeted at groups including the elderly, assisted (very low income and lower income) and gap-group income families. The remaining balance of approximately 40 percent will be sold at market prices.

16. Petitioner's proposed land uses and acreage

allocations for the Property are as follows:

	<u>Acreage</u>	<u>Percent of Site</u>	<u>Average Density</u>	<u>Units</u>	<u>Mix</u>
RESIDENTIAL	508	60%	9.7	4,871	100%
◦ Single-family	449.0		8.3	3,722	76%
◦ Elderly	12.5		35.0	438	9%
◦ Multi-family	18.9		15.0	283	6%
◦ Rental	12.5		20.0	255	5%
◦ Assisted	8.6		20.0	173	4%
RECREATION, PARKS & OPEN SPACE	179	22%			
◦ Golf Course	144				
◦ Golf Clubhouse	3				
◦ Recreation Centers (2)	5				
◦ Neighborhood Park (1)	6				
◦ Community Park (1)	14				
◦ Entry Feature/Buffer	6				
CIVIC	14	2%			
◦ Church & Day Care (4)	9				
◦ Park & Ride	5				
SCHOOLS	52	6%			
◦ Elementary (2)	12				
◦ Intermediate (1)	15				
◦ High (1)	25				
COMMERCIAL	11	1%			
◦ Neighborhood	3				
◦ Other Commercial	8				
ROADWAYS	63	8%			
◦ Major Internal	45				
◦ Ewa Parkway	18				
DRAINAGE	10	1%			
	<u>830</u>	<u>100%</u>			

17. Petitioner has not set selling prices for the residential units. However, Petitioner's emphasis is on affordable housing which targets those families earning 140 percent and below the median income for the Island of Oahu as

established by the U.S. Department of Housing and Urban Development (HUD). Petitioner offered the following suggested range of sales prices for Oahu based on the current HUD's median income of \$36,500 for a family of four:

AFFORDABLE HOME PRICES
 BASED ON INCOME
 Oahu

<u>INCOME GROUP</u>	<u>AFFORDABLE HOME PRICES</u>	
	<u>9% Interest</u>	<u>10% Interest</u>
Low	\$97,100	\$89,000
Low-Moderate	\$97,100 - \$152,500	\$89,000 - \$139,800
Moderate	\$152,500 - \$180,200	\$139,800 - \$165,300

These estimates of affordable home prices are based on the following assumptions:

1. A 10% down payment
2. A 30-year, fixed rate mortgage loan
3. A customer trust fund of \$100 per month (for real property taxes, insurance, maintenance, and other reserves).
4. A 3:1 qualifying ratio. That is, income must be 3 times the total monthly payment.

18. Petitioner proposes to situate the market residential units along golf course fairways to maximize value while the multi-family residential units will be located adjacent to major public facilities such as schools, shopping

areas, recreation centers, churches and day care facilities. Additionally, all rental units will be located adjacent to major public facilities and readily accessible to public transportation.

19. Excess revenues from the sale of market units may be used to reduce the cost of affordable residential units.

20. The proposed golf course will be primarily for drainage control and will be located within the NASBP Accident Potential II Zone. The existing Navy potable water transmission pipeline within the golf course area will be rerouted before golf course construction.

21. Petitioner proposes to develop Kapolei Village over a 15-year period starting at the northern area and progressing south towards NASBP. Six increments are proposed with each increment containing a range of housing types consistent with the findings of Petitioner's Market Study. Petitioner projects construction to start in late 1988 with the first home available in late 1989.

DEVELOPMENT COST AND PROJECT FINANCING

22. Petitioner estimates the total cost for the development of Kapolei Village in 1988 dollars to be \$534,100,000 including land acquisition cost, on- and off-site improvements, construction costs and administrative expenses. The preliminary budget for Kapolei Village is as follows:

Land acquisition.....	\$ 16,100,000
Off-site, backbone, infrastructure, and golf course improvements.....	86,000,000
On-site improvements.....	77,000,000
Housing construction.....	266,000,000
Sales, general and administrative.....	25,000,000
Other.....	<u>64,000,000</u>
TOTAL.....	\$534,100,000

23. Petitioner proposes to fund the proposed Kapolei Village by using the following State resources: (1) Land acquisition will be funded through a general fund appropriation of \$61 million, of which \$16.1 million will be used to purchase the Property (The Department of Land and Natural Resources is the expending agency); (2) The \$120 million Homes Revolving Fund will support the development of off-site and on-site infrastructure; (3) The Dwelling Unit Revolving Fund (DURF), as well as the Homes Revolving Fund will be used for the construction of dwelling units; (4) Tax exempt revenue bonds may be issued to finance the development of rental housing projects; and (5) The Rental Assistance Revolving Fund may be utilized to subsidize rents for qualified families in the newly constructed rental projects. Additionally, federal funds, if available will be used to develop assisted housing projects.

NEED FOR THE PROPOSED DEVELOPMENT

Residential Demand

24. Petitioner's market analysis estimates total population for Oahu to increase from 833,000 in 1987 to 954,000 by 2005, with a potential corresponding household increase of almost 59,000 from the current 280,000 households. Petitioner further estimates that with average annual demolition replacements of 600+ units and preferred vacancy factors of 5% for new units, the average annual housing need for Oahu for new housing is estimated at 4,000 units.

Based on projections by the City and County of Honolulu Department of General Planning, Ewa should account for 30-35% of the total Oahu household growth. Assuming that the demand for housing in Ewa is similar to Oahu as a whole, the annual demand by price range for 1987-2007 for Ewa is estimated at 1,200 - 1,400 units as follows:

EWA ANNUAL NEW HOUSING DEMAND BY PRICE RANGE
AVERAGE 1987-2007

<u>Income Levels</u>	<u>Approximate Home Prices</u>	<u>Percent House-Holds</u>	<u>20-Year New Housing</u>	<u>Annual New Housing</u>
Under \$27,300	Rental	47%	11,280-13,160	564- 658
\$27,300-40,920	\$79,500-125,500	32	7,680- 8,960	384- 448
\$40,920-55,575	\$125,500-175,000	15	3,600- 4,200	180- 210
\$55,575+	\$175,000+	6	1,440- 1,680	72- 84
		TOTAL	<u>24,000-28,000</u>	<u>1,200-1,400</u>

25. Petitioner estimates that over the next 20+ years, approximately 47,000 housing units are proposed for development

in Ewa and Central Oahu. This projected supply consists of 30,461 units for Ewa and 16,516 units for Central Oahu or an average of 2,350+ units per year, consisting of 1,525+ units for Ewa and 825+ units for Central Oahu.

26. Petitioner believes the projected supply should be adjusted as follows:

- ° Inclusion of Waikele and Village expansion, which are located in Central Oahu, but adjacent to Ewa.
- ° Exclusion of Ko'Oolina, due to the luxury nature of the development.
- ° Exclusion of Ewa Town Center, due to the housing component being a long-range project that may not start in the time frame being considered.

These adjustments result in a revised projection for the Ewa area of 28,000+ units over the next 20+ years or an average annual supply of 1,400+ units, which approximates the average expected demand of 1,200 - 1,400 units per year.

27. However, when the market is segmented by price, the supply of lower priced dwelling units does not appear to be adequate. Petitioner estimates there may be an annual shortage of 481+ lower priced units in Ewa. This projected shortage consists of 198+ single-family detached units and 283+ multi-family units. The following table presents these potential differences:

POTENTIAL DIFFERENCES IN PROPOSED SUPPLY AND DEMAND FOR NEW HOUSING UNITS PRICED AT UNDER \$125,500

	<u>Proposed Supply</u>	<u>Demand</u>	<u>Potential Difference</u>
Single Family	250	448	- 198
Multi-Family	<u>375</u>	<u>658</u>	- <u>283</u>
TOTAL	<u>625</u>	<u>1,106</u>	- <u>481</u>

Over a 20-year period, these differences equate to potential shortages of 4,000+ single-family and 5,600+ multi-family dwelling units.

28. The proposed supply of single-family detached units, priced under \$125,500, is summarized below:

<u>Project</u>	<u>Proposed Single-Family Detached Units Priced Under \$125,500</u>
Kapolei Village	2,200
Waikele	1,030
Gentry - Ewa	900
West Loch Estates	750
Village Park Expansion	<u>100</u>
TOTAL	<u>4,980</u>

This proposed distribution, which may be understated based on recent market activity, highlights the significant role of Kapolei Village in providing lower priced, single-family detached housing in Ewa.

Based on the estimated supply of proposed housing, Kapolei Village will be the largest supplier of lower priced single-family detached housing in Ewa.

STATE AND COUNTY PLANS AND PROGRAMS

29. The Property is designated within an Agricultural District as reflected on Land Use Commission Official Map Number O-6 Ewa.

30. The City and County of Honolulu's General Plan indicates that the "secondary urban center" should be located in the West Beach-Makakilo area to relieve developmental pressures in the urban-fringe areas.

31. The majority of the Property is designated as Agriculture on the Ewa Development Plan Land Use Map. Other Development Plan designations of the Property include Commercial and Public Facility, located along Barbers Point Access Road.

32. The Property is currently zoned for agricultural use (AG-1 Restricted).

33. The Property is not located within the City and County of Honolulu Special Management Area.

IMPACTS UPON RESOURCES OF THE AREA

Agricultural Resources

34. Oahu Sugar Company (OSCO) currently manages approximately 14,200 acres of plantation land covering portions of Central Oahu, north of Pearl Harbor, and portions of the Ewa Plain including the Property, west of Pearl Harbor. Waimanalo Road, a major cane haul road, serves the majority of cane fields west of Fort Weaver Road. Fields west of the Property which continue in production will require access over Waimanalo Road through the Property for harvesting operations.

Petitioner's land leases from the Estate of James Campbell allow for partial withdrawal of lands for urbanization.

35. Petitioner believes the development of Kapolei Village would not adversely affect the economic viability of OSCO, nor would it require layoffs of sugar workers. Reductions in employment would occur through retirement and voluntary movement to other jobs. Over the long term, OSCO could accommodate a major reduction in acreage and maintain economies of scale by operating just one mill, rather than two.

36. The development of Kapolei Village on sugarcane acreage would eliminate the possibility of using these lands for diversified agriculture. However, Petitioner believes it is doubtful that this would adversely affect the growth of diversified agriculture in Hawaii because: (1) an extensive amount of prime-agricultural land and water have been freed from sugar and pineapple production because of past mill closings and reductions in operations; (2) a possibility that additional land and water will be freed from sugar production given the outlook for low sugar prices; and (3) compared to the available supply a very small amount of land and water is required to grow crops to achieve food and animal-feed self-sufficiency, and to increase exports.

37. There is potential for remaining sugarcane fields on the Ewa Plain that have not been urbanized to continue cane production after agricultural leases terminate. These remaining

fields will likely continue using Waimanalo Road for cane hauling through the Property or require an alternate route to transport harvest to the Waipahu Sugar Mill.

38. The State Department of Agriculture recommends that the proposed Kapolei Village be developed in phases to minimize adverse impacts to Oahu Sugar Company and to maintain Waimanalo Road to 1995.

Ground Water Resources

39. The Property is located within the Board of Water Supply's (BWS) Ewa-Waianae District and is served by an agricultural water system maintained by the Oahu Sugar Company.

40. Existing BWS infrastructure in the area includes: a 30-inch water main running along the northern side of Farrington Highway; the Makakilo No. 1 Booster, north of the project site, supplying water to the Makakilo residential community; and a 24-inch water line (withdrawal capacity: 5 million gallons per day) maintained by the Navy, providing potable water needs of NASBP.

41. The Ewa area lies within the Pearl Harbor Ground Water Control Area as designated by the Department of Land and Natural Resources, State of Hawaii (DLNR). Current groundwater pumpage has nearly reached the aquifer's sustainable yield.

42. According to Petitioner, the Estate of James Campbell has verbally agreed to provide 175,000 gallons of water per day to Kapolei Village at no cost. The Board of Water

Supply has committed 75,000 gallons of water per day for the first phase of the project. Additionally, water may be available from the Estate of James Campbell based on the Ewa (Regional) Water Master Plan.

43. Major proposed water facilities in the area include a second 30-inch water main paralleling the existing main along Farrington Highway and additional storage reservoirs located at an approximate elevation of 220 feet above sea level, located north of the H-1 Freeway.

44. Petitioner proposes to use non-potable water to fulfill the irrigation requirements of Kapolei Village. An application for water allocation approval is now pending before the DLNR. The sustainable yield for brackish water and sea water withdrawals for the coastal caprock sub-area has not yet been determined.

45. The Property is not a significant recharge area for the Pearl Harbor aquifer.

Flora and Fauna

46. Petitioner's Final Environmental Impact Statement (February 1988), indicates that the entire region has been drastically disturbed for more than 100 years and there is no semblance of any endemic ecosystems in the vicinity of the Property. None of the native flora found on the Property is considered rare, threatened or endangered.

According to Petitioner's wildlife study, there are no endemic forest birds on the Property and all of the mammals, land reptiles, and amphibians that occur are introduced.

Archaeological/Historical Resources

47. No potentially significant archaeological sites or features of any kind were encountered during Petitioner's reconnaissance survey of the Property. Petitioner believes that no further archaeological work of any kind is necessary, and recommends that full archaeological work clearance for the project area be granted. However, if previously unknown or unexpected subsurface cultural features or deposits are encountered, Petitioner will notify the Historic Sites office of the DLNR.

Scenic, Recreational, Cultural Resources

48. The predominant view from the site is of the Waianae Mountain Range located approximately three miles to the north. Other views include the primary urban center to the east; the Pacific Ocean to the south; and Puu Kapolei directly to the west.

A shortage of recreational facilities exists in the Makakilo area which results in the utilization of Ewa Beach facilities for many sports activities.

Air Installations Compatible Use Zone (AICUZ)

49. The U.S. Navy has prepared an Air Installations Compatible Use Zone (AICUZ) Study (1984) for NASBP. The NASBP

AICUZ identifies significant noise contours and Accident Potential Zones (APZ) for areas under aircraft flight paths which have a higher than normal potential for aircraft accidents.

50. There are three Accident Potential Zones defined in the Navy's AICUZ of 1984.

The Clear Zone, the first 3000 feet at the end of the runway, represents the area of highest potential hazards and most land uses are precluded from this area.

The APZ I, a 5000 foot zone beyond the Clear Zone, defines an area of lesser hazard whereby all forms of residential uses are considered incompatible.

The APZ II, a 7000 foot zone beyond APZ I, is considered less hazardous than APZ I but still possessing a level of risk sufficient to require density and use restrictions.

51. Approximately 108 acres of the Property are located within APZ II. An additional one-third acre of the Property at the extreme southeast corner lies within the APZ I zone. None of the Property lies within the Clear Zone.

52. Petitioner proposes to locate the golf course within the portion of the Property designated as APZ I and APZ II.

53. The Navy indicates the 1984 NASBP AICUZ projected 65 Ldn contour over the Property is no longer supported and provided a draft Ldn contour map (Navy's Exhibit 6) which reflects that no part of the Property is subject to 65 Ldn or

greater. The Navy pointed out that its draft noise contour map does not consider all future operations and is subject to change.

54. The Navy expressed concerns over the proximity of the proposed development to the NASBP. According to the Navy, noise generated from this installation and its aircraft operations will likely result in numerous noise complaints which may inhibit NASBP's operations.

55. Presently, aircraft operating at NASBP from parallel runways 04 right/22 left and 04 left/22 right overfly a portion of the Property.

In addition, maintenance on aircraft engines, approximately one-quarter mile from the makai boundary of the Property, is also a potential source of noise during Kona wind conditions.

56. Two noise studies, one prepared by Petitioner and one by the Navy, presented conflicting evidence on actual and projected noise impacts emanating from NASBP. Apparently each study utilized different standards or procedures which resulted in the increased or decreased apparent or projected noise impact. In addition, various assumptions are made on aircraft operations which are not utilized consistently. The potential for greater noise impacts is probable in the event military operations at NASBP increase. The Commander in Chief of the Pacific Fleet anticipates that NASBP will never be quieter than it is currently.

Other Noise Impacts

57. Canehaul trucks, which travel across the Property and along existing canehaul roads in the area, are the dominant source of noise during the harvesting season which occurs every 18 months. During the peak harvesting day of a 24-hour operation, canehaul truck noise levels could exceed acceptable levels.

58. Noise impacts generated from future traffic within Kapolei Village are expected to be relatively minor as development occurs. To effectively minimize noise impacts generated from automobiles, Petitioner proposes to construct perimeter walls around the project and sound attenuation barriers such as walls, earth berms and plant vegetation between housing units and roadways to mitigate traffic noise.

Air Quality

59. The principal source of short term air quality impacts will be from construction activities. Construction vehicle activity will increase concentrations of pollutants in the vicinity of the Property. As the project is developed, increased vehicular traffic resulting from the development will be a major contributor to air pollutants. Petitioner will comply with Department of Health regulations to mitigate short term impacts from construction activities (e.g., fugitive dust). In addition, Petitioner will construct perimeter wall and barriers such as walls, earth berms and vegetation plant to alleviate air quality impacts.

60. Petitioner proposes to mitigate long term impacts to air quality resulting from increased vehicular traffic by improving road facilities in the vicinity of the project, and implementing a ride share program to reduce travel demands.

61. Petitioner anticipates additional adverse impacts on air quality from cane burning operations of nearby sugarcane fields. Petitioner proposes to inform prospective residents of this potential health hazard.

Water Quality

62. Petitioner proposes to discharge all domestic wastewater into the City and County of Honolulu sewer system. Surface water runoff will be directed into the proposed municipal golf course drainage system for necessary detention and settlement. The urbanization of the Property poses no known risk of contamination to groundwater or coastal waters.

63. The Navy raised concerns that the proposed project may adversely impact its potable water source located north of the Property. Currently, this water source produces potable water at the maximum allowable chloride levels. However, it has not been shown that the development of the Property will adversely affect the Navy's water source.

ADEQUACY OF PUBLIC SERVICES AND FACILITIES

Highway and Roadway Facilities

64. The Property is served by Farrington Highway, a two-lane highway along the Property's northern boundary, and

NASBP Access road, a two-lane highway along the western boundary of the site. Further north of the Property is the H-1 Freeway allowing access via the Makakilo Interchange.

Bus service is available to the vicinity of Makakilo, Ewa and Ewa Beach.

65. Petitioner proposes to implement off-site improvements by upgrading the Makakilo Interchange on the H-1 Freeway, and widening and signalizing Farrington Highway and Fort Barrette Road. Approximately 5,250 lineal feet of Farrington Highway and 6,200 lineal feet of Fort Barrette Road will be widened.

66. Petitioner will seek funding for the necessary highway improvements from various federal, state and county agencies and will coordinate improvements with adjoining landowners.

67. Petitioner anticipates that the above improvements and the implementation of various programs to reduce transportation impacts such as ride sharing, high occupancy lanes, and public transportation will mitigate adverse traffic impacts as a result of the development of Kapolei Village.

Water Service

68. The existing water system consists of a 30-inch transmission line on Farrington Highway which provides water to existing developments in the Ewa area as well as to the Waianae-Makaha area. The water source is comprised of wells

owned by the Estate of James Campbell and the Board of Water Supply.

69. Petitioner projects the total average water demand for Kapolei Village will be approximately 2.8 million gallons per day (MGD). The maximum daily demand will be 4.2 MGD and the peak hour demand will be 8.4 MGD.

Petitioner proposes on-site water improvements to include water lines and fire hydrants on the main streets. These improvements are comprised of 16- and 12-inch water lines connected to the 30-inch transmission line on Farrington Highway and to the proposed transmission line on Fort Barrette Road.

Petitioner states it will be responsible for funding all required water system improvements.

70. Petitioner has obtained tentative water commitment for the Increment I (150 units). However, water commitment for the remainder of the development has not been obtained. Water from the Board of Water Supply will be made available on a first come - first served basis, provided that there is sufficient source availability at the time water is actually required. In addition, water from the Estate of James Campbell will be made available based on an Ewa (Regional) Water Master Plan.

Wastewater Disposal

71. The existing sewerage system includes the Makakilo Sewer Interceptor, the Ko'Oolina Interceptor and the Honouliuli Wastewater Treatment Plant (WWTP). The Makakilo Interceptor

conveys the sewage produced from the Makakilo development to the Honouliuli WWTP via Fort Barrette Road and Renton Road.

Petitioner projects the average daily sewage flow generated by the project will be 2.2 MGD. The peak flow will be 6.6 MGD.

72. Petitioner proposes that the sewage generated by the project be conveyed via the Ko'Olina Sewer Interceptor to the Honouliuli WWTP for treatment and disposal. The proposed off-site improvements include upgrading a portion of the Ko'Olina Sewer Interceptor Increment 2 to accommodate the flows from Kapolei Village.

73. Petitioner also proposes that the Ko'Olina Sewer Interceptor Increment 1 be upgraded to the east boundary of Kapolei Village. This upgrade is required to accommodate the additional flows from the proposed Kapolei Town Center development and is not part of the Kapolei Village off-site improvements.

Drainage

74. Petitioner states that drainage on the Property will be managed by a street drainage system consisting of underground drain lines, drain manholes, and intake boxes. Runoff from the system will be discharged into the proposed golf course which will provide for detention to retain the majority of surface runoff. Excess water will be channeled to an open coral pit location on NASBP.

75. Petitioner proposes to improve the off-site drainage system by upgrading the drainage swale north of

Farrington Highway to prevent overtopping of Farrington Highway during a 100-year rainstorm.

Petitioner states it will be responsible for funding all required drainage improvements.

76. The Navy has expressed concern over the use of the coral pit which is located on Navy property makai of Kapolei Village, for drainage purposes. The Navy is specifically concerned that the coral pit may not be adequate to accommodate large storm flows and that Petitioner's proposed drainage system may increase the amount of flooding that may occur on Navy property.

Solid Waste Disposal

77. Currently, solid waste for the region is disposed of at the Palailai and Waianae Landfills. Both of these landfill sites are expected to close in mid-1988 and are not expected to provide refuse disposal services for the proposed Kapolei Village. However, a new landfill site is currently under construction at Waimanalo Gulch and is expected to open as the other two landfill sites close. Additionally, a Garbage-to-Energy H-POWER facility, located in the James Campbell Industrial Park is projected to become operational in late 1990.

Schools

78. The following elementary schools are within the vicinity of the project area: Barbers Point, Makakilo,

Maukalani, and Ewa Beach. In addition, Ilima Intermediate School, and Campbell High School also serve the project and surrounding area.

Petitioner proposes to provide school sites to accommodate additional school facilities.

Police and Fire Protection

79. The Honolulu Police Department's Pearl City substation is expected to be the primary source of service to the project. The adequacy of police protection in the future is dependent upon the rate of development in Ewa and the availability of funding for sufficient personnel, equipment and communications.

80. Fire protection for Kapolei Village is considered adequate. Primary fire protection for the project will come from the Makakilo Fire Station. Additionally, the Barbers Point Naval Air Station fire company is available to assist the Honolulu Fire Department under a mutual aid agreement. New facilities are currently planned for the Ewa district.

Electricity and Telephone Service

81. Electrical power for the project site and vicinity is provided by the Hawaiian Electric Company (HECO). Overhead lines (46 KV) lie within the 100-foot right-of-way south of the project site paralleling the NASBP boundary. Other 46 KV overhead lines run along NASBP Access Road and Farrington Highway.

ECONOMIC/SOCIAL IMPACTS

Impacts on Employment (Direct or Indirect)

82. The City and County of Honolulu projects the Ewa area's population will increase from approximately 36,000 in 1980 to 83,000 by the year 2005. Petitioner predicts that a maximum 5,000 units for Kapolei Village will produce a maximum increase in population of 15,000 to 16,500 persons.

83. Kapolei Village will provide approximately 640 local employment opportunities for proposed commercial sites. Additional jobs will be available in staffing schools and recreational facilities.

84. Development of Kapolei Village will directly benefit the economy in construction/retail and real estate opportunities. The project will create a broader tax base thereby increasing the revenues that are necessary to provide the public facilities that will benefit the community and the State as a whole.

CONFORMANCE TO URBAN DISTRICT STANDARD

85. The Property meets the standards applicable in establishing boundaries of the Urban District set forth in Section 15-15-18 of the Commission's Rules in that:

1. the uses proposed by Petitioner are "city-like" in character;
2. the Property is in close proximity to existing and planned centers of trade and employment;

3. basic services such as sewers, transportation systems, water, sanitation, schools, parks and police and fire protection are, or will be, adequate to serve the Property;

4. the topography and drainage of the Property in its developed state will be satisfactory and reasonably free from the danger of foods, unstable soil conditions, and other adverse environmental effects;

5. the proposed development will provide open space amenities and will preserve and enhance scenic and natural amenities; and

6. the design and construction controls proposed by Petitioner are adequate to protect the public health, safety and welfare and the public's interest in the aesthetic quality of the landscape.

86. The proposed project is generally consistent with objectives and policies of the Hawaii State Plan, Chapter 226, HRS as follows:

Section 226-5 Objectives and Policies for Population

Kapolei Village will contribute to the distribution of future growth expectations of the secondary urban center by providing a well managed community offering mixed housing types and community support facilities.

Section 226-6 Objectives and Policies for the Economy
in General

Development of Kapolei Village will directly benefit the economy in construction, commercial/retail, and real estate

opportunities. The project will create a broader tax base thereby increasing the revenues that are necessary to provide the public facilities that will benefit the community and the State as a whole.

Section 226-19 Objectives and Policies for
Socio-Cultural Advancement - Housing

The proposed project's housing units are designed to accommodate families with incomes starting from the very low income level. In addition, Kapolei Village will offer a mix of housing types including gap-group, assisted, elderly and market housing to accommodate the needs of a large portion of the housing market.

RULING ON PROPOSED FINDINGS OF FACT

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

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 evidence that the reclassification of the Property consisting of approximately 830 acres situate at Honouliuli, District of Ewa, Island of Oahu, State of Hawaii, Tax Map Key 9-1-16:23 and portion of Tax Map Key 9-1-16:25, from the Agricultural District to the Urban

District for a residential community, for the primary purpose of providing affordable housing, subject to the conditions in the order, is reasonable, nonviolative of Section 205-2, and 206-16, Hawaii Revised Statutes, and is consistent with the Hawaii State Plan as set forth in Chapter 226, Hawaii Revised Statutes, as amended, and the Hawaii Land Use Commission Rules.

ORDER

IT IS HEREBY ORDERED that the Property, consisting of approximately 830 acres, being the subject of Docket Number A88-622 by the Housing Finance and Development Corporation, State of Hawaii, situate at Honouliuli, Ewa, Oahu, City and County of Honolulu, State of Hawaii, identified as Oahu Tax Map Key Number: 9-1-16: parcel 23 and portion of parcel 25, and approximately identified on Exhibit A attached hereto and incorporated by reference herein, for reclassification from the Agricultural District to the Urban District, shall be and hereby is approved subject to the following conditions:

1. The Property shall be developed for the purpose of providing affordable housing in accordance with the requirements of Chapter 201E of the Hawaii Revised Statutes, as amended.

2. Petitioner shall provide affordable housing opportunities by offering for sale or rent, on a preferential basis sixty percent (60%) of the residential units to residents of the State of Hawaii of low, low-moderate, and moderate income.

3. Petitioner shall coordinate, with the Honolulu Board of Water Supply, Department of Land and Natural Resources, the Ewa Water Development Corporation, adjoining land owners and developers, and/or other Federal, State, or County agencies, measures designed to obtain the required water for the project. In the event that water is not available due to insufficient supply, Petitioner shall fund on an equitable basis, necessary water source, storage, transmission facilities, and filtration system development.

4. Petitioner shall provide drainage improvements for the subject project and shall coordinate off-site improvements with the Estate of James Campbell, the Barbers Point Naval Air Station, adjoining land owners and developers, and/or other Federal, State, or County agencies.

5. Petitioner shall provide professional archaeological monitoring of the project site during all grading, digging, or other earthworking phases of project development in accordance with the Department of Land and Natural Resources requirements. 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, Petitioner shall immediately stop work and contact the State Historic Preservation Office.

6. Petitioner shall participate in the funding and construction of transportation improvements as represented by the Petitioner. In the event that other transportation improvements resulting from project development are identified by the State Department of Transportation, Petitioner shall fund on an equitable basis and coordinate with all adjoining land owners and developers, and/or other Federal, State, or County agencies said improvements on a schedule accepted and approved by the State Department of Transportation.

7. Petitioner shall appoint a transportation manager whose function is the formation, use, and continuation of alternative transportation opportunities that would maximize the use of existing and proposed transportation systems.

8. A forty (40) foot setback shall be established along the existing railroad right-of-way in a manner compatible with County Ordinance No. 84-94.

9. Petitioner shall inform all prospective occupants of a) possible odor, noise, and dust pollution resulting from the adjacent Barbers Point Access Road, Farrington Highway, and surrounding agricultural operations, and b) the Hawaii Right-to-Farm Act, Chapter 165, Hawaii Revised Statutes, which limits the circumstances under which pre-existing farming activities may be deemed a nuisance.

10. Should Ewa area sugarcane cultivation lands (dependent on access routes provided by the Waimanalo Sugar

Cane Haul Road) continue production after currently existing land leases terminate, Petitioner shall provide, as necessary, alternate sugarcane haul road(s) to maintain the uninterrupted agricultural operation of said sugarcane production areas.

11. Petitioner shall inform each prospective occupant of residential property of possible noise impact from Barbers Point Naval Air Station and Honolulu International Airport or other sources and will provide covenants in the deed to such occupants which will release and discharge the State of Hawaii, the City and County of Honolulu and the United States Government or any subdivision thereof from all liability, and provide that such occupants will not file suit against the State of Hawaii and the City and County of Honolulu and the United States Government or any subdivision thereof on account of, or resulting from, any inconvenience, disturbance and/or injury due to noise under 65 Ldn in the area affecting such occupants or their property. Such covenants shall run with the land.

12. The acquisition of the Property by or through the Housing Finance and Development Corporation from the Estate of James Campbell, whether by purchase, condemnation or otherwise, shall be subject to the covenants, rights and obligations stated in Chevron's Easement ("Easement No. 182" as identified on Maps 36 and 45 of Land Court Application 1069, recorded in the Office of the Assistant Registrar of the Land

Court of the State of Hawaii as Land Court Document Nos. 213791 and 213792, noted on Certificate of Title Numbers 15790 and 48377 in Book Numbers 158 and 484, respectively, and also recorded in the Bureau of Conveyances of the State of Hawaii in Liber 3404, Page 113).

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

14. 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.

15. Petitioner shall provide annual reports to the Land Use Commission, the Office of State Planning and the City and County of Honolulu Department of General Planning in connection with the status of the project and Petitioner's progress in complying with the conditions imposed.

16. 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 assurance of satisfaction of these conditions by the Petitioner.

Done at Honolulu, Hawaii, this 23rd day of August 1988,
per motions on June 29, 1988 and August 16, 1988.

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 *T. Tacbian*
TEOFILO PHIL TACBIAN
Commissioner

By *Robert S. Tamaye*
ROBERT S. TAMAYE
Commissioner

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

By *Richard B. P. Choy*
RICHARD B. P. CHOY
Commissioner

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

By *Toru Suzuki*
TORU SUZUKI
Commissioner

By *Allen Y. Kajioka*
ALLEN Y. KAJIOKA
Commissioner



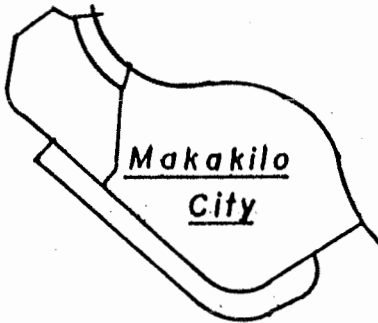
OAHU

A88-622 / H.F.D.C.

LOCATION MAP

T.M.K. 19-1-16: 23, 25 (POR.)
HONOLULU, EWA, OAHU, HAWAII

■ Approved Area



Makakilo
City

H-1 FREEWAY

FARRINGTON HIGHWAY

NORTH
SC. : 1" = 2000'

R.D.

ACCESS

ROAD

WAIMANALO

BPMAS

RENTON ROAD

BARBERS POINT NAVAL AIR STATION

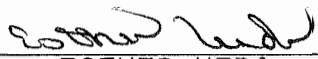
EXHIBIT "A"

THE ESTATE OF JAMES CAMPBELL
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Honolulu, Hawaii 96813

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Grosvenor Center, Mauka Tower
737 Bishop Street
Honolulu, Hawaii 96813

DATED: Honolulu, Hawaii, this 23rd day of August 1988.



ESTHER UEDA
Executive Officer