

BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAI'I

In the Matter of the Petition of)
)
DEPARTMENT OF TRANSPORTATION,)
STATE OF HAWAII)
)
To Amend the Land Use District)
Boundary of Certain Lands situated)
at Honouliuli, District of Ewa,)
City and County of Honolulu, State)
of Hawai'i, Identified by Tax Map)
Key Nos. 9-1-14: Portion of 24 and)
9-1-14: Portion of 27, consisting)
of approximately 140.499 acres from)
the Agricultural District to the)
Urban District.)
_____)

DOCKET NO. A96-719
FINDINGS OF FACT,
CONCLUSIONS OF LAW, AND
DECISION AND ORDER

APR 29 10 22 AM '97
LAND USE COMMISSION
STATE OF HAWAII

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

BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAI'I

In the Matter of the Petition of)	DOCKET NO. A96-719
)	
DEPARTMENT OF TRANSPORTATION,)	FINDINGS OF FACT,
STATE OF HAWAII)	CONCLUSIONS OF LAW, AND
)	DECISION AND ORDER
To Amend the Land Use District)	
Boundary of Certain Lands situated)	
at Honouliuli, District of Ewa,)	
City and County of Honolulu, State)	
of Hawai'i, Identified by Tax Map)	
Key Nos. 9-1-14: Portion of 24 and)	
9-1-14: Portion of 27, consisting)	
of approximately 140.499 acres from)	
the Agricultural District to the)	
Urban District.)	
_____)	

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

The DEPARTMENT OF TRANSPORTATION, STATE OF HAWAII, ("Petitioner") filed a Petition for Land Use District Boundary Amendment on July 11, 1996, pursuant to Hawaii Revised Statutes ("HRS") 205-4, and Hawaii Administrative Rules ("HAR") chapter 15-15, to amend the State land use district boundaries by reclassifying two separate parcels of land totaling approximately 140.499 acres, identified as Tax Map Key Nos.: 9-1-14: portion of 24, and portion of 27 (collectively referred to as the "Petition Area" or "Property"), from the State Land Use Agricultural District to the State Land Use Urban District for the development and expansion of the existing Barbers Point Harbor.

The Land Use Commission of the State of Hawaii ("Commission"), having heard and examined the testimony, evidence, and argument of the parties, both written and oral;

Petitioner's Proposed Findings of Fact, Conclusions of Law, and Decision and Order and the subsequent stipulation between Petitioner, the Office of Planning ("OP") and the City and County of Honolulu ("City"); and the entire record of this docket, hereby makes the following findings of fact, conclusions of law, and decision and order:

FINDINGS OF FACT

PROCEDURAL MATTERS

1. On July 11, 1996, Petitioner filed a Petition for Land Use District Boundary Amendment ("Petition") with the Commission. The Petition was accepted as a complete filing on September 26, 1996.

2. Filed with the Petition were a List of Exhibits and Exhibit Nos. 1, 2, 3, 4, 5, and 6.

3. On September 6, 1996, Petitioner filed an Amended Certificate of Service, First Supplemental List of Exhibits, and Exhibits Nos. 7, 8, 9, 10, 11, 12, 13, and 14.

4. The City filed a statement of position and the written testimony of Cheryl D. Soon, Chief Planning Officer, on November 1 and 20, 1996, respectively.

5. On October 25, 1996, the City filed a List of Witnesses and List of Exhibits.

6. On November 26, 1996, a prehearing conference was conducted in Conference Room 200, Leiopapa A Kamehameha Building, 235 S. Beretania Street, Honolulu, Oahu, with representatives of the Petitioner and OP present.

7. On December 5, 1996, Petitioner filed its Exhibit Nos. 15-60, inclusive.

8. On December 12, 1996, the Commission conducted the hearing on the Petition, pursuant to notice published on October 17, 1996, in the Honolulu Star Bulletin, a newspaper of general circulation.

9. On December 12, 1996, the Commission admitted Petitioner's Exhibit Nos. 1-60, inclusive, City and County of Honolulu's Exhibit No. 1, and Office of Planning's Exhibit No. 1 into evidence.

10. During the December 12, 1996 hearing, Petitioner withdrew Petitioner's Exhibit No. 60. The exhibit was resubmitted and identified as Petitioner's Exhibit No. 61. Petitioner submitted Exhibit No. 62 and orally requested a waiver of the requirements for copies. The Commission admitted into evidence Exhibit Nos. 61 and 62, and granted Petitioner's request for a waiver of the requirement for copies of Exhibit No. 62.

11. During the December 12, 1996 hearing, the Commission received written testimony and heard oral testimony from Petitioner, OP, and the City.

12. No written or oral public testimony was received.

13. No request for intervention was filed.

14. Both OP and the City presented testimony in support of the Petition.

15. The December 12, 1996 hearing was continued until January 30, 1997; however, the Commission deferred the continued hearing to its next scheduled meeting on February 28, 1997.

16. On February 28, 1997, the Commission continued the hearing on the Petition and after receiving additional testimony from Petitioner, closed the hearing on the Petition.

DESCRIPTION OF THE PROPERTY

17. The land being requested for reclassification is located adjacent to the existing Barbers Point Harbor. Barbers Point Harbor is situated along the southern portion of Oahu's Waianae Coast, approximately two miles north-northwest of Barbers Point lighthouse, 15 miles due west of Honolulu Harbor, and 20 miles from downtown Honolulu.

18. Barbers Point Harbor is located in an industrial area on the leeward coast of Oahu and presently consists of the following facilities:

- a. a 42 foot deep entrance channel;
- b. a harbor basin approximately 2300 feet by 1800 feet and 38 feet deep;
- c. two piers forming a continuous 1,600 foot wharf;
- d. approximately 35.5 acres of storage yards;
- e. a barge basin approximately 600 feet by 400 feet and 21 feet deep;
- f. a barge pier with about 5 acres of storage yards;
- g. an administration building; and
- h. a 36,000 square foot transit cargo shed.

19. The Petition Area encompasses two separate parcels totalling approximately 140.499 acres, with approximately 83.999 acres owned by the State of Hawai'i ("State") and approximately 56.5 acres owned by Campbell Estate. The State and Campbell Estate have reached an agreement to transfer the necessary Campbell Estate lands to the State. It is anticipated that the

transfer of the lands to the State will be completed in the near future.

20. All of the harbor basin expansion project and subsequent improvements will involve State lands and lands owned by Campbell Estate.

21. This Petition proposes to reclassify the Petition Area from the Agricultural District to the Urban District. The Petition Area is contiguous to the Urban District on its south and west sides and contiguous to the Agricultural District on its north and east sides.

22. Campbell Estate and the State Board of Land and Natural Resources have authorized Petitioner to seek the reclassification of the Petition Area to the Urban District.

23. The Petition Area is located on the Ewa plain, which extends from sea level at the coastline to an elevation of about 100 feet, 3 to 5 miles inland. The plain is composed of calcareous material which has been modified, consolidated and cemented by dissolution, rain, air and other weathering to form a hard but extremely permeable surface. The rock is classified predominantly as coral limestone and coral limestone breccia. Alluvium, consisting of muds and clays, is interlayered with these limestones.

24. At the project site, natural elevations range from approximately 10 feet above mean sea level near the basin to approximately 60 feet above mean sea level near the northeast boundary. The Petition Area is generally flat with an average slope of one-half percent ($\frac{1}{2}\%$) to five percent (5%). Stockpiles

of material from the original harbor excavation form 30 to 40 foot high mounds. Excavation and processing of this material is ongoing.

25. Soils within the Petition Area are designated by the U.S. Department of Agriculture ("USDA") Soil Conservation Service as Coral Outcrop. Coral Outcrop consists of coral or cemented calcareous sand with a thin layer of friable red soil material in cracks, crevices and depressions. Coral Outcrop is unsuitable for cultivating crops.

26. While portions of the proposed development sites are designated Agricultural by the State, these areas have not been used for agricultural purposes. The agricultural areas are not included in any of the Agricultural Lands of Importance to the State of Hawaii (hereinafter "ALISH") classifications.

27. The University of Hawaii Land Study Bureau's detailed land classification (productivity rating) for the Petition Area is "E", which is the poorest productivity rating. The Land Study Bureau detailed land classification system rates the expected productivity of soil in a particular area for agricultural purposes. Ratings from "A" (the most agriculturally productive) to "E" (the least productive) are given. A rating of "E" under this system means that the condition of the soil, (i.e., rocky, not suited to machine tillability, etc.) is poor for agricultural operations.

28. Surface water runoff generated by areas comprising and adjacent to Barbers Point Harbor drains overland toward the shoreline, onsite depressions and the harbor. Even though heavy

rains occasionally transport large quantities of silt to the nearshore area, prevailing advective forces appear to transport such material out of the immediate area within several days. The natural drainage patterns on the Diamond Head side of the harbor were altered by stockpiling and coral mining activities near the harbor and it is anticipated that such patterns will be further altered at the additional stockpile sites. However, the runoff volume from the stockpiles is not expected to exceed the volume generated under existing conditions and may in fact decrease due to absorption of rainfall into the stockpiles. Campbell Estate has proposed the construction of a large drainage channel as an element of the Kapolei Business Park which will collect stormwater runoff and discharge it to the ocean.

29. According to the Flood Insurance Rate Map, the Petition Area has been classified as Zone D, indicating that flood hazards are undetermined in the area. It appears the Petition Area may be vulnerable at this time to occasional flash flooding.

30. Petitioner has studied the potential flooding resulting from hurricane and tsunami actions in two separate studies: (a) The Leeward Oahu Hurricane Vulnerability Study, Determination of Coastal Inundation Limits (1993) and (b) Tsunami Response of Barbers Point Harbor (1982). Based on the studies, the predicted maximum depths of overland flooding around the harbor perimeter resulting from tsunamis ranged from 0 to 3 feet depending on the characteristics of the tsunami. Further, because existing grades of the area mauka of the harbor will be

reduced in elevation, and the harbor shoreline will be moved further inland, the extent of overland flooding due to tsunami will increase in the vicinity of the Petition Area. The maximum predicted stillwater levels in Barbers Point Harbor resulting from the worst case hurricane are less than the elevations of the harbor marginal wharves, and therefore no hurricane flooding inland of the wharves is anticipated.

31. Immediately north of Barbers Point Harbor is the new Ko Olina Resort, which is in a partial state of completion and presently consists of four artificial sandy lagoons, a golf course and accompanying club house, a marina that shares the same channel entrance as the harbor and one hotel named the Ihilani Resort and Spa.

32. A 40-foot wide historic railroad right-of-way, listed on the National Register of Historic Places, is located approximately 200 feet mauka of the nearest area of proposed work for the harbor improvements.

33. Coral limestone mining and processing operations are presently occurring within the Petition Area and in nearby areas to the south and east of Barbers Point Harbor. This is where coral from the construction of the original harbor basin is stockpiled. Grace Pacific Corporation ("GPC") and Hawaiian Cement ("HC") have agreements with Campbell Estate to conduct such operations, which agreements are to remain in force after the State's acquisition of the 56.5 acre parcel from Campbell Estate.

34. GPC and HC have authorization to conduct these coral limestone mining and processing operations pursuant to separate agreements each commercial entity has made with Campbell Estate. The agreements have not been recorded in the State Bureau of Conveyances, or filed with the Assistant Registrar of the Land Court of the State of Hawaii. Petitioner's Exhibit 12 however, evidences that:

- (a) Campbell Estate formally committed to certain preconditions imposed by the Commission on Campbell Estate's petition to reclassify certain lands at Kapolei; and
- (b) the State agreed to permit GPC and HC to continue conducting their operations in certain areas.

35. Except for the coral limestone mining and processing operations being conducted by Grace Pacific Corporation and Hawaiian Cement, the Petition Area is vacant.

36. Other surrounding land uses include Campbell Industrial Park, Kenai Industrial Park, Barbers Point Naval Air Station, Ko Olina Fairways (residential development) and the first residential developments of the Villages of Kapolei.

DESCRIPTION OF PROPOSED DEVELOPMENT

37. Petitioner proposes to continue the development of the shoreside and berthing facilities at Barbers Point Harbor by the expansion of the existing harbor basin and construction of additional piers, storage yards and related facilities. The development of Barbers Point Harbor was always envisioned as a time-phased development, and an environmental impact statement ("EIS") prepared in 1978 described port facilities that were not projected for completion until the year 2030.

38. Subsequent studies, such as the 2010 Master Plan for Barbers Point Harbor (1991) (hereafter "2010 Master Plan") and the Honolulu Waterfront Master Plan (1989), have reaffirmed the need to continue the development of Barbers Point Harbor. Conceptual arrangements for the Petition Area were portrayed in the 2010 Master Plan. An updated master plan addressing Oahu's commercial harbors is currently in preparation, and is expected to indicate further conceptual plans for the Petition Area. The Petition Area is therefore central to all plans to improve Barbers Point Harbor.

39. In January, 1995, Petitioner completed the Final Supplemental Environmental Impact Statement for Basin Expansion and Tug Pier at Barbers Point Harbor, Oahu, Job H.C. 1823 and Future Pier and Storage Yard Improvements at Barbers Point Harbor, Ewa, Oahu, Hawaii (hereinafter referred to as the "SEIS").

40. The Petition and SEIS both describe work for the proposed harbor basin expansion to occur at two locations. The first location is within the Property at the north-east corner of the existing basin and the second location is outside the Property at the south corner of the existing basin. The SEIS identifies these two areas as Expansion Area A, and Expansion Area B, respectively.

41. Expansion Area A is within the 140.499-acre Property proposed for reclassification to the Urban District and is northeast and adjacent to the existing harbor basin. Construction will include the creation of an approximately 1,100

by 1,100 foot basin (about 25 acres), 38 feet deep, new piers (Piers 7, 8, and 9), storage yards, and stockpiling areas. The new piers will provide approximately 3,050 additional feet of wharf to accommodate future cargo projections. Approximately 450,000 cubic yards of dry material and 1,820,000 cubic yards of wet material will be removed to expand the basin.

42. Petitioner has represented that excavation of the basin expansion area will be done through mechanical dredging, without the use of explosives or blasting.

43. Expansion Area B is outside of the Property proposed for reclassification, and is already within the Urban District. Construction will include the removal of a triangular area of land measuring approximately 230 feet by 280 feet (approximately 0.7 acres) from the south corner of the existing basin. The expansion will allow the construction of a tugboat pier 150 feet by 15 feet and the extension of Pier 5 by 300 feet. Approximately 50,000 cubic yards of primarily coralline limestone material will be removed.

44. The proposed work within the Petition Area addressed by the SEIS consists of the following:

- a. Basin expansion. Extension of the harbor basin by approximately 1,100 feet by 1,100 feet along the northeast corner;
- b. Pier construction. Construction and operation of three additional piers for general cargo ships that will border the expanded basin area;
- c. Support facilities. Construction and operation of storage yards and other support facilities adjacent to the new piers to be built bordering the expanded basin area;

- d. Acquisition of lands. Acquisition by the State from Campbell Estate of approximately 140.5 acres comprising the Petition Area and the facilities situated thereon; and
- e. LUC reclassification. Reclassification of the Petition Area from the Agricultural District to the Urban District.

The SEIS also covers other work to be done outside of the Petition Area but within the existing harbor basin area, including (a) removal of a triangular area of land measuring approximately 230 feet by 280 feet in the southern corner of the present basin, (b) construction and operation of a tugboat pier and (c) construction of an approximately 300-foot extension of existing Pier 5.

45. Petitioner's Exhibit No. 10, provides an updated estimated construction schedule and cost estimates for development of the Property. According to the schedule, the harbor expansion and the construction of piers, storage facilities and stockpiling areas have been divided into 12 separate construction projects, and programmed into 5-year increments. The total cost is estimated at \$162,000,000.00.

PETITIONER'S FINANCIAL CAPABILITY TO UNDERTAKE THE PROPOSED DEVELOPMENT

46. Pursuant to 15-15-50(c)(8), HAR, as an agency of the State of Hawaii, Petitioner is not required to submit a statement of current financial condition.

STATE AND COUNTY PLANS AND PROGRAMS

47. The Petition Area is located within the State Land Use Agricultural District, as reflected on the official state land use district boundary map 0-6 (Ewa).

48. The General Plan of the City and County of Honolulu states broad objectives and policies for the overall physical and economic development of Oahu. The General Plan envisions Kapolei, Makakilo, West Beach and other areas in the Ewa region as Oahu's secondary urban center, including a second deep-draft harbor to complement Honolulu Harbor.

49. The Ewa Development Plan encompasses the region from Kahe Point to West Loch of Pearl Harbor. According to the Ewa Development Plan Land Use Map, the areas comprising the Petition Area and the additional piers and storage yards are designated "industrial." The stockpiles are located in areas designated "industrial." The proposed development conforms to these designations.

50. The City and County of Honolulu Department of Land Utilization (hereinafter "DLU") administers the Land Use Ordinance which is the City's zoning ordinance. The lands comprising the Petition Area are currently zoned AG-2 (General Agriculture). The existing stockpile areas are, and the proposed stockpile areas are planned to be, located on lands zoned AG-2 and I-3 (Waterfront Industrial). While not required for the construction of the proposed improvements, Petitioner intends to seek rezoning of the Petition Area following Commission action on this Petition.

51. The objectives and policies of the Hawaii Coastal Zone Management (hereinafter "CZM") Program, as contained in chapter 205A, HRS, are set forth for the protection and management of Hawaii's valuable coastal areas and resources.

Chapter 205A, HRS, outlines controls, policies and guidelines for development within an area along the shoreline referred to as the Special Management Area (hereinafter "SMA"). These policies are administered by the counties. No part of the Petition Area lies within the SMA boundaries. Moreover, Barbers Point Harbor itself is exempt from the SMA regulatory mechanism.

NEED FOR PROPOSED DEVELOPMENT

52. Currently, the major commercial shipping activity at Barbers Point Harbor consists of loading and unloading of bulk cargo and petroleum products. The bulk cargo consists of imported coal, imported cement clinker, exported scrap metal and construction materials.

53. Petroleum products represent about sixty two per cent (62%) of the cargo handled at Barbers Point Harbor, with bulk cargo constituting about thirty two per cent (32%) of the cargo handled.

54. Barbers Point Harbor handles approximately seventeen per cent (17%) of the total statewide cargo volume handled at State commercial harbors and is the second busiest commercial harbor in the State.

55. From its opening on July 1990, through State fiscal year 1994, Barbers Point Harbor experienced a tremendous surge of activity that peaked in State fiscal year 1994. The total tonnage handled at Barbers Point Harbor fluctuated slightly over the period from State fiscal year 1995 to the present but has generally remained constant throughout this period.

56. The growth rate for cargo volumes has historically been very similar to the growth rate of the Gross State Product, thus Petitioner anticipates a 2% annual growth rate in the volume of cargo handled at Barbers Point Harbor.

57. For at least the next ten years, Petitioner anticipates that Barbers Point Harbor will continue to service ships and barges that carry dry bulk cargo, liquid bulk cargo, neobulk cargo, automobiles, containerized cargo and ferry passengers, as well as vessels that require dry dock services and bunkering.

58. Although the existing piers at Barbers Point Harbor are designed to accommodate containers, service of container ships is currently not performed at Barbers Point Harbor, due to the lack of necessary infrastructure and constraints of the harbor entrance. Infrastructure such as gantry cranes would be provided by a container service company. A feasibility study regarding possible improvements to the harbor entrance and deepening of the basin is currently being completed by the Army Corps of Engineers. Petitioner has represented that until the feasibility study is completed, and additional harbor improvements are made, Barbers Point Harbor will not be able to service container ships.

59. With the exception of excursion-passenger vessels, Honolulu Harbor will service the same types of vessels that call at Barbers Point Harbor. Petitioner anticipates that container, inter-island, neobulk and liquid bulk cargo coming through

Honolulu Harbor will increase an estimated two per cent (2%) per year through the year 2020.

60. Although the capacity of Honolulu Harbor can be slightly increased, Barbers Point Harbor will have to be prepared to handle a majority of the increases in demand for Oahu commercial harbor space.

61. The proposed expansion of Barbers Point Harbor is to handle the anticipated increase in the cargo volume at Barbers Point. The proposed improvements at Barbers Point Harbor are necessary to: (a) provide additional deep-draft port and shoreside facilities on Oahu to supplement Honolulu Harbor, (b) permit the handling of cargo volumes projected for Oahu and the State, (c) establish a port closer to the growing number of cargo destinations in leeward Oahu, and (d) to avoid the growing traffic congestion affecting goods movement on the approaches to Honolulu Harbor.

62. Petitioner has determined that the expansion of Barbers Point Harbor is the only feasible alternative for increasing commercial harbor space on Oahu. Honolulu Harbor is anticipated to reach full capacity in the near future. Constructing new commercial harbors either at Pearl Harbor or in Kaneohe Bay have been rejected because of the significant adverse environmental impacts each such alternative would have. Moreover, Pearl Harbor is not available as it is still used as an active naval base and mixing such military use with commercial

harbor uses would result in safety and security complications.

IMPACTS UPON THE RESOURCES OF THE AREA

63. The complete development of Barbers Point Harbor through the year 2030 was previously addressed in the following three (3) environmental impact statements:

- a. Barbers Point Harbor Final Environmental Impact Statement, U.S Army Corps of Engineers (July, 1976) (hereafter "1976 EIS"); and
- b. Barbers Point Harbor Supplement to the Final Environmental Impact Statement, U.S. Army Corps of Engineers (January, 1977).
- c. Revised Environmental Impact Statement for the Barbers Point Deep Draft Harbor on Oahu, M&E Pacific, Inc. (June, 1978);

64. The phased development of Barbers Point Harbor was envisaged as early as the 1976 EIS. All subsequent planning documents have been based on the phased development approach.

65. Although the environmental aspects of the work now proposed were addressed in these previous documents, conditions around Barbers Point Harbor have changed since these earlier EISs. Thus, in January, 1995, Petitioner completed the Final Supplemental Environmental Impact Statement for Basin Expansion and Tug Pier at Barbers Point Harbor, Oahu, Job H.C. 1823 and Future Pier and Storage Yard Improvements at Barbers Point Harbor, Ewa, Oahu, Hawaii (hereafter referred to as the "SEIS"), which was accepted by the Governor on May 30, 1995.

66. In his acceptance letter, the Governor directed that should the project, as described in the SEIS, go forward, that certain mitigation measures be implemented. The mitigation measures are set forth in an attachment to the Governor's May 30,

1995 acceptance letter which is attached to the Petition as Exhibit "5".

67. Petitioner has represented that the environmental impacts of the proposed development in the Petition Area have been fully disclosed in the SEIS accepted by the Governor. With the implementation of the mitigation measures developed in consultation with the State Department of Health, Department of Land and Natural Resources and other state and federal agencies, long-term impacts in all areas assessed are expected to be minimal and acceptable.

68. The SEIS does not cover any possible impacts in regards to improvements of the harbor entrance. Petitioner has represented that it would complete an environmental impact statement to examine potential impacts due to improvements made to the harbor entrance at such time that the improvements are feasible to undertake.

Agricultural Resources

69. While portions of the proposed development sites are designated Agricultural by the State, these areas have not been used for agricultural purposes. The agricultural areas are not included as important agricultural lands under the ALISH classification system.

Archaeological/Historical/Cultural Resources

70. Archaeological surveys have been performed covering the Petition Area which consists of an 84 acre parcel owned by the State and a 56.5 acre parcel owned by Campbell Estate. The boundaries of a portion of the Petition Area to be

acquired from Campbell Estate were adjusted to avoid important sites recommended for preservation.

71. Based on an assessment completed for the 84 acre parcel in 1993, and a field inspection of the parcel performed in 1994, it was determined that no archaeological sites or deposits remain in the survey area.

72. The State Historic Preservation Division (hereafter "SHPD") indicated that it had finished archaeological data recovery for the 84 acre parcel and "development of this parcel will have no adverse effect on significant historic sites."

73. Thirty-seven (37) archaeological sites were documented for the area containing the 56.5 acre parcel. Of those 37 sites, a total of 8 were evaluated as being no longer significant and needing no further documentation. The remaining 29 sites are considered significant for information content. Five (5) of these sites have been designated for preservation.

74. The 56.5 acre parcel was reconfigured to exclude the 5 sites recommended for preservation. The other sites remaining in the 56.5 acre parcel will be evaluated under an archaeological mitigation plan for fieldwork which will address data recovery, analysis and testing procedures. The SHPD has accepted the data recovery and preservation plan for this area.

75. Petitioner anticipates that the proposed harbor expansion will not affect a 40-foot historical railroad right-of-way that runs north of the Property. The right-of-way is part of a railway constructed by the Oahu Railway and Land Company

(OR&L), during the period from 1889 to 1899. The closest the right-of-way gets to the proposed work is never less than 200 feet, therefore it will not be affected by harbor activities.

76. The SHPD established the Barbers Point Archaeological District in the late 1970's to facilitate the archaeological review of Barbers Point Harbor construction. The district is eligible for the National Register of Historic Places, but has not been officially listed on either the National Register or the Hawaii Register.

77. In connection with the SEIS, the State Office of Environmental Quality Control ("OEQC") recommended the following, as conditions of approval, to mitigate impacts to archaeological resources during the construction phase and operational phase.

"The mitigation plan approved by the State Historic Preservation Division must be implemented. The data recovery activities must occur at construction sites before any work affecting the archaeological resources begins."

"In addition, should there be any inadvertent discoveries of resources during construction work, work which would affect the archaeological resources must stop immediately and the SHPD must be notified."

"The Department of Transportation must work cooperatively with adjacent landowners to implement measures to protect all archaeological sites that have been recommended for partial or complete preservation in the vicinity of the project area (including site 50-80-12-9633). If adequate controls cannot be accomplished on private lands, State lands adjoining the affected private lots must be fenced."

Coastal Waters Resources

Physical Conditions

78. It is anticipated that other than improving surge conditions in the harbor, the proposed development will not have any other impact on the physical conditions of the coastal waters.

Water Quality

79. Because most of the excavation will be done behind an enclosure berm, the critical event for water quality will be the excavation and removal of the berm. However, this event is not expected to generate unacceptable levels of turbidity. Short term water quality impacts from the construction of the piers and storage yards are similarly expected to be acceptable and within the natural limits of variability.

80. Barbers Point Harbor and the coastal waters in front of the harbor are designated Class "A" by the State Department of Health. Harbors and marinas are allowable uses within Class "A" waters. Barbers Point Harbor is classified as a marine embayment for purposes of the State water quality standards.

81. The water quality impact assessment in the SEIS suggests the following sources of the high nutrient and turbidity levels observed in the harbor and nearshore waters:

- a. Groundwater is probably the primary source of nitrate;
- b. The observed levels of ammonium are probably the result of biological activity of marine organisms; and

- c. Observed turbidity levels are the results of both suspended living phytoplankton and non-living particulate material.

82. Potential long-term adverse impacts to water quality could result from the accidental release of contaminants such as oil and gasoline during the refueling of vessels. Low levels of hydrocarbon contaminants do not appear to adversely affect algal, invertebrate or fish populations within marinas or harbors. Although increased vessel traffic could increase the potential of oil spills, oil spill response procedures have been developed for Barbers Point Harbor. The discharge of vessel sewage is subject to State and federal regulation and cannot be done directly into the harbor or nearshore waters.

83. The increases in harbor turbidity are expected to be within the natural variability already experienced in the harbor. The development of storage yards and storm drainage systems will increase the potential of shoreside contaminants entering the harbor. The existing groundwater influx and tidal flushing of the harbor are not expected to be changed by the harbor expansion. These processes are expected to continue to flush the limited amount of pollutants that might be introduced into the harbor into ocean waters where they will undergo further dispersion.

84. In connection with the SEIS, the OEQC recommended the following, as conditions of approval, to mitigate water quality impacts during the construction phase and operational phase of the harbor expansion.

Construction Phase

"Expansion Area A must be excavated behind an enclosure berm to minimize turbidity within the main harbor and coastal waters."

"In the event that hydraulic dredging is used as the construction method, the return water must be discharged to Expansion Area A, behind the enclosure berm."

"Turbidity must be monitored during construction. If turbidity measurements exceed levels of variability found prior to construction at the surveyed monitoring points, silt curtains or other appropriate measures must be used to limit turbidity to within levels of variability documented during prior water quality monitoring programs. Measures to control excessive turbidity must be implemented in accordance with the Department of Health's water quality certification procedures."

Operational Phase

"Each company which transfers oil or other petroleum products at the harbor must develop a Harbor User Plan that describes oil spill response procedures and have it approved by the Coast Guard."

Marine Biology

85. The majority of the material to be removed for the expanded basin area is behind the existing harbor shoreline. The removal of existing shoreline will kill organisms which have settled there. However, due to the turbid nature of the harbor waters and the strong groundwater influx, it is unlikely that corals have become established in this area. Petitioner represents that the new shoreline will provide three times the habitat area for colonization as presently exists.

86. The primary short-term potential impact to marine biological communities will be from elevated turbidity and

increased sedimentation rates. Elevated turbidity is not expected to have any lasting effect on highly mobile resident fish populations. Benthic populations of stony corals, macroalgae and macroinvertebrates, on the other hand, cannot move. However, the increased sedimentation rate projected under worst case conditions are less than one tenth (1/10) the rates which coral have been shown to tolerate without significant impact. During the original expansion of the harbor, fish mortality was associated with blasting of the harbor entrance channel. However, for this development no blasting will be used to excavate the expanded basin area.

87. Long-term water quality impacts are expected to be minimal and therefore no significant adverse impacts to marine ecology are anticipated from the proposed excavation and construction of shoreside facilities.

Ciguatera Toxin

88. Ciguatera fish poisoning is caused by the marine dinoflagellate, *Gambierdiscus toxicus* (hereinafter "G. toxicus"), which is found in association with certain brown or red algae. The lack of G. toxicus in Barbers Point Harbor and nearby coastal waters indicates that ciguatera poses no serious problem at the harbor because G. toxicus does not thrive in turbid waters or in waters (a) less than 25 degrees Celsius or (b) experiencing groundwater influx. Further, during the original harbor development, no increase in toxicity or outbreaks were noted. Therefore Petitioner does not expect ciguatera outbreaks to occur as a result of the proposed development.

89. In January 1994, Barbers Point Harbor was surveyed for ciguatera fish poisoning. The survey included the collection and analysis of 130 fish of various species, and the collection and classification of algae samples. No G. toxicus was found.

Floral and Faunal Resources

90. It is not anticipated that the proposed harbor expansion will have a significant negative impact on floral or faunal communities because work will occur on previously disturbed areas and the floral and faunal resources to be affected are abundant in the region.

91. A botanical survey of the Property was conducted on January 9, 1992. No threatened and endangered and rare species occur on the Property. The vegetation on the Property is dominated by weedy species and contains no noteworthy species. The findings of the botanical study report concluded that the proposed harbor expansion would not have a significant negative impact on the Property and no mitigation measures were proposed.

92. A faunal survey of the Property was conducted on November 14, 1991. No endangered or threatened species of birds or mammals were found on the Property. The survey report concluded that the Property supports the typical mix of introduced birds found in similar habitat elsewhere in the Ewa plain region of the island.

Threatened and Endangered Species

93. In connection with the SEIS, the National Marine Fisheries Service was involved in the impact evaluation on the green sea turtles and the humpback whales and the U.S. Fish and

Wildlife Service was involved in the impact evaluation on the hawaiian stilts, achyranthes splendens (shrub) and chamaesyce skottsbergii (shrub). The DOT also consulted with DLNR in completing its impact evaluations.

Green Sea Turtles

94. No significant construction related impacts are anticipated because (a) the construction will take place along the internal harbor shoreline 3,000 feet or more from the natural shoreline, (b) the turbidity expected from excavation and dredging will be temporary and within the natural range of variability, and (c) no blasting is to be used in excavating the expanded basin area.

95. In comments on construction phase mitigation measures, OEQC recommended that contract specifications require construction personnel to monitor green sea turtles which may venture into the harbor basin.

Humpback Whales

96. No significant negative impact to the humpback whale is expected because of the distance of whale migration areas from the development site.

97. Based on discussions with the National Marine Fisheries Service, Petitioner's marine environmental consultant concluded that the proposed harbor expansion would not present any significant impact to the humpback whale.

Hawaiian Stilts

98. No significant long-term negative impact to the stilts is expected because the proposed development will not

affect their habitats, including existing stilt nesting areas. It is noteworthy that the stilts have established themselves in areas of heavy industrial activity.

Monk Seals

99. Possible impacts to monk seals were not considered by Petitioner as the harbor may not be a prime monk seal habitat. However, there have been reports that monk seals have beached in nearby surrounding areas.

Achyranthes splendens (shrub) and Chamaesyce skottsbergii (shrub).

100. The proposed development does not overlap with any plant locations identified by the U.S. Fish and Wildlife Service. No material will be disposed on top of the plants. No significant negative impact is expected from the proposed development.

Groundwater Resources

101. The Ewa plain is composed of terrestrial alluvium, such as clay and mud eroded from the Waianae Mountains, and coral limestone deposited during periods when the area was covered by the ocean. This wedge of sediments and sedimentary rock is referred to as "caprock". In geologic cross section, layers of limestone alternating with terrestrial clays and muds rest on volcanic basement. Limestone layers in the caprock are referred to as aquifers because they are porous enough to contain groundwater. The terrestrial clays and muds are aquitards. They have low permeabilities and impede the flow of groundwater between the limestone aquifers.

102. Recharge of groundwater in the caprock aquifers comes from: (a) direct infiltration from rainfall and runoff onto the Ewa plain, (b) leakage of groundwater from the Waianae basalt aquifer and (c) infiltration from irrigation.

103. At the Barbers Point Harbor shoreline, the caprock layer is approximately 250 feet thick. The upper-most limestone layer in the caprock contains brackish groundwater and is about 60 feet thick in the Petition Area. The groundwater in this upper-most limestone layer has become more brackish since irrigation ceased from sugarcane land which is adjacent to the Petition Area. The principal use for this water would be for dust control, washing of coral and cooling of water.

104. The harbor expansion will be excavated into the upper-most limestone aquifer in the caprock to a depth of 38 feet below mean lower low water ("mllw") (45 feet mllw along the perimeter of the basin). At the harbor, the upper-most limestone aquifer is greater than 60 feet in thickness. The excavation will not affect the aquiclude that separates the limestone aquifers in the caprock.

105. Construction of the original harbor extended the coastline 3,000 feet inland of the natural coast and modified the groundwater flow in the upper-most limestone aquifer. Groundwater flow into the harbor doubled when compared to the undisturbed coastline to a rate of about 1 million gallons per day ("mgd").

106. Major changes in land use have occurred since the original harbor was constructed, including the significant

reduction in groundwater recharge from sugar cane irrigation. The current quality of the groundwater in the caprock aquifers is too saline for irrigation, but when recharge from irrigation ceases, the groundwater will become even saltier. Petitioner anticipates that groundwater flow into the harbor will decrease by approximately one-half, from 0.7 mgd to 0.3 or 0.4 mgd, upon termination of groundwater recharge from sugar cane irrigation.

107. Petitioner represents the harbor expansion will not affect the Waianae basalt aquifer or any of the other aquifers that contain potable groundwater resources on Oahu.

108. Petitioner represents the dredging will not affect the basalt aquifer or potable water supplies.

109. Petitioner has represented that it will obtain a Water Use Permit from the Commission on Water Resource Management.

110. The harbor expansion will have a slight effect on the upper-most limestone aquifer in the caprock but this will not affect the utility of this resource which can be used only for such purposes as industrial cooling and coral washing. The groundwater impact associated with the termination of sugar cane irrigation will be much greater than the impact associated with both the original harbor and the proposed harbor expansion.

Agricultural Resources

111. Soils within the Petition Area are designated by the U.S. Department of Agriculture ("USDA") Soil Conservation Service as Coral Outcrop. Coral Outcrop is unsuitable for cultivating crops.

112. While portions of the proposed development sites are designated Agricultural by the State, these areas have not been used for agricultural purposes. The agricultural areas are not included in any of the ALISH classifications.

113. The University of Hawaii Land Study Bureau's detailed land classification (productivity rating) for the Petition Area is "E", which is the poorest productivity rating. A rating of "E" under this system means that the condition of the soil, (i.e., rocky, not suited to machine tillability, etc.) is poor for agricultural operations.

114. The project will not affect any existing agricultural operations since none take place on the Property.

115. The U.S. Department of Agriculture, Natural Resource Conservation Service provided the following comments relating to the agricultural productivity of the Property:

"We have found that although this area is zoned agriculture, this particular area has never been farmed. The soil in the area was too poor for sugar production therefore we have no objection to this petition."

116. The Petition Area is not suitable for cultivating crops since the soils are 80 to 90 percent coral outcrop and the remaining 10 to 20 percent consists of a thin layer of friable, red soil material which is located in cracks, crevices and depressions within the coral outcrop.

Scenic and Visual Resources

117. The major viewsheds of Barbers Point Harbor are:
(a) from Farrington Highway, although a kiawe forest somewhat blocks the view of the harbor and the existing stockpile and

(b) from Honokai Hale, Nanakai Gardens and some parts of Makakilo.

118. Barbers Point Harbor and Campbell Industrial Park have an industrial appearance.

119. The construction and operation of the harbor improvements are not expected to have an adverse visual impact because the existing harbor already has an industrial appearance, and these new activities will be immediately adjacent to the existing port development.

120. The 40-foot limitation on stockpile height will help minimize visual impacts. Since the harbor area already has stockpiles and an overall industrial appearance, visual impacts from additional stockpiles will be minimal. Visual impacts will decrease as material is withdrawn from the stockpiles, and at some point the stockpiles will no longer exist.

121. Details of the night illumination of the proposed storage yards have not yet been developed. Petitioner anticipates that there may be visual impacts due to night illumination. The impacts of night illumination of the storage yards on residential areas could be mitigated through proper design of the lighting system, including height and number of lighting standards and the use of appropriate shielding.

122. Petitioner and the City have agreed to establish a buffer zone between the Ko Olina Resort and the 84 acres acquired from the Estate of James Campbell consisting of a 50-foot strip of landscaping along the northwest boundary of the parcel and a 100-foot building setback.

Social and Economic Impacts

123. The entire Ewa Plain is undergoing change, which is centered on the developing City of Kapolei.

124. With respect to potential social impacts, the Barbers Point Harbor expansion project, from a regional perspective, is not expected to alter the changes already occurring. The project will add to the urban character, and is consistent with the development of the region as the secondary urban center.

125. The proposed project achieves a portion of Petitioner's plans to expand the harbor and support the redevelopment and improvement of Honolulu Harbor and Ke'ehi Lagoon. The expansion of Barbers Point Harbor would result in providing space for relocation of certain existing facilities presently in Honolulu Harbor, and would allow various cargo services.

126. The proposed harbor expansion will implement the next phase of the plan to establish a port closer to the growing number of cargo destinations in leeward Oahu, and will allow the cargo handling capacity to increase.

127. The proposed Barbers Point Harbor expansion will improve conditions under which the commuter ferry operates. The proposed ferry system remains a part of the master plan for Barbers Point Harbor. A pier has already been constructed for ferry operations. The project will add permanent facilities to support intra-island ferry activities, including a terminal, shelter amenities and a parking lot.

128. Barbers Point Harbor, with the planned improvements, is expected to increase economic activity not only in the Ewa area but throughout the State.

129. The proposed development will not have an effect on existing agricultural or other related employment since agricultural activities do not occur on any of the directly affected areas. Grace Pacific Corporation and Hawaiian Cement will continue their operations during construction of the harbor improvements.

130. Construction expenditures will have a beneficial impact on the local construction industry. Petitioner estimates that up to 28 jobs could be directly created during the excavation and dredging of the expansion area and an average of 70 jobs could be directly created during construction of the new piers and storage facilities.

131. Beneficial economic impacts are expected during harbor operations, including direct maritime expenditures, port-related job creation and the development of new businesses near the harbor. While some of these revenues will accrue to the State (wharfage and facility charges), others will flow to private businesses.

132. Harbor operations will require support businesses to supply ships, handle cargoes and provide other services. Petitioner estimates that at full operation, the proposed development could generate about 469 jobs (based on an employment multiplier of about 4 jobs per acre) and about 500 jobs could be created indirectly (based on about 1 indirect job per direct

job). Harbor improvements will also encourage certain businesses to locate near the harbor. Employment levels of 3.5 persons per acre could be expected for heavy and waterfront industrial business activities.

133. The expansion project is expected to have the following impacts on State and City finances: (a) by stimulating harbor-related business enterprises and increasing employment in the Ewa area, increase State tax revenues in the form of excise, individual and corporate income taxes, (b) the harbor improvements will permit a higher level of shipping activity and therefore increase port user fees to the State and (c) State acquisition of the Petition Area will decrease real property tax revenues since these lands will become tax-exempt. However, Campbell Estate is planning to develop the Kapolei Business Park adjacent to the harbor and is changing the zoning of approximately 552 acres from agriculture to industrial and commercial. Since industrial and commercial districts generate far more property tax revenue than agricultural land, an increase in property taxes from lands that will become the business park is expected and will more than offset the loss of the Petition Area from the property tax base.

134. The Barbers Point Redevelopment Commission found that an expanded harbor will be beneficial to the redevelopment of the Barbers Point Naval Air Station. The plan for the reuse of this area includes light industrial and commercial uses. The expanded harbor will add to the attractiveness of these parcels

and support the generation of economic development and job creation for the redeveloped site.

ENVIRONMENTAL QUALITY

Noise

135. Construction noise will be generated by construction equipment operating at the site, and the movement of construction materials. Total noise from the construction site is dependent upon the methods being employed during each stage of the process.

136. Three methods of excavation were evaluated: (a) blasting, (b) hydraulic dredging and (c) mechanical excavation.

137. Since the total mechanical horsepower of the mechanical excavation method is roughly the same as the blasting method, total noise impact from both methods' construction equipment would be similar. The estimated construction noise levels generated by equipment used with either the blasting or mechanical excavation methods are in the range of 45 to 52 dBA ("A" weighted decibel unit).

138. Hydraulic dredging could have the highest total mechanical power of the three methods, depending on the size of the dredge used. This method would generate a total noise level about three dBA higher than the noise produced by the blasting method.

139. Petitioner has represented that excavation will be done mechanically by predrilling and using a backhoe to complete the excavation, and no explosives will be utilized.

140. The construction noise and vibration impact analysis completed by Petitioner shows that with suitable precautions, there would be no adverse impacts during harbor expansion.

141. The sources of noise from harbor operations include tugboats, ship engines, horn and whistle signals used in docking and departure sequences, heavy cargo cranes, forklifts, motorized vehicles, dry-bulk conveyors, refrigerated containers and other equipment. Noises required for navigation within the harbor are exempt from DOH noise criteria.

142. The probable impacts from all of the harbor operation noise sources listed above, including noises required for navigation, are as follows:

a. Ko Olina Resort. During the daytime, under tradewind conditions, Ko Olina will be in a cross-wind position to receive noise from the piers and yards. Noise from cranes on ships at the closest pier where unloading will occur could cause sound levels of 48 to 53 dBAs at the Ko Olina golf course and on the lanais of the closest apartments in Ko Olina. During Kona winds and on nights when it is calm and there is thermal inversion (causing sound to refract (bend) over obstacles), noise levels of 55 to 60 dBA from the cranes could be experienced at the same locations. Any non-exempt motorized vehicle or equipment in the northern pier area which is noisier than about 75 dBA at 100 feet could exceed the allowable 50 dBA noise limits if not shielded effectively by a ship or building.

b. Nanakai Gardens, Honokai Hale and Ko Olina Fairways. During normal tradewind conditions, these communities will be upwind of the proposed development and normal harbor activities should be inaudible. Under certain non-trade wind conditions and/or thermal inversions, harbor activities may be audible, but traffic noise from Farrington Highway and normal ambient sounds generated by a developed community will provide a masking effect.

c. Campbell Industrial Park and Other Proposed Business/Industrial Parks. Industrial parks should not be impacted by noise from harbor operations since industrial land uses generate considerable noise of their own. It is also likely that noise sensitive spaces such as offices will be air-conditioned, thereby reducing their sensitivity to outdoor noise.

143. Future traffic noise levels associated with the proposed development are predicted to be nearly the same as future noise levels without the development. Therefore, the proposed development is not expected to have a significant adverse noise impact on areas surrounding the Petition Area.

Vibration

144. Petitioner's analysis regarding the vibration impacts focused on impacts that are expected to occur if blasting is selected as the construction technique, since the vibration impacts of the hydraulic dredging and mechanical dredging without blasting construction methods would be significantly less.

145. The structures nearest the construction sites are harbor-related facilities and equipment, such as the dry bulk unloader, the cement silo, the coal conveyor and the piers. Provided that blasting results in a maximum peak vibration velocity of less than 0.3 in/sec, there is no likelihood of structural damage because the vibration velocity level is safe for the most vulnerable of structures. This vibration velocity level would not be strong enough to cause even minor damage to the Ko Olina Fairways, the nearest residences, about 1/2 mile away from the construction sites. Residences and structures farther away would be even less affected. Recreational areas within the Ko Olina Resort would probably experience vibrations in the clearly perceptible range, but these vibrations would not cause any damage. Construction equipment, including bulldozers, loaded trucks, jackhammers, augers for drilled shafts and earth movers will generate peak vibration velocity levels that will not damage harbor structures or cause annoyance in residential areas.

146. In connection with the SEIS, OEQC recommended the following measures, as conditions of approval, to mitigate aural quality impacts for the construction phase and operational phase.

Construction Phase

- a. "Construction noise from all sources must comply with noise regulations established by the Department of Health."
- b. "Construction equipment must be equipped with mufflers in good working order and must comply with Department of Health and OSHA regulations for vehicular noise emissions."
- c. "Appropriate vibration limits to protect structures and minimize annoyance at

potentially affected residential areas must be set in the contract specifications."

- d. "The contractors must retain a blasting consultant to provide a plan and initiate blasting work, including the supervision of initial test blasting to establish effects and baseline conditions."
- e. "Vibration must be monitored at sensitive locations at the beginning of the construction period. Monitoring may be eliminated if records show a consistent pattern of compliance with specified vibration levels."
- f. "The Department of Transportation must inform potentially affected people living and working in the vicinity about the construction method, probable effects, quality control measures and precautions to be used, and the channels of communication available to them."

Operational Phase

"The exact types and locations of future harbor equipment are unknown at this time. Noise mitigation measures must be followed to conform to the Department of Health noise regulations."

Air Quality

147. Air quality in the Petition Area is primarily affected by air pollutants from vehicular, industrial, natural and agricultural sources.

148. During construction, there are two potential types of air pollution emissions which could impact air quality during construction: (a) fugitive dust from vehicle movement, soil excavation, and stockpiling and (b) exhaust emissions from on-site construction equipment. The potential for dust problems from the material excavated from the harbor and the use of the transport roads will be minimized by the fact that most of the

material will be wet, having been excavated from areas below the water table.

149. Dust will be a greater concern at material stockpile areas. However, past experience has shown that the coral limestone material becomes somewhat cemented as it dries, thus minimizing dust from the stockpiles. Some of the dredged material may cause unpleasant odors. Compared to material excavated from the original harbor channel and basin, the excavated material for the proposed development is expected to contain much less organic matter to decay and produce odors. The hot, dry climate of the area will rapidly dry the material which is expected to diminish the odors.

150. In connection with the SEIS, OEQC recommended the following measures as conditions of approval to mitigate air quality impacts for the construction phase: (a) active areas, unpaved haul roads and stockpile areas must be watered as necessary to control dust and (b) if dust blowing from the stockpiles becomes a nuisance, appropriate mitigation measures such as wind screens, covering the stockpiles with erosion control mats, cementing the surface with a crusting agent, or other appropriate measures must be used.

151. Air pollutants from engine exhausts of construction equipment should have a relatively insignificant impact especially compared to vehicle emissions from nearby roadways.

152. Industrial sources of air pollution associated with a port facility include vessels entering and leaving the

harbor and docked along the piers, cranes used for loading and unloading cargo, motorized vehicles used for cargo servicing, liquid bulk loading and unloading operations and the dry bulk unloader and conveyor system. Emissions from normal port operations could exceed the significant emission rates for particulate matter, nitrogen oxides and hydrocarbons. However, no long-term adverse impact to the Petition Area and adjacent sensitive properties is anticipated because the prevailing wind pattern is expected to carry a high percentage of emissions from harbor activities and operations out to sea. Further, air quality emissions from cargo handling will be controlled in accordance with applicable DOH air quality regulations.

153. In connection with the SEIS, OEQC recommended, as a condition of approval and a mitigative measure, that air quality emissions from cargo handling be controlled in accordance with Department of Health air quality regulations during the operations phase of the harbor expansion.

154. Motor vehicle traffic is a significant source of carbon monoxide. Utilizing the Environmental Protection Agency computer model Mobile 4.1, the predicted carbon monoxide concentrations at the intersections of Kalaeloa Boulevard and Malakole Street, and Kalaeloa Boulevard and the future main access road in 2006 with or without the proposed development are expected to be within current allowable State limits, even though present conditions at the Kalaeloa Boulevard and Malakole Street intersection do not meet State requirements. The projected reduced concentrations are based on the expectation that:

(1) older, more polluting vehicles will be leaving the State's roadways during the intervening 15 years and (2) the planned roadway improvements will be completed. No air quality study has been performed specifically for the Property.

Hazardous and Solid Materials

155. The proposed development will be built in areas where no environmental citations have been reported. The excavated materials will not be considered solid waste since they have commercial value and will be stockpiled for reuse. The additional shipping activity to be handled by the proposed development might increase the potential for accidental or unauthorized discharges of waste and hazardous materials in the harbor area. However, users will be required to follow proper safety and material handling rules and procedures.

156. In its written testimony, OP indicated the following:

- a. The activities associated with the enlargement of the Barbers Point Harbor may include the installation of new Underground Storage Tanks ("USTs").
- b. These USTs would be regulated pursuant to the technical standards and financial responsibility requirements of 40 CFR Part 280.
- c. In addition, these USTs would be subject to State administrative rules on underground storage tanks promulgated under HRS Chapter 342L.

157. The Department of Health pointed out in their memo dated October 22, 1992 that the assessment and remediation of soil and groundwater contamination can be costly and time-

consuming. Therefore the Department of Health recommended that an environmental assessment and remediation plan be planned far in advance and implemented prior to the commencement of any construction.

158. In connection with the SEIS, OEQC recommended the following mitigation measures as conditions of approval to mitigate impacts from hazardous waste during the construction phase and operations phase.

Construction Phase

"Removal of the fuel pipeline with Expansion Area B, and hazardous materials generated during construction must be handled in accordance with all safety and materials handling rules. Oil spill emergency response procedures must always be followed."

Operational Phase

"All regulations pertaining to the handling of hazardous materials must be followed."

Traffic

159. The impacts on the following roadway facilities around Barbers Point Harbor were analyzed: (1) segments of the H-1 Freeway at the Palailai Interchange, (2) ramps at the Palailai Interchange affected by the proposed development, (3) the intersection of Kalaeloa Boulevard and Malakole Street and (4) the future intersection of Kalaeloa Boulevard with a proposed future access road to Barbers Point Harbor. By the year 2005, the proposed development is expected to impact traffic conditions along Kalaeloa Boulevard and the H-1 Freeway. With or without this development, the highway system in the vicinity of

Barbers Point Harbor will need improvement to accommodate the traffic to be generated by other developments in the Ewa region.

ADEQUACY OF PUBLIC SERVICES AND FACILITIES

Potable Water Supply

160. The potable water demand for the proposed pier and storage yard facilities can be estimated by the acreage of the shoreside facilities and a water use factor. A factor of 880 gallons per day per acre was used for the type of facilities proposed. This factor was based on actual water consumption for a compatible area within Honolulu Harbor. Potable water use for the Petition Area, including approximately 113 acres of shoreside facilities, is estimated to be about 99,440 gallons per day.

161. The ultimate demand for the entire harbor, as fully developed (including the development of the Petition Area), will be about 194,000 gallons per day based on a total land area of about 220.5 acres. Present water usage is about 20,000 gallons per day. The existing harbor facilities have a water allocation from the City and County of Honolulu Board of Water Supply of about 127,000 gallons per day. The 20-inch existing water main to the harbor could accommodate the estimated ultimate demand for the entire harbor. The water supply system will have to be extended to the proposed shoreside facilities.

162. The present allocation of 127,000 gpd would need to be increased by about 67,000 gpd. No determination has been made as to the source of this additional water.

163. Petitioner is working with the Department of Land and Natural Resources and the City and County of Honolulu Board

of Water Supply ("BWS") in its water development program to address Petitioner's estimated future water requirements for the fully developed harbor.

164. Petitioner is working with Campbell Estate, member of the Ewa Plain Water Development Corporation, to address Petitioner's additional water supply needs.

165. The BWS had no objections to the project but noted some concerns, including indicating that:

- a. A revised water master plan showing the expansion, increased water use, and proposed water facilities along with hydraulic calculations should be submitted to the BWS for review and approval.
- b. The availability of water will be determined when the building permit applications are submitted for review and approval.
- c. The developer may be required to pay a Water System Facilities Charge to the Board of Water Supply for transmission depending on the location of the DLNR source.

Wastewater

166. The subject project is located within the County sewer service system.

167. There are no existing wastewater facilities on the sites of the proposed development. Three comfort stations generate wastewater within the harbor. Disposal of wastewater from the Petitioner-operated comfort station is by onsite seepage pit. The remaining two comfort stations are operated by the tenants. One uses a septic tank and the other uses a holding tank for wastewater disposal.

168. The Honouliuli Wastewater Treatment Plant (WTP) is the nearest treatment facility, located approximately four miles east of the harbor.

169. In the interim, wastewater generated by the proposed development will be disposed of through a septic system.

170. Wastewater from the harbor will be disposed of through the Kapolei Business Park sewer system, and treated at the Honouliuli WTP.

171. The State Department of Health provided the following comments: (a) it has been determined that the subject project is located within the County sewer system and (b) as the area is sewerred, the Department of Health has no objections to the proposed land use reclassification provided that the project is connected to the public sewers.

Power and Communications

172. The Hawaiian Electric Co., Inc. (HECO) is providing electricity to Barbers Point Harbor through a utility corridor along Malakole Street and GTE Hawaiian Telephone provides telephone service to existing harbor facilities.

173. An existing HECO substation is located adjacent to the railroad right-of-way and west of Kalaeloa Boulevard.

174. The proposed development will place additional demands on power and communication systems. The existing electrical and telephone lines will be extended to the areas of the proposed improvements. HECO is committed to provide electrical power to all Ewa/Kapolei developments. Thus, to fulfill this commitment, HECO is planning to increase the

electrical generating capacity of its Kahe Power Plant. It has not been determined whether current power supply is adequate for the proposed harbor expansion or whether an increase in generating capacity at the Kahe Power Plant is needed to accommodate the proposed project.

Fire Protection

175. Fire protection services to Barbers Point Harbor are presently provided from the Makakilo and Nanakuli Fire Stations. A new fire station near the entrance to Campbell Industrial Park was scheduled to be in service by March, 1995.

176. With the new fire station located within a few minutes of Barbers Point Harbor, the Fire Department response time will be shortened. The proposed development is not expected to have any adverse impacts to the City and County of Honolulu Fire Department facilities or services.

Police Protection

177. The Ewa region is in District III which extends from Red Hill to Kaena Point and Kipapa Ridge. The region is handled by the Pearl City Police Station, who will likely first dispatch officers from beats in Makakilo and Ko Olina to Barbers Point Harbor.

178. Two substations are proposed by the Police Department. One would be located in Ko Olina and the other would be near the proposed relocation site of the Ewa Beach Fire Station at Ewa Marina.

179. There are plans for a new regional station in the Kapolei area which is a few minutes away from the harbor. Since

this new police station would serve Barbers Point Harbor, the proposed improvements would have no significant impacts on police services.

Solid Waste Disposal

180. The proposed development is not anticipated to have any significant adverse impacts on solid waste disposal services provided by the City, as dredged material is not considered solid waste since it has commercial value and will be stockpiled for reuse. No evidence has been presented regarding the increase of solid waste due to development of the piers and other harbor improvements proposed by Petitioner.

Recreational Facilities and Public Access

181. There are no recreational activities occurring at areas that will be directly affected by the proposed development. Existing shoreline access at the harbor entrance will not be affected.

182. Public access for recreational fishing is currently allowed at the makai point on the east side of the channel entrance and to the mole separating Ko Olina and Barbers Point Harbor on the west side. Access to the makai point is partially over Campbell Estate property. These accesses are not presently controlled by Petitioner.

183. Public access to the mole area will be restricted during construction for safety and security reasons.

184. After construction, Petitioner will need to assess, in light of safety and security concerns, whether continued public access to the mole would be feasible.

185. Operation of a historic railway, situated within the 40 foot wide historic railroad right-of-way listed on the National Register of Historic Places referenced in finding 31, provides a recreational train service for visitors who ride the rail for 6.5 miles from a station in Ewa, to Paradise Cove at Ko Olina Resort.

Civil Defense

186. Based on a hurricane vulnerability study that provided a prediction of coastal flooding which can be expected during scenario hurricane storm wave attack in the project area, the maximum predicted stillwater levels in Barbers Point Harbor resulting from the worst case hurricane are less than the elevations of the harbor marginal wharves, and therefore no hurricane flooding inland of the wharves is anticipated.

187. The proposed expansion project would not alter the existing inundation limit predictions for the site, except to include the actual basin expansion water area within the zone of inundation.

COMMITMENT OF STATE FUNDS AND RESOURCES

188. The DOT generates revenues through its tariff structure. Major sources of revenues include wharfage, rentals, and interest income. The DOT finances major capital improvement projects through its revenue bonds and cash CIP program. All capital improvement project expenditures are required to receive authorization from the State Legislature. The DOT plans to construct improvements (pier, yard, and shed projects) in the Petition Area on an incremental basis over a period of

approximately 16 years. The DOT has already received authorization from the legislature to expend funds on the following items:

- a. By Act 296/91, amended by Act 300/92, authorization was provided to purchase the 56.5 acre parcel. Funds were also authorized to commence design of the dredging project.
- b. By Act 289/93, authorization was provided to commence the dredging project and start design on new pier facilities to provide additional vessel berthing space.

189. On January 29, 1997, Petitioner accepted the proposal and awarded the contract for the initial phase of the harbor expansion to the lowest responsible bidder. The contract, which has not been executed, covers the basin expansion at the Barbers Point Harbor.

190. Petitioner received an appropriation, and was authorized by the State Legislature to use the Harbor revenue bond fund for the harbor expansion.

191. Petitioner's appropriation has a proviso stating Petitioner must encumber the money by June 30th of fiscal year 1995-96.

192. If Petitioner cancels the award of the project, or the contractor cannot do the work because of Commission conditions or restrictions, Petitioner would have to go back to the Legislature for reappropriation of funding authorization because the funding would have been deemed to have lapsed June 30, 1996.

193. Additional funding authorization will be requested of the 1997 Legislature to construct new pier facilities, design

additional pier facilities, and provide navigational improvements such as night lighting and a control tower.

CONFORMANCE WITH URBAN DISTRICT STANDARDS

194. The proposed reclassification is in general conformance to §15-15-18, HAR, which sets forth the standards for determining "U" Urban District boundaries.

CONFORMITY WITH HAWAII STATE PLAN, STATE FUNCTIONAL PLANS, STATE REGULATIONS AND CITY AND COUNTY PLANS AND REGULATIONS

Hawaii State Plan

195. The proposed development is generally consistent with the objectives and policies of the Hawaii State Plan. The following describes the compatibility of the proposed development in relation to the various elements planned for the State of Hawaii.

a. Economy in general (HRS 226-6(a)(1), (2), HRS 226-6(b)(9), (10)). The proposed development will provide jobs for residents of Ewa, central Oahu, the leeward coast and the rest of the island. Even though Ewa is experiencing rapid population growth, the employment base of this region remains limited. In addition to direct employment at the harbor, the proposed development will encourage businesses that would benefit from proximity to port facilities to locate near the harbor, and therefore provide a broader choice of employment for Ewa residents. The proposed development is being promoted through a cooperative and coordinated effort involving both the State and the private sector to improve the operational efficiency and capacity of the harbor. The proposed development will also

support private sector efforts to develop employment centers near the harbor.

b. Economy - Agriculture (HRS 226-7(b)(10)).

While portions of the proposed development sites are designated Agricultural by the State, these areas have not been used for agricultural purposes. The agricultural areas are not included in any of the ALISH classifications. Neither are these areas considered important agricultural lands under the LESA system. The soil is coral outcrop, which is not suitable for crop production.

c. Physical Environment - Land Based, Shoreline and Marine Resources (HRS 226-11(a)(1), HRS 226-11(b)(2), (3), (6), (8)). Expansion of the Barbers Point Harbor will satisfy the need for ship berthing and cargo handling space while minimizing impacts to the shoreline and marine resources. Impacts associated with developing the necessary port facilities at a new location will be avoided. The impacts of the proposed development on the environment are more fully set forth in Section 11 of the Petition and the exhibits attached thereto, but generally, the proposed development will not have a major impact on natural resources.

d. Transportation (HRS 226-17(b)(4), (6), (8), (9)). Based on two separate master plan studies Honolulu Waterfront Master Plan (1989) and 2010 Master Plan for Barbers Point Harbor (1991), it is clear that capacity improvements must be made to Barbers Point Harbor. The proposed development would increase cargo handling capacity and allow construction of

dedicated fuel and tug piers. The proposed development will provide an additional 3,350 linear feet of piers and 134 acres of storage yards. The proposed development will support the rapidly growing Ewa region by providing improved port services and decreasing overland transportation costs for cargoes destined for Ewa and leeward Oahu that must presently be hauled from Honolulu Harbor.

State Function Plans

196. State Functional Plans - State Transportation Functional Plan. State Functional Plans are the primary guidelines for implementing the Hawaii State Plan. While the Hawaii State Plan establishes long-term objectives, the State Functional Plans focus on shorter-term actions. The proposed development satisfies the following objectives and policies of the State Transportation Functional Plan:

- a. Expansion of the transportation system (objective);
- b. Increase transportation capacity and modernize transportation infrastructure in accordance with existing master plans and laws requiring accessibility for people with disabilities (policy);
- c. Identification and reservation of lands and rights of way required for future transportation improvements (objective); and
- d. Identify, reserve and/or acquire land for future transportation improvements (policy).

197. The proposed development is consistent with the above objectives and policies. The proposed development will increase the harbor's cargo handling capacity and allow the subsequent construction of additional facilities, such as a dedicated fuel pier.

198. Further, Barbers Point Harbor improvements are specifically identified in the State Transportation Functional Plan as implementing actions. Under Objective 1.A (Expansion of the transportation system) and Policy 1.A.1 (Increase transportation capacity and modernize transportation infrastructure in accordance with existing master plans ..."), one of the implementing actions is: "Implementing Action 1.A.1.c: Barbers Point Harbor -- Piers, yards, sheds, land acquisition, and improvements in FY 92-93: \$20 million." Under Objective 1.D (Identification and reservation of lands and rights of way required for future transportation improvements) and Policy 1.D.1 (Identify, reserve and/or acquire land for future transportation improvements), one of the implementing actions is: "Implementing Action 1.D.1.a: Reserve land/rights of way for anticipated improvements in the following areas/facilities: Barbers Point Harbor (\$5.6 million) for future harbor expansion."

State Master Plans

199. The Honolulu Waterfront Master Plan (1989) called for improvements to Barbers Point Harbor as the deepening of the entrance channel and the construction of new slips and backland storage yards. This master plan also recommended that certain waterfront industrial activities such as the grain and sugar

terminals be relocated from Honolulu Harbor to Barbers Point Harbor. The proposed development is in conformance with this master plan's recommendation to construct new slips and backland storage yards.

200. The 2010 Master Plan for Barbers Point Harbor was generated through a planning process in which representatives of government agencies, local community boards, users of the harbor and other members of the maritime community provided input in four areas of port facilities: general cargo, dry-bulk cargo, liquid-bulk cargo and facilities. The proposed development implements the following recommendations of the 2010 Master Plan: (a) acquisition of additional land, (b) expansion of the harbor basin by dredging new berths, (c) excavation of the south corner of the harbor basin and (d) construction of the tug pier.

Coastal Zone Management Program

201. No part of the Petition Area lies within the SMA boundaries. Moreover, Barbers Point Harbor itself is exempt from the SMA regulatory mechanism. Nevertheless, DOT sought and obtained a CZM Program Federal Consistency Review from the Office of State Planning, now known as OP, the State office charged with the responsibility to review and make CZM consistency determinations. OP's review covered the portion of the proposed development consisting of the excavation of the expanded harbor basin and the construction of a tugboat pier, Piers 7, 8, and 9 and an extension of Pier 5. OP concurred with DOT's CZM assessment and found the activity is consistent with the CZM Program based on the following conditions:

a. The mitigation measures proposed in the SEIS and listed in the Governor's SEIS acceptance letter be implemented;

b. Each phase of the 1,100 feet by 1,100 feet basin expansion area shall be excavated behind an enclosure berm to minimize turbidity;

c. A Section 401 Water Quality Certification from the DOH is obtained and complied with; and

d. Any change to the project proposal, design, or proposed mitigation measures requires CZM approval.

202. Moreover, the proposed development conforms with the objectives and policies of the Hawaii CZM Program as follows:

a. Recreational resources. The objective is to provide coastal recreational opportunities accessible to the public. Barbers Point Harbor is a commercial harbor and is therefore not available for public recreational activities. Public access to the ocean shoreline is available via Malakole Street and through the parking lot adjacent to the barge harbor. The proposed development will not affect this public access point.

b. Historic resources. The objective is to protect, preserve, and where desirable, restore those natural and man-made historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture. Archaeological surveys have been performed and the boundaries of the lands comprising a portion of the Petition Area acquired from Campbell Estate were adjusted to

avoid important sites recommended for preservation.

Archaeological impacts will therefore be minimal. There will be no impact on the historic railroad mauka of the harbor.

c. Scenic and open space resources. The objective is to protect, preserve, and where desirable, restore or improve the quality of coastal scenic and open space resources. The lands that will be affected by the proposed development have been used for surface mining, stockpiling and processing of coral limestone minerals, and therefore, has minimal value as either a scenic or open space resource. Visual impacts of the proposed development are expected to be minimal.

d. Coastal ecosystems. The objective is to protect valuable coastal ecosystems from disruption and minimize adverse impacts on all coastal ecosystems. With the implementation of the planned mitigation measures, the impacts on coastal waters and marine biology is expected to be minimal.

e. Economic uses. The objective is to provide public or private facilities and improvements important to the State's economy in suitable locations. Barbers Point Harbor is the most appropriate location for the additional port facilities needed by the State.

f. Coastal hazards. The objective is to reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion and subsidence. The harbor configuration provides a safe haven from storm waves, although tsunami precautions include putting vessels in harbors to sea. A

drainage master plan will be developed to ensure the proper discharge of stormwater runoff.

g. Managing development. The objective is to improve the development review process, communication and public participation in the management of coastal resources and hazards. The State has consulted with, and will continue to involve, the maritime community, area residents and other interested parties in the development of Barbers Point Harbor. The State has initiated a public outreach program to keep area residents informed about Barbers Point Harbor development plans.

City and County of Honolulu Plans and Policies

General Plan of the City and County of Honolulu

203. The General Plan of the City and County of Honolulu envisions Kapolei, Makakilo, West Beach and other areas in the Ewa region as Oahu's secondary urban center, including a second deep-draft harbor to complement Honolulu Harbor. The proposed development is consistent with the General Plan in the following respects:

a. Population. The proposed development supports the development of the secondary urban center by providing an expanded port facility in close proximity, thereby contributing to the reduction of transportation costs for goods which support the economic growth of leeward Oahu. In this way, the proposed development meets the General Plan objective and policy of encouraging development within the secondary urban center at Kapolei and the Ewa and central Oahu urban-fringe areas

to relieve developmental pressures in the remaining urban-fringe and rural areas.

b. Transportation and utilities. The proposed development implements the General Plan policy of creating a transportation system which will (i) enable people and goods to move safely, efficiently and at reasonable cost, (ii) serve all people, including the poor, the elderly and the physically handicapped and (iii) offer a variety of attractive and convenient modes of travel. The proposed development also implements the General Plan policy of facilitating the development of a second deep-draft harbor to relieve congestion in Honolulu Harbor.

c. Physical development and urban design. The proposed development is expected to provide direct and indirect employment opportunities and thereby support the continuing development of Barbers Point as an industrial center. This implements the General Plan objective of developing a secondary urban center in Ewa with its nucleus in the Kapolei area. It also implements the following General Plan policies:

- (i) encouraging the development of a major residential, commercial and employment center within the secondary urban center at Kapolei, (ii) encouraging the continuing development of Barbers Point as a major industrial center and (iii) cooperating with the State and federal governments in the development of a deep water harbor at Barbers Point.

Development plans

204. The Ewa Development Plan encompasses the region from Kahe Point to West Loch of Pearl Harbor. According to the Ewa Development Plan Land Use Map, the areas comprising the Petition Area and the additional piers and storage yards are designated "industrial." The stockpiles are located in areas designated "industrial." The proposed development conforms to these designations.

205. There is a pending update to the Ewa Development Plan referred to as the Ewa Development Plan (Ewa Development Plan: Final Proposed Draft, Planning Department, City and County of Honolulu, March, 1996). This pending update would not change the present designations for either the Petition Area or the proposed stockpile areas.

Zoning

206. The City and County of Honolulu DLU administers the Land Use Ordinance which is the City's zoning ordinance. The lands comprising the Petition Area are currently zoned AG-2 (General Agriculture). The existing stockpile areas are, and the proposed stockpile areas are planned to be, located on lands zoned AG-2 and I-3 (Waterfront Industrial). While not required for the construction of the proposed improvements, Petitioner intends to seek rezoning of the Petition Area following the Commission's action on this Petition.

INCREMENTAL DISTRICTING

207. The expansion project is comprised of 12 separate projects and is expected to be accomplished over a period of 20 years.

208. The schedule of the individual projects comprising the expansion project, separated into five year increments beginning in 1997, is set forth in Petitioner's Exhibit 10.

RULING ON PROPOSED FINDINGS OF FACT

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

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

CONCLUSIONS OF LAW

Pursuant to HRS chapter 205, and the Hawaii Land Use Commission Rules under HAR chapter 15-15, and upon consideration of the Land Use Commission decision-making criteria under HRS section 205-17, this Commission finds upon a clear preponderance of the evidence that the reclassification of the Property consisting of approximately 140.499 acres of land in the State Land Use Agricultural District, situate at Honouliuli, District of Ewa, City and County of Honolulu, State of Hawaii, Tax Map Key Nos. 9-1-14: portion of 24 and portion of 27, to the State Land

Use Urban District, for the expansion of Barbers Point Harbor, and subject to the conditions in the Order below, is reasonable, non-violative of HRS section 205-2, and is consistent with the Hawaii State Plan as set forth in HRS chapter 226, and the Coastal Zone Management Program as set forth in HRS chapter 205A.

DECISION AND ORDER

IT IS HEREBY ORDERED that the Property, being the subject of Docket No. A96-719, consisting of approximately 140.499 acres of land in the State Land Use Agricultural District, situate at Honouliuli, District of Ewa, City and County of Honolulu, State of Hawaii, Tax Map Key Nos. 9-1-14: portion of 24 and portion of 27, and approximately shown in Exhibit "A" attached hereto and incorporated herein by reference, shall be and is hereby reclassified to the State Land Use Urban District, and the State Land Use District Boundaries shall be amended accordingly, subject to the following conditions:

1. Petitioner shall excavate Expansion Area A behind an enclosure berm to minimize turbidity within the main harbor and coastal waters.

2. Petitioner shall use mechanical dredging, without the use of explosives or blasting, for excavation of the basin expansion area.

3. Petitioner shall monitor turbidity during construction only when construction is exposed to the harbor waters. If turbidity measurements exceed levels of variability found prior to construction at the surveyed monitoring points, Petitioner shall use silt curtains or other appropriate measures

to limit turbidity to within levels of variability documented during prior water quality monitoring programs. Measures to control excessive turbidity must be implemented in accordance with the Department of Health's water quality certification procedures.

4. Petitioner shall initiate and fund a nearshore water quality monitoring program covering the Barbers Point Harbor basin and areas within the immediate vicinity of the harbor entrance as required by the State Department of Health (DOH). Mitigation measures shall be implemented by Petitioner if the results of the monitoring program warrant them. Mitigation measures shall be developed in coordination with the DOH and implemented by Petitioner.

5. Petitioner shall follow all Federal and State regulations pertaining to the handling and storage of hazardous materials.

6. Petitioner shall develop, in conformance with U.S. Coast Guard regulations, a plan covering Barbers Point Harbor that describes oil spill response procedures for the harbor, prior to operation of the new piers. Petitioner shall ensure that each company that transfers oil or other petroleum products at the harbor develops an oil response plan that is acceptable to the U.S. Coast Guard.

7. Petitioner shall conduct a records search to check for the presence of any Underground Storage Tanks (USTs) that may be or may previously have been located within the Petition Area, prior to commencement of any improvement within the Petition

Area. If any such USTs are discovered, Petitioner shall close them in accordance with Federal and State requirements before construction on the site begins.

8. Petitioner shall ensure that construction activities are in compliance with the provisions of DOH Administrative Rules, Chapter 11-13, "Community Noise Control for Oahu."

9. Petitioner shall monitor vibration at sensitive locations at the beginning of the construction period. Petitioner may eliminate monitoring methods, if records show a consistent pattern of compliance with specified vibration levels. Petitioner shall implement such mitigation measures, as warranted, to protect structures and minimize annoyance at potentially affected residential areas.

10. During the construction period, Petitioner shall hold periodic public information meetings for potentially affected people living and working in the vicinity about the construction method, probable effects, quality control measures and precautions to be used, and the channels of communication available to them.

11. During dredging operations affecting harbor waters conducted by Petitioner, Petitioner shall designate a single individual (environmental monitor) to be responsible for all environmental monitoring and reporting. Petitioner shall provide the individual's name, address, and telephone number to the U.S. Corps of Engineers, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and Land Use Commission prior to the

initiation of construction activities. The environmental monitor shall conduct daily visual inspections of the construction areas to survey for green sea turtles and monk seals, and to ensure that effects to green sea turtles and monk seals do not exceed allowable levels. Petitioner shall execute contract specifications that require construction personnel to monitor green sea turtles and monk seals which may venture into the harbor basin.

12. Petitioner shall initiate and fund a program to monitor the populations of threatened and endangered green sea turtles and monk seals in the harbor basin and the areas in the immediate vicinity of the harbor entrance, as required by the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and the State Division of Aquatic Resources. Mitigation measures shall be implemented by Petitioner if the results of the monitoring program warrant them. Mitigation measures shall be developed in coordination with the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and the Department of Land and Natural Resources.

13. Petitioner shall notify the U.S. Fish and Wildlife Services of any Hawaiian Stilt activity which may occur if settlement ponds are constructed.

14. Petitioner shall limit dredged coral stockpiles to 40 feet in height.

15. Petitioner shall develop and submit a Best Management Practice (BMP) plan to control stormwater runoff, erosion and sediment from dredged coral stockpiles to the

Department of Health for approval in accordance with NPDES permit requirements. Prior to the start of the dredging project, Petitioner shall submit a copy of the NPDES permit to the Land Use Commission.

16. Petitioner shall implement effective soil erosion and dust control measures during construction in accordance with the regulations of the State Department of Health.

17. Petitioner shall fund the design and construction of drainage improvements required as a result of the development of the Property to the satisfaction of the appropriate State agencies.

18. Petitioner shall develop a solid waste management plan in conformance with the Integrated Solid Waste Management Act, Chapter 342G, Hawaii Revised Statutes.

19. Petitioner shall fund and construct adequate wastewater treatment, transmission and disposal facilities, in accordance with the regulations of the State Department of Health. Petitioner will coordinate the planning of wastewater treatment, transmission and disposal facilities in the Petition Area, as appropriate, with the City Department of Wastewater Management.

20. Petitioner shall participate in an air quality monitoring program to be coordinated with the State Department of Health.

21. Within the Petition Area, Petitioner shall fund and construct adequate defense measures in coordination with the State civil defense agency.

22. Petitioner shall ensure the provision of roadway improvements necessitated by the proposed development. Petitioner will ensure that the planning of any roadway improvements necessitated by the proposed development that are to be situated outside of the Barbers Point Harbor area is coordinated with the City Department of Transportation Services.

23. After construction, Petitioner will assess, consideration to safety and security concerns, options for providing public access to the mole, and continue to provide such access, to the extent feasible.

24. Petitioner shall be responsible for ensuring the development of adequate water source, storage, and transmission facilities and improvements for the Petition Area. Water transmission facilities and improvements shall be coordinated and approved by the appropriate State and County agencies.

25. For all sites within the Petition Area approved for preservation by the State Historic Preservation Division (SHPD) to undergo archaeological data recovery, an archaeological data recovery plan (scope of work) shall be prepared by Petitioner. This plan must be approved by the SHPD and a certified copy of said plan shall be filed with the Commission prior to the commencement of the dredging project.

26. For all sites within the Petition Area approved for preservation by the State Historic Preservation Division (SHPD), a preservation plan shall be prepared by Petitioner. This plan must include buffer zones/interim protection measures during construction, and long-range preservation. The plan must

be approved by the SHPD and a certified copy of said plan shall be filed with the Commission prior to the commencement of the dredging project.

27. Petitioner shall immediately stop work and contact the State Historic Preservation Division should any previously unidentified archaeological resources such as artifacts, shell, bone or charcoal deposits, human burials, rock or coral alignments, pavings or walls be encountered during Project development.

28. Petitioner shall prepare an environmental impact statement or supplemental environmental impact statement pursuant to chapter 343, HRS, prior to making any improvements to the harbor entrance.

29. Petitioner shall complete the development of the Petition Area in substantial compliance with the representations made before the Land Use Commission. Failure to so develop the Property may result in reversion of the Property to its former land use classification, or change to a more appropriate classification.

30. 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 Petition Area prior to development of the Petition Area.

31. Petitioner shall timely provide, without any prior notice, annual reports to the Commission, the Office of Planning, and the City and County of Honolulu Planning Department in connection with the status of the subject project and

Petitioner's progress in complying with the conditions imposed herein. The annual report shall be submitted in a form prescribed by the Executive Officer of the Commission.

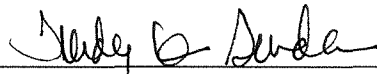
32. The Commission may fully or partially release the conditions provided herein as to all or any portion of the Property upon timely motion and upon the provision of adequate assurance of satisfaction of these conditions by Petitioner.


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

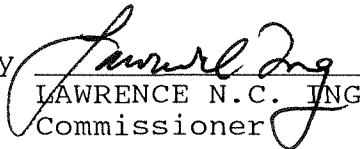
34. Petitioner shall record the conditions imposed by the Commission with the Bureau of Conveyances pursuant to section 15-15-92, Hawaii Administrative Rules.

Done at Honolulu, Hawai'i, this 29th day of April 1997,
per motion on April 25, 1997.

LAND USE COMMISSION
STATE OF HAWAII


By 
TRUDY K. SENDA
Chairperson and Commissioner


By 
RUPERT K. CHUN
Vice Chairperson and Commissioner

By 
LAWRENCE N.C. ING
Commissioner

By 
M. CASEY JARMAN
Commissioner

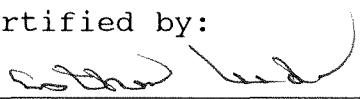
By (absent)
HERBERT S.K. KAOPUA, SR.
Commissioner

By 
LLOYD F. KAWAKAMI
Commissioner

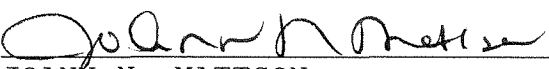
By 
MERLE A. K. KELAI
Commissioner

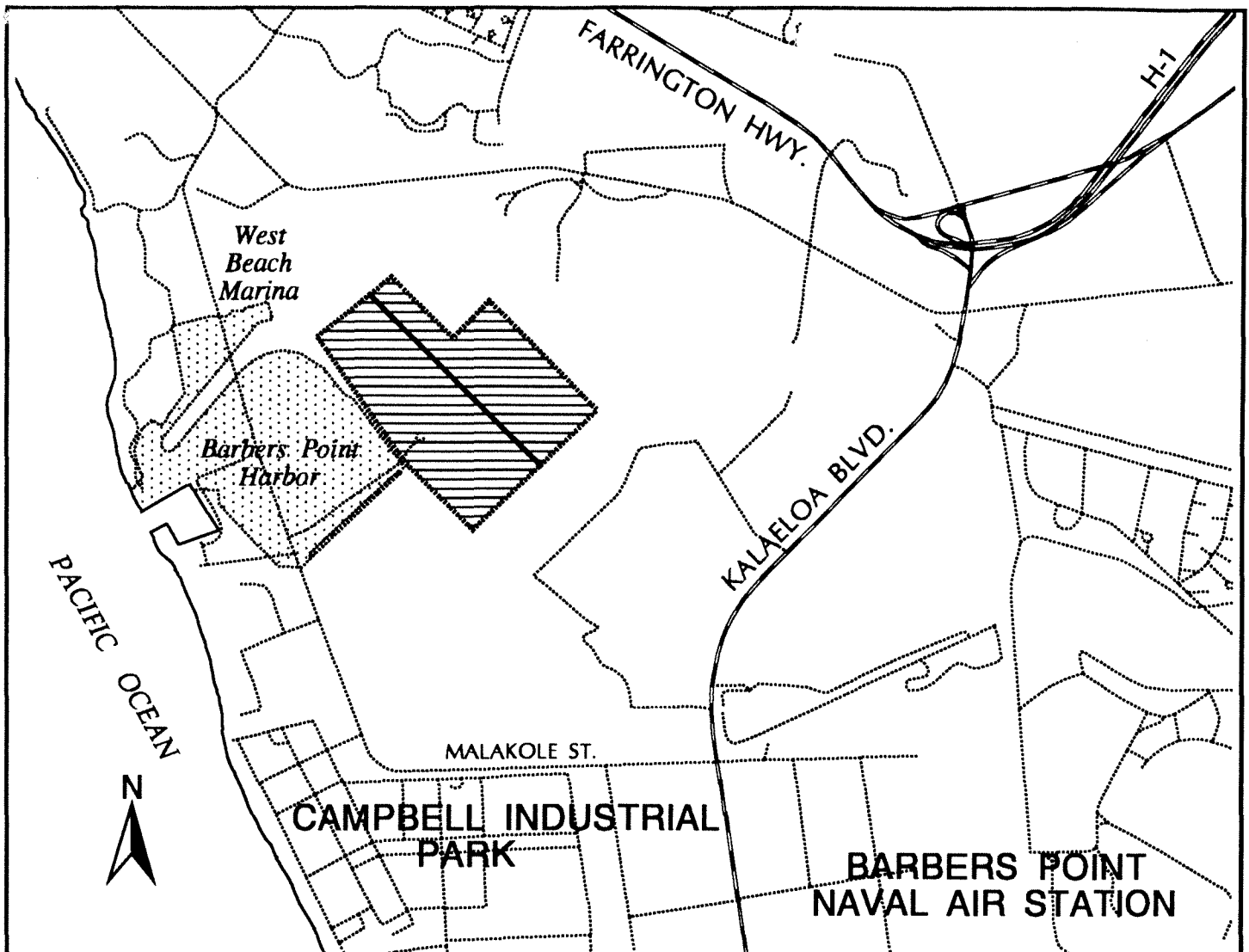
Filed and effective on
April 29, 1997

Certified by:


Executive Officer

By (absent)
EUSEBIO LAPENIA, JR.
Commissioner

By 
JOANN N. MATTSON
Commissioner



A96-719 / DEPARTMENT OF
TRANSPORTATION,
HARBORS DIVISION

LOCATION MAP

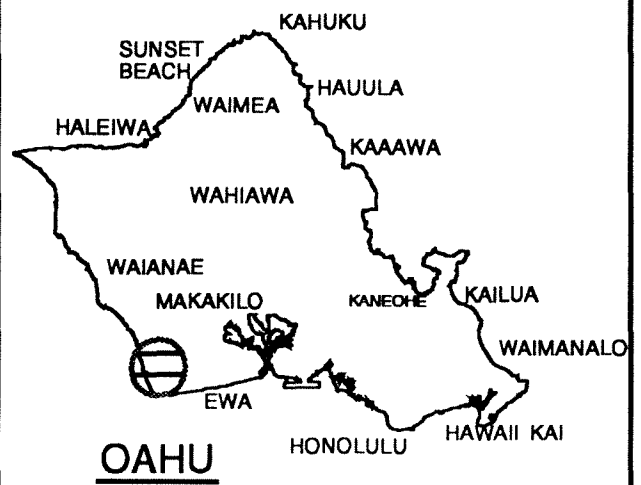
TMK: 9-1-14: por. 24, and por. 27

Honouliuli, Ewa, Oahu



APPROVED AREA

EXHIBIT "A"



OAHU

BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAI'I

In the Matter of the Petition of)	DOCKET NO. A96-719
)	
DEPARTMENT OF TRANSPORTATION,)	CERTIFICATE OF SERVICE
STATE OF HAWAII)	
)	
To Amend the Land Use District)	
Boundary of Certain Lands situated)	
at Honouliuli, District of Ewa,)	
City and County of Honolulu, State)	
of Hawai'i, Identified by Tax Map)	
Key Nos. 9-1-14: Portion of 24 and)	
9-1-14: Portion of 27, consisting)	
of approximately 140.499 acres from)	
the Agricultural District to the)	
Urban District.)	
_____)	

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:

DEL. RICK EGGED, Director
 Office of Planning
 P. O. Box 2359
 Honolulu, Hawaii 96804-2359

CERT. PATRICK T. ONISHI, Chief Planning Officer
 Planning Department
 City and County of Honolulu
 650 South King Street
 Honolulu, Hawaii 96813

CERT. BRUCE Y. MATSUI, ESQ.
 LANE T. ISHIDA, ESQ., Attorneys for Petitioner
 Department of the Attorney General
 300 Kekuanao'a Building
 465 South King Street
 Honolulu, Hawaii 96813

CERT. THOMAS FUJIKAWA, Chief
 Harbors Division
 Department of Transportation
 79 S. Nimitz Highway
 Honolulu, Hawaii 96813

DATED: Honolulu, Hawaii, this 29th day of April 1997.



ESTHER UEDA
Executive Officer