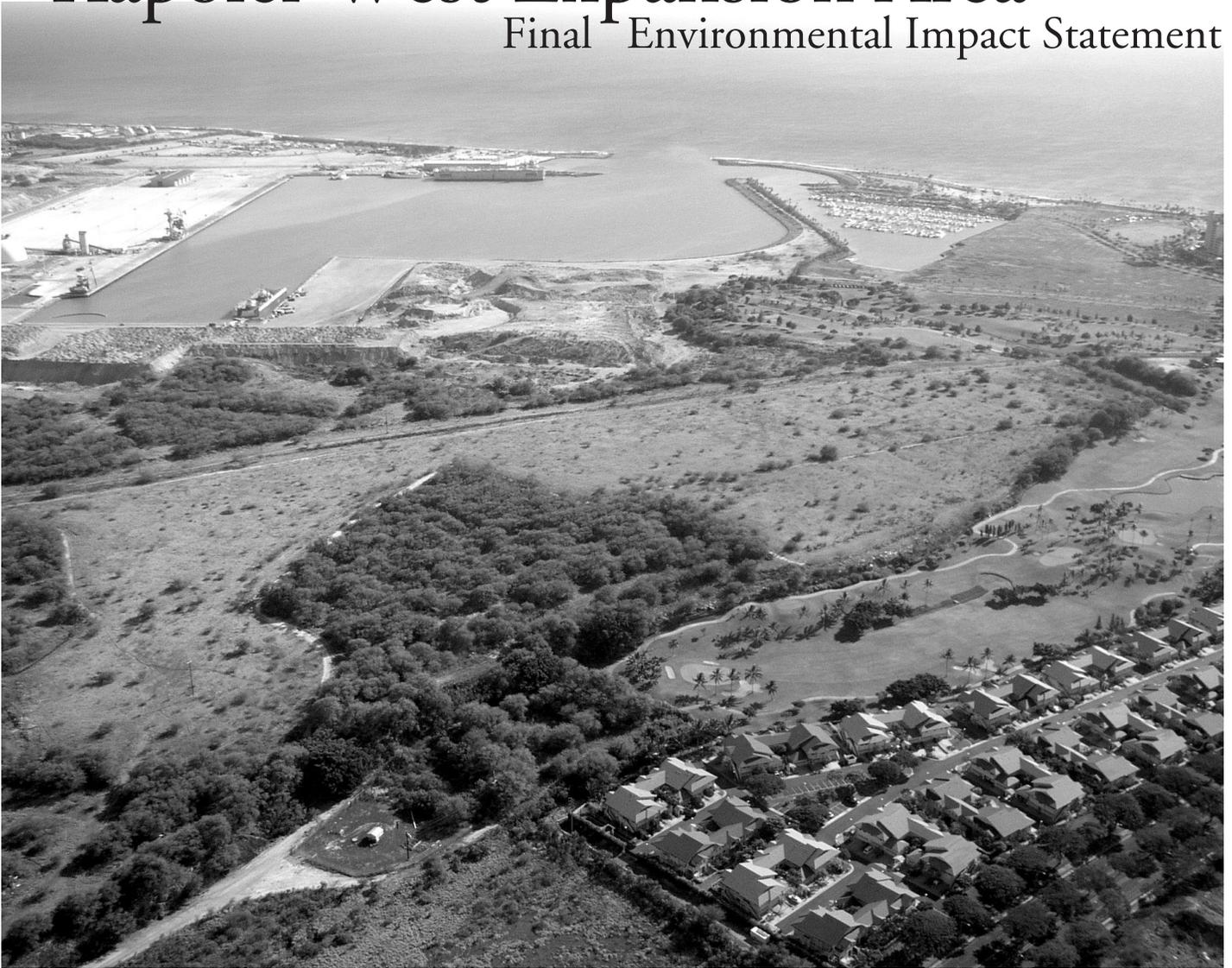


Kapolei West Expansion Area

Final Environmental Impact Statement



VOLUME 1 OF 2

prepared for
Aina Nui Corporation and
The Estate of James Campbell

June 2005

prepared by
Helber Hastert and Fee, Planners

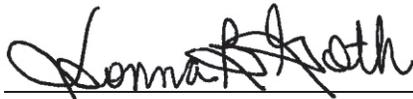
for submittal to
State of Hawaii Land Use Commission
in support of a District Boundary Amendment

Kapolei West Expansion Area

Final Environmental Impact Statement

TMK Parcels 9-1-14:por. 33; 9-1-15:por. 4 and por. 20

This final environmental impact statement and all ancillary documents were prepared under the signatory's direction or supervision, and the information submitted, to the best of the signatory's knowledge, fully addresses document content requirements as set forth in sections 11-200-17 and 11-200-18, Hawaii Administrative Rules, as appropriate.



Donna Goth
President
Aina Nui Corporation

June 2, 2005

Date

prepared for
Aina Nui Corporation and
The Estate of James Campbell

June 2005

prepared by
Helber Hastert and Fee, Planners

for submittal to
State of Hawaii Land Use Commission
in support of a District Boundary Amendment

PREFACE

Since publication of the Draft EIS in March 2005, the middle school site included in the Kapolei West master plan has been increased in size from 10.0 acres to 15.5 acres due to a request by the State of Hawaii Department of Education. This reduced available residential acreage in the adjacent area, resulting in a modest increase in residential density, and a modest re-distribution of housing units in both the Petition Area and the Urbanized Area. All land use tables, acreages and residential densities have been revised accordingly. These revisions did not change the total number of residential units or other aspects of the plan.

Agency comments on the Draft EIS and the associated response letters are included in Chapter 13. Comments covered a wide range of issues, including project impacts to infrastructure systems and regional drainage; potential land use incompatibility issues resulting from the proposed residential uses adjacent to existing industrial activities surrounding Kalaeloa Harbor; accessibility and convenience issues with proposed parks south of the OR&L ROW; increased interconnectivity between the planned residential neighborhoods; and concern that conclusions for certain resource areas that state “no mitigation is necessary” are misleading when the analysis of probable impacts acknowledged the potential for impacts and suggested that mitigative measures would be necessary.

A summary of the changes made to the Final EIS is provided below.

Inside Cover Sheet

- Pursuant to Section 11-200-20(d), HAR, Ms. Donna Goth, President of Aina Nui Corporation, signed and dated the Final EIS.

Chapter 1.0 Introduction and Summary

- Section 1.1 Introduction (page 1-1): Inserted “(Appendix A)” at the end of the second paragraph.
- Section 1.2 Development Summary (page 1-2):
 - Inserted “A-2 Medium Density Apartment, R-5 Residential, BMX-3 Business Mixed Use” under Proposed City and County of Honolulu Zoning.
 - Changed “Special Management Area Permit” to “Special Management Area Use Permit.”
- Section 1.3 Summary of Probable Impacts and Mitigation Measures (pages 1-4 to 1-8):
 - Deleted last sentence on page 1-4, “Table 1 below summarizes the findings by each resource area.”
 - Renamed Table 1 from “Summary of Potential Cumulative Impacts” to “Summary of Potential Impacts and Mitigation” and revised the impact and mitigation assessment for several resource areas (e.g., Soils; Historic, Cultural and Archaeological Resources; Transportation; Water Supply, Wastewater; Grading and Drainage; Solid Waste; Power and Communications; Schools; Parks and Recreational Facilities).

- Table 2A General Mitigation Summary added to identify proposed mitigation measures.
- Table 2 Traffic Mitigation Summary revised as Table 2B.
- Section 1.4 Alternatives Considered (page 1-7):
 - Explanation of the No Action Alternative has been expanded to justify why the Petition Area is “not particularly suited for agricultural production”.
 - Inserted “and other impervious surfaces” after “higher proportion of land dedicated for roadways.”
 - Replaced “The industrial floor area, estimated at 1.4 million square feet, would add an estimated 2,900 jobs” with “The industrial use would add an estimated 940 jobs.”
- Section 1.5 Summary of Unresolved Issues has been revised. No unresolved issues were identified in the Draft EIS. Unresolved issues identified in the Final EIS include:
 - Density of regional commercial space;
 - State review and acceptance of the archaeological inventory survey, including data recovery and testing of Site 50-80-12-4893;
 - Identification of proposed mitigation to address impacts to the O’ahu Railroad and Land right-of-way;
 - Extension of electrical and telephone service to the project; and
 - Timing of the West Kalaeloa drainage channel.
- Section 1.7 Necessary Permits and Approvals (page 1-7 and 1-8):
 - Inserted “Permits and approvals required for the Proposed Action would be pursued following approval of the Land Use District Boundary Amendment Petition.”
 - Added State of Hawai’i, Department of Transportation Construction Plan Approval and Construction and Use/Occupancy Permits to the summary of approvals.
 - Changed “Drainage and Water Mater Plans” to “Master Plans.”
- Section 1.10 Organization (page 1-10): Added new bullet, “13. Parties Consulted During the Preparation of the Final Environmental Impact Statement.”

Chapter 2.0 Project Description

- Section 2.1 Location and Ownership (page 2-1): Inserted “and the James Campbell Industrial Park” between “...the Kapolei Business Park” and “to the south.”
- Section 2.2 Background (pages 2-5 to 2-12):
 - Table 4 Summary of Current and Past Development Proposals (page 2-5) and Table 5 Kapolei West Land Use Summary (page 2-8): Updated to reflect revised parcel acreages, densities and residential distribution due to the expansion of the middle school site from 10 acres to 15.5 acres.
 - Changed “terms of the lease is scheduled to expire to 2010” to “terms of the lease are scheduled to expire in 2010” (page 2-6).
 - Updated the description of low and medium density residential (page 2-9) to correspond to the revised parcel acreages, densities and residential distribution shown on Table 5 (retitled Table 5A).

- Added Table 5B Land Use Summary to show the acreages, densities and corresponding land uses for the individual parcels shown in the project master plan.
- Updated description of Neighborhood Commercial Center with the following: A mixed use residential component will be considered if market conditions warrant.
- 10-acre middle school site expanded to 15.5 acres (page 2-10).
- Inserted park classifications for proposed parks and changed “Kamokila Park” to “Kamokila Community Park” (page 2-10).
- Changed “Farrington Highway” to “H-1 Freeway” (page 2-11).
- Changed “Development Concept Plan” to “Project Master Plan (Figure 3)” (page 2-11).
- Deleted “proposed project” before “between 2008 and 2020” (page 2-12).

Chapter 3.0 Relationship of the Proposed Project to Land Use Plans, Policies and Controls

- Section 3.1.1. Hawai'i State Plan: Inserted language under Section 226-15 and 16 to address *Guidelines for Sustainable Building Design in Hawai'i* (pages 3-4 and 3-5).
- Section 3.2.1 General Plan:
 - I. Population, Objective C: Revised discussion with updated population growth projections from DPP (page 3-20).
 - II. Economic Activity, Objective A: Added updated job growth projections from DPP (page 3-20).
 - IV. Housing, Objective C: Added updated DPP projections for housing growth (page 3-21).
 - V. Transportation and Utilities, Objective A: Inserted discussion of project's compatibility with the Pearl Harbor Historic Trail and Leeward Bikeway (page 3-22).
- Section 3.2.2.2 The Vision for 'Ewa's Future: Inserted language to address siting of the proposed parks (Open Space and Greenways, page 3-25).
- Section 3.2.2.3 Land Use Policies, Principles, and Guidelines:
 - Inserted discussion of project's compatibility with the Pearl Harbor Historic Trail and Leeward Bikeway (Open Space and Preservation, page 3-28).
 - Revised discussion to describe proposed park classification (Community-Based Parks, page 3-29).
 - Added discussion regarding the Pearl Harbor Historic Trail and Leeward Bikeway (Historic and Cultural Resources, page 3-29).
 - Inserted “corridor” after “major rapid transit” (page 3-31).
- Section 3.2.4 Special Management Area: Added Major Special Management Area Use Permit requirements (page 3-38).

**Chapter 4.0 Assessment of Affected Environment, Probable Impacts and Mitigation:
Physical Environment**

- Section 4.2.2 Probable Impacts: Replaced “No mitigation is necessary” statement with mitigation measures (page 4-2).
- Section 4.3.2 Probable Impacts: Replaced “No mitigation is necessary” statement with Section 4.3.3 Mitigation; discussion of probable impacts re-organized to address mitigation in Section 4.3.3.
- Section 4.3.3 Mitigation:
 - Added “Soddings and plantings shall be established on disturbed areas which are at final grade or will not be worked for longer than 14 days” to list of erosion control BMPs (page 4-5).
 - Changed “Chapter 23, ROH” to “Chapter 14, ROH” after “Grading and Erosion Control Plans would be prepared in compliance with” (page 4-5).
- Section 4.5.1 Affected Environment:
 - Provided clarification regarding the coordinating agencies’ roles in confirming and allocating water for the project (page 4-11).
 - Corrected allocated amounts reported for the ‘Ewa-Kunia Aquifer System and the Waipahu-Waiawa Aquifer System (pages 4-11 and 4-12).
- Section 4.5.2 Probable Impacts:
 - Revised project water demands for consistency with estimates in Section 6.2 and Section 6.3 (page 4-12).
 - Added language to identify impacts to aquifer from introduction of impervious surfaces (page 4-12).
 - Replaced “No mitigation is necessary” statement (page 4-13) with Section 4.5.3 Mitigation.
- Section 4.5.3 Mitigation: Inserted language that golf course operations would comply with Conditions No. 13 and 14 established by the Land Use Commission Docket No. A90-655/ West Beach Estates Decision and Order.
- Section 4.8.1 Affected Environment and Section 4.8.2 Probable Impacts: Inserted language to reference the updated avifaunal and feral mammal survey (page 4-15).
- Section 4.9.2 Probable Impacts:
 - Added language that OR&L ROW crossings would require review and approval by the State of Hawai‘i Department of Transportation (page 4-19).
 - Replaced “No mitigation is necessary” statement (page 4-19) with Section 4.9.3 Mitigation.
- Section 4.9.3 Mitigation: Re-organized discussion from Section 4.9.2 to identify mitigation measures.
- Section 4.10.2 Probable Impacts: Clarified building heights and possible impacts to existing surrounding residential areas (page 4-20).
- Section 4.11.2 Probable Impacts:
 - Inserted language to address potential occasional impacts of emissions from sources at Campbell Industrial Park (page 4-22).

- Replaced “No mitigation is necessary” statement (page 4-23) with Section 4.11.3 Mitigation.
- Section 4.11.3 Mitigation:
 - Re-organized discussion from Section 4.11.2 to identify mitigation measures.
 - Added appropriate mitigation measures to address possible impacts to project from industrial sources.
- Section 4.12.2 Probable Impacts and Section 4.12.3:
 - Re-organized discussion from Section 4.12.2 to identify mitigation measures in Section 4.12.3.
 - Added appropriate mitigation measures to address possible impacts to project from industrial sources.

Chapter 5.0 Assessment of Affected Environment, Probable Impacts and Mitigation: Socio-Economic Environment

- Section 5.1.2 Probable Impacts: Added discussion to describe impacts to social welfare.
- Section 5.2.2 Probable Impacts and Section 5.2.3 Mitigation: Re-organized discussion from Section 5.2.2 to identify mitigation measures in Section 5.2.3.
- Section 5.4.2.3 Net Fiscal Benefits: Added discussion of fiscal impacts beyond 2020.

Chapter 6.0 Assessment of Affected Environment, Probable Impacts and Mitigation: Public Facilities and Services

- Section 6.1.1.3 Existing Traffic Conditions:
 - Inserted language defining Level of Service.
 - Changed the phrase “door-to-door” to “curb-to-curb” (page 6-5).
- Section 6.1.3 Mitigation:
 - Table 15: 2014 conditions at key intersection (with mitigation): Kalaeloa Boulevard-Farrington Highway Morning Peak Hour Existing Condition changed from Level of Service (LOS) E to LOS D.
 - Changed “A network of bicycle lanes and greenways should link the residential areas to the middle school and nearby elementary school.” to “A network of bicycle lanes and greenways would link the residential areas to the middle school. Access to the nearby elementary school within the Ko Olina Resort would involve use of the Resort’s bicycle and pedestrian facilities.”
 - Added estimates of Public Transit boardings and alightings.
- Section 6.2.1 Affected Environment: Added language to clarify that groundwater in the Waianae Aquifer “in the vicinity of the project site” does not meet potability standards (page 6-26).
- Section 6.2.2 Probable Impacts: Replaced “No mitigation is necessary” statement (page 4-19) with Section 4.9.3 Mitigation.
- Section 6.2.3 Mitigation:
 - Re-organized discussion from Section 6.2.2 to identify mitigation measures.

- Inserted language that project would incorporate appropriate design and landscaping measures to encourage water conservation and minimize water consumption (page 6-29).
- Section 6.3.2 Probable Impacts:
 - Revised estimates for average wastewater flows (Table 17) using a single family residential factor for low density residential use.
 - Replaced “No mitigation is necessary” statement (page 6-31) with Section 6.3.3 Mitigation.
- Section 6.3.3 Mitigation: Re-organized discussion from Section 6.3.2 to identify mitigation measures.
- Section 6.4.1 Affected Environment: Inserted “The drainage channel is planned to run east of Kalaeloa Harbor, passing along the western boundary of the existing Chevron, USA facility (Figure 2, Appendix L)” at the end of the section.
- Section 6.4.2 Probable Impacts and Section 6.4.3 Mitigation: Replaced “No mitigation is necessary” statement (page 6-35) with Section 6.4.3 Mitigation. Re-organized discussion from Section 6.4.2 to identify mitigation measures in Section 6.4.3.
- Section 6.5.2 Probable Impacts and Section 6.5.3 Mitigation: Replaced “No mitigation is necessary” statement (page 6-36) with Section 6.5.3 Mitigation. Re-organized discussion from Section 6.5.2 to identify mitigation measures in Section 6.5.3.
- Section 6.6.2 Probable Impacts:
 - Replaced references to “Hawaiian Telephone Company” with “Hawaiian Telcom, Inc” (page 6-37).
 - Replaced “No mitigation is necessary” statement (page 6-37) with Section 6.6.3 Mitigation.
- Section 6.7.1 Affected Environment: Revised the description of capacity and enrollment projections for area schools to correctly represent the information presented in Table 21 (page 6-38).
- Section 6.7.2 Probable Impacts and Section 6.7.3 Mitigation: Replaced “No mitigation is necessary” statement (page 6-39) with Section 6.7.3 Mitigation. Re-organized discussion from Section 6.7.2 to identify mitigation measures in Section 6.7.3.
- Section 6.8.2 Probable Impacts:
 - Revised the community-based park planning requirements based on a new factor of 3.3 acres/1000 residents, as requested by DPP.
 - Replaced “No mitigation is necessary” statement (page 6-41) with Section 6.8.3 Mitigation.
- Section 6.8.3 Mitigation:
 - Re-organized discussion from Section 6.8.2 to identify mitigation measures.
 - Inserted references for proposed park classification.
- Section 6.9.2 Probable Impacts: Clarified that the Honolulu Police Department would require increased resources to provide police services for the project.

Chapter 7.0 Cumulative Impacts

- Section 7.3.1 Physical Environment:
 - Noted that site development would result in potential forage habitat loss for Pueo (page 7-7).
 - Added language that mitigation measures have been identified to minimize cumulative impacts to the OR&L ROW (page 7-7).
- Section 7.3.2 Socio-Economic Environment: Added DPP regional job growth projections and discussion of fiscal impacts beyond 2020 (pages 7-8 and 7-9).
- Section 7.3.3 Public Facilities and Services: Clarified degree of impact to utilities and public infrastructure systems (page 7-9).

Chapter 8.0 Alternatives to the Proposed Action

- Section 8.1 No Action: Expanded to justify statement that the Petition Area is “not particularly suited for agricultural production” (page 8-1).
- Section 8.2: Updated analysis of the ‘Ewa DP Alternative based on planning factors received from DPP. Estimate of jobs presented as part of the alternative was revised from 2,900 to 940 jobs (pages 8-1 to 8-3).

Chapter 13.0 Parties Consulted During the Preparation of the Final Environmental Impact Statement

- New chapter added since the Draft EIS was published.

Appendices

- Addendum added to Appendix C Water Resources Study.
- Appendix E Avifaunal and Feral Mammal Survey added. Subsequent appendices re-numbered accordingly.
- Appendix E Archaeological Inventory Surveys re-numbered as Appendix F. Archaeological Inventory Survey of Approximately 124 Acres at Kapolei, Honouliuli Ahupua‘a, ‘Ewa District, O‘ahu (TMK: 9-1-14:33 and 9-1-15:20) revised and updated based on SHPD review; CSH letter transmitting revised report to SHPD appended.
- Appendix J Traffic Impact Study (re-numbered as Appendix K) has been revised.
- Addendum added to Appendix K Civil Engineering (re-numbered as Appendix L).
- Revisions to the figures are as follows:
 - Figure 1 (Project Location): Inset map added.
 - Figure 2 (Tax Map Key Parcels): TMK parcels in the Urbanized Area labeled.
 - Figure 3 (Project Master Plan): Pedestrian corridor, residential parcels, and on-site project roads labeled accordingly. Middle school site expanded.
 - Figure 10 (Significant Historic Sites): Middle school site expanded.
 - Figure 15 (2020 Roadway Network with Kapolei West Project): Makaiwa Interchange added.
 - Figure 16 (Kapolei Watersheds): Replaced with new figure showing Petition Area.

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VOLUME 2

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 - Findings of Fact, Conclusions of Law, and Decision and Order
 - Order Granting Motion to Amend Findings of Fact, Conclusion of Law, and Decision and Order
 - State of Hawai'i Land Use Commission Docket No. A04-753
 - Order determining LUC as accepting authority and issuance of EIS Preparation Notice
- B Agricultural Impact Assessment (Decision Analysts Hawai'i, Inc.)
- C Water Resources Study (Mink and Yuen, Inc.)
- D Botanical Survey (Char & Associates)
- E Avifaunal and Feral Mammal Survey Update (Philip L. Bruner)
- F Archaeological Inventory Surveys (Cultural Surveys Hawai'i, Inc.)
- G Air Quality Study (B.D. Neal & Associates)
- H Noise Impact Assessment (D.L Adams Associates)
- I Market Assessment (Mikiko Corporation)
- J Cultural Impact Assessment (Cultural Surveys Hawai'i, Inc.)
- K Traffic Impact Study (Wilbur Smith Associates)
- L Civil Engineering (Engineering Concepts, Inc.)

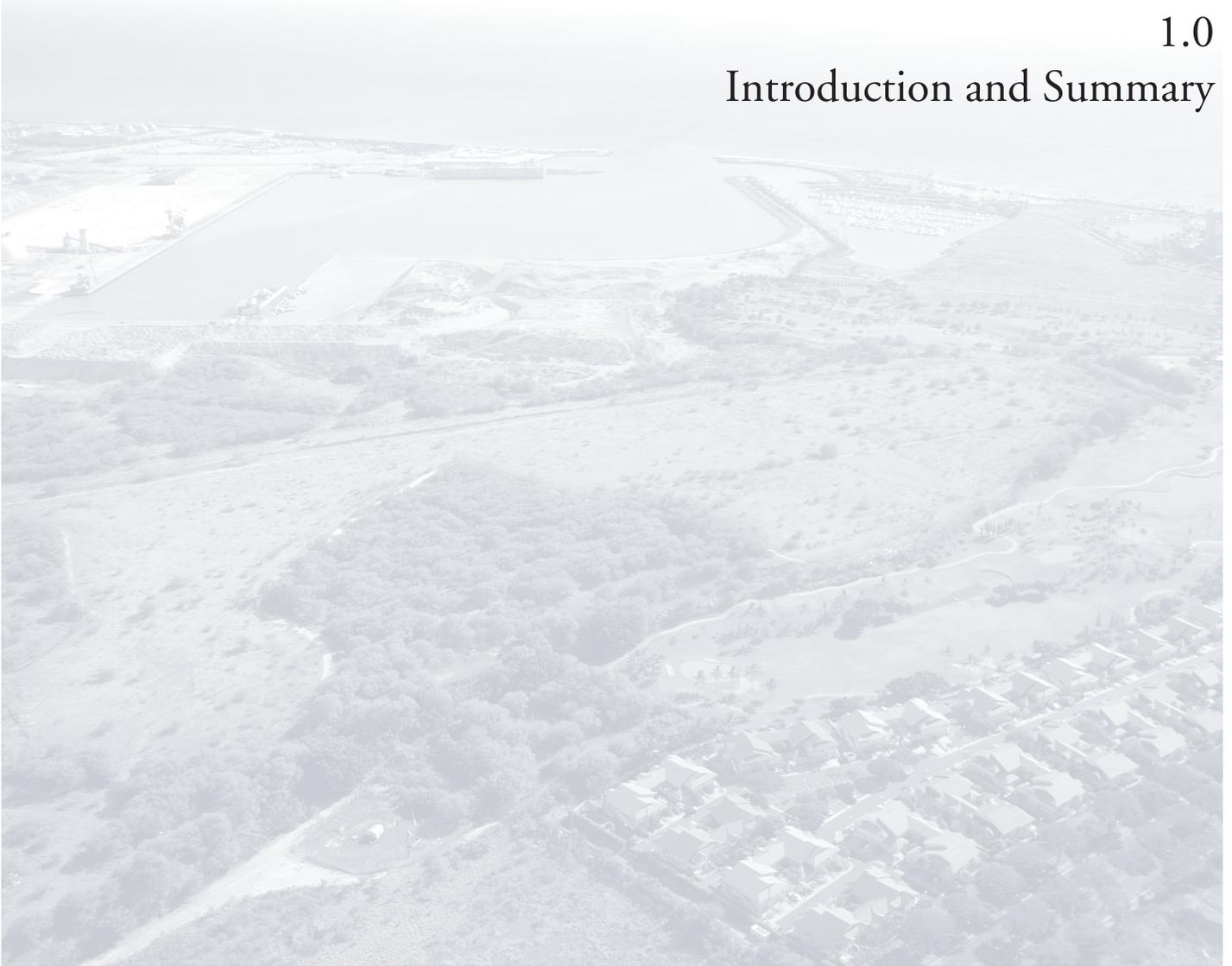
ACRONYMS AND ABBREVIATIONS

ac	acre
ALISH	Agricultural Lands of Importance to the State of Hawai'i
BMP	best management practice
BWS	Honolulu Board of Water Supply
cfs	cubic feet per second
CFR	Code of Federal Regulations
cfs	cubic feet per second
CSH	Cultural Surveys Hawai'i
CWRM	State of Hawai'i Commission on Water Resource Management
dB	decibel
dBA	A-weighted decibels
DBEDT	Department of Business, Economic Development & Tourism
DEA	Draft Environmental Assessment
DEIS	Draft Environmental Impact Statement
DHHL	Department of Hawaiian Home Lands
DOE	State of Hawai'i Department of Education
DOH	Department of Health
DP	Development Plan
DPP	City and County of Honolulu Department of Planning and Permitting
DTS	City and County of Honolulu Department of Transportation Services
du	dwelling unit(s)
EA	Environmental Assessment
EIS	Environmental Impact Statement
EISPN	Environmental Impact Statement Preparation Notice
EMS	Emergency Medical Services
FAR	floor area ratio
FEMA	Federal Emergency Management Agency
FHWA	Federal Highways Administration
FIRM	Flood Insurance Rate Map
FTE	full time equivalent
gpd	gallons per day
HAR	Hawai'i Administrative Rules
HCDA	Hawai'i Community Development Authority
HECO	Hawaiian Electric Company
HIFP	Highway Impact Fee Program
HRA	Hawaiian Railway Society
HRS	Hawai'i Revised Statutes
ITE	Institute of Transportation Engineers
LOS	Level of Service
LSB	University of Hawai'i Land Study Bureau
LUC	State of Hawai'i Land Use Commission
mgd	million gallons per day
msf	million square feet
msl	mean sea level
NB	Neighborhood Board
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
OMPO	O'ahu Metropolitan Planning Organization

OR&L	O'ahu Railroad and Land Company
OSCO	O'ahu Sugar Company
PHGMA	Pearl Harbor Groundwater Management Area
ROH	Revised Ordinances of Honolulu
ROW	Right of Way
SCS	Soil Conservation Service
SHPD	State Historic Preservation Division
SIHP	State Inventory of Historic Places
SMA	Special Management Area
TIP	Transportation Improvement Program
TMK	tax map key
UGB	Urban Growth Boundary
UH	University of Hawai'i
U.S.C.	United States Code
USLE	Universal Soil Loss Equation

1.0

Introduction and Summary



1.0 INTRODUCTION AND SUMMARY

1.1 INTRODUCTION

This Final Environmental Impact Statement (FEIS) is being prepared in support of a Petition for a State Land Use District Boundary Amendment filed by Aina Nui Corporation (“Petitioner”), an affiliate of the Estate of James Campbell (“Estate”), to reclassify approximately 174.2 acres of land from the Agricultural District to the Urban District (“Petition Area”), and a subsequent City and County of Honolulu Zone Change application, pursuant to Chapter 24, Article 3, Section 24-3.7, Revised Ordinances of Honolulu (ROH). The Petition Area is located in Honouliuli, ‘Ewa District, O‘ahu, and straddles the O‘ahu Railway and Land Company (OR&L) Railroad Right-of-Way (ROW). The OR&L ROW is owned by the State of Hawai‘i and listed on the National Register of Historic Places.

The Petitioner proposes to integrate the Petition Area with an adjoining parcel of approximately 372.6 acres to the north of the Petition Area (“Urbanized Area”) for the development of Kapolei West, a 546.8-acre master-planned residential and golf community. The adjoining 372.6 acres are classified as Urban (Docket No. A90-655 approved by the State Land Use Commission in 1991 and formerly referred to as West Beach Estates’ “Ko Olina Phase II”) (Appendix A).

In accordance with Chapter 343, Hawai‘i Revised Statutes (HRS) and Title 11, Chapter 200, Hawai‘i Administrative Rules (HAR) of the Department of Health (DOH), an environmental review is required as the Proposed Action (i.e., reclassification from the Agricultural to the Urban District) proposes use of a historic site located on State lands (i.e., planned roadways and golf cart pathways cross the OR&L ROW). The State of Hawai‘i Land Use Commission (Commission) has (1) agreed to be the Accepting Authority pursuant to Chapter 343(c), HRS and Title 11-200-4(b), HAR and (2) determined that the Proposed Action may have a significant effect upon the environment to warrant the preparation of an environmental impact statement (Commission Order filed December 14, 2004 (Docket No; A04-753) (Appendix A).

1.2 DEVELOPMENT SUMMARY

Project Name:	Kapolei West Expansion Area
Proposed Action:	Reclassification of approximately 174.2 acres of land from the Agricultural District to the Urban District (Petition Area) to be consolidated with a 372.6-acre adjacent parcel designated as Urban in 1991
Applicant/Petitioner:	Aina Nui Corporation 1001 Kamokila Boulevard, Suite 255 Kapolei, HI 96707 Donna Goth, President

EIS Preparer:	Helber Hastert & Fee, Planners 733 Bishop Street, Suite 2590 Honolulu, HI 96813 (808) 545-2055 Tom Fee / Corlyn Olson Orr
Accepting Authority:	Land Use Commission State of Hawai'i
Chapter 343, HRS "Triggers":	<ul style="list-style-type: none"> • Use of a historic site (planned roadways and golf cart paths cross the historic OR&L Railroad right-of-way) • Use of State Lands (State owned rights of way, including the OR&L ROW) • Change of existing county plans
Location:	'Ewa District, O'ahu, Hawai'i
Tax Map Key Parcels:	9-1-14: por. 33; 9-1-15: por. 4 and por. 20
Landowners:	Aina Nui Corporation and The Estate of James Campbell
Existing Uses:	Vacant lands, quarrying, stockpiling, railroad right-of-way
Proposed Uses:	Residential, golf course, parks, circulation and open space
National Register of Historic Places:	Site Number 80-12-9714 (12/1/75) O'ahu Railway & Land Company Railroad Right-of-Way
Existing State Land Use District:	Agricultural
Proposed State Land Use District:	Urban
Existing City and County of Honolulu 'Ewa Development Plan:	Low and Medium Density Residential, Industrial
Proposed City and County of Honolulu 'Ewa Development Plan:	Low and Medium Density Residential, Parks and Golf Course
Existing City and County of Honolulu Zoning:	AG-1 Restricted Agricultural, AG-2 General Agricultural
Proposed City and County of Honolulu Zoning:	P-2 General Preservation, A-1 Low Density Apartment, A-2 Medium Density Apartment, R-5 Residential, BMX-3 Business Mixed Use
Other Land Use Approvals:	City and County of Honolulu Zone Change, Special Management Area Use Permit

1.3 SUMMARY OF PROBABLE IMPACTS AND MITIGATION MEASURES

The Proposed Action would develop 174.2 acres of vacant agricultural lands for residential (about 1,180 homes), park (17.1 acres) and golf course uses. The Petition Area is located between the Kalaehoa Deep Draft Harbor, the Ko Olina Resort, and the City of Kapolei, on the western coast of O'ahu. The Proposed Action is generally consistent with the City and County's General and Development Plans that identify the 'Ewa Region as the City and County's secondary urban center. A summary of probable direct, indirect and cumulative impacts and mitigation is provided below.

Physical Environment. The Proposed Action would not have an adverse direct or indirect impact on climate, topography and soils, agricultural capability, botanical resources, groundwater resources, historic, cultural and archaeological resources, scenic and visual resources, air quality and noise. The Petition Area has limited agricultural productivity and no populations of threatened or endangered plant or animal species. Based on the sustainable yields of the 'Ewa-Kunia and Waipahu-Waiawa Aquifer Systems and the present unallocated and unused supplies, the available supply of water is sufficient to support the Petition Area and the larger Kapolei West project. Cultural and archaeological resources, including the OR&L ROW, have been carefully studied and several important sites have been identified for preservation or data recovery. Following resolution of mitigation measures in consultation with the State of Hawai'i Department of Land and Natural Resources Historic Preservation Division (SHPD) and the Hawaiian Railway Society, it is anticipated that the proposed development of crossings of the OR&L would have "no effect" on this National Register site. The existing open landscape would transition to a built up urban landscape that would detract from existing scenic vistas, but no recognized public view planes would be significantly affected. Implementation of Best Management Practices during the construction period would minimize noise and air quality impacts to non-significant levels.

Socio-Economic Environment. The Proposed Action would not have an adverse direct or indirect impact on population or traditional customs and practices and would have a beneficial impact on housing, employment, and fiscal resources. The Petition Area's net impact on the City and County's population is projected at 420 full-time equivalent (FTE) in-migrants by 2020. Of this, 380 FTE residents would be new to the State (i.e., 40 are presumed to relocate from elsewhere in the State). The Proposed Action would not adversely affect rights customarily and traditionally exercised for subsistence, cultural and religious purposes due to the lack of former, contemporary or continuing cultural practices within the Petition Area. The development would slightly offset the large projected shortfall of primary housing units. During its development phase, the Petition Area could support an average of about 390 direct, indirect and induced FTE jobs per year. By its completion in about 2020, the Petition Area could support some 260 FTE operational period jobs per year. The Proposed Action would yield positive State and County government revenue/expenditure ratios (3.6 and 4.0, respectively).

Public Facilities and Services. The Proposed Action would not have a significant direct or indirect impact on public transportation systems if the proposed traffic mitigation measures are implemented. The Proposed Action would not have an adverse impact on Utilities and Public Infrastructure Systems (Water Supply, Wastewater, Drainage, Solid Waste, Power and

Communications). State and County agencies, and utility providers are charged with providing utilities and services to the new communities while maintaining levels of service to existing communities. The City and County's directed growth strategy requires that the utilities and public infrastructure systems be upgraded to accommodate planned growth. The Petitioner would pay its proportionate fair share of the cost of these systems that would be designed and constructed in accordance with public works standards. The Kapolei West project, including the Proposed Action, would provide an important, environmentally friendly link in managing stormwater within the local watersheds, in part by using open, golf course fairways to allow for stormwater detention and recharge. The Proposed Action would not have an adverse impact on Public Services. The Petition Area would generate about 260 students that would need to be served by Kapolei Area schools. The Petitioner is working closely with the State of Hawai'i Department of Education (DOE) to ensure that facilities are in place to serve the needs of the Petition Area student population. The Kapolei West project includes a site for new middle school, considered a critically needed facility by DOE. A new elementary school is planned for the City of Kapolei and the adjacent Ko Olina Resort includes a site designated for another elementary school. The Proposed Action would not have an adverse impact on Recreational Facilities, Police, Fire and Emergency Services. The Petition Area includes approximately 17.1 acres of park lands, significantly more than the City and County's minimum standards (Petition Area parks would be used by the greater Kapolei West community but even at the total project level, Kapolei West parklands exceed minimum standards). Police, Fire and Emergency services would need to be expanded to provide service to the Petition Area. These are municipally-provided services that would be funded through increased real property assessments associated with the Petition Area.

Cumulative Impacts. Cumulative impacts of the Proposed Action were assessed. The analysis included a review of all foreseeable development projects within the region of impact, and a resource by resource analysis of potential impacts. Within the context of the City and County's General and Development plans directing a substantial portion of future growth to the 'Ewa region, the analysis indicated that the Proposed Action would not create potentially significant cumulative impacts.

**Table 1
Summary of Potential Impacts and Mitigation**

Resource	Beneficial Impact	No Impact	No Significant Adverse Impact	No Significant Adverse Impact with Mitigation Provided
Physical Environment				
Climate		X		
Topography and Slopes		X		
Soils				X
Agricultural Capability			X	
Groundwater Resources				X
Natural Hazards		X		
Biological Resources			X	
Historic, Cultural and Archaeological Resources				X
Scenic and Visual Resources			X	
Air Quality			X	
Noise			X	
Socio-Economic Environment				
Population Impacts			X	
Housing	X			
Employment	X			
Fiscal Impacts	X			
Traditional Customs and Practices		X		
Public Facilities and Services				
Transportation				X
Water Supply				X
Wastewater				X
Grading and Drainage				X
Solid Waste				X
Power and Communications				X
Schools				X
Parks and Recreational Facilities				X
Police, Fire Protection, Emergency Services			X	

Mitigation. Mitigation is proposed for a range of resources and systems as summarized in Table 2A below. A number of intersection and roadway improvements would be required to reduce project impacts on public transportation systems to non-significant levels as summarized in Table 2B below.

**Table 2A
General Mitigation Summary**

Resource	Mitigation Measure
Physical Environment	
Soils	Implement construction period erosion control best management practices
Groundwater	Comply with condition Nos. 13 and 14 established by the Land Use Commission Docket No. A90-655/West Beach Estates Decision and Order
Historic, Cultural and Archaeological Resources	Preserve six historic sites (including the State-owned OR&L ROW), observe OR&L ROW building setbacks, coordinate scheduling of construction activities that might affect the ROW, construct automated crossing guards at major road crossings of OR&L ROW, and continue consultations with the State DOT, Hawaiian Railway Society and DLNR SHPD
Air Quality	Implement construction period controls to comply with State air pollution rules
Noise	Implement construction period controls to comply with State noise rules
Public Facilities and Services	
Transportation	See Table 2B
Water Supply	Construct infrastructure systems to support proposed action
Wastewater	Construct infrastructure systems to support proposed action
Drainage	Construct infrastructure systems to support proposed action
Solid Waste	Implement design strategies and technologies that support the use of recycled materials and conservation and recycling practices when feasible
Power and Communications	Coordinate with HECO and Hawaiian Telcom, Inc
Schools	Provide fair share contribution to DOE
Parks and Recreational Facilities	Comply with County Park Dedication Rules

**Table 2B
Traffic Mitigation Summary**

Time Frame	Intersection	Improvement
2014	Kapolei Parkway-Kalaeloa Boulevard	Provide right-turn lane on makai-bound Kalaeloa Boulevard to accommodate increased volume of right turns
		Provide a second (double) left-turn lane and a right-turn lane on the Honolulu-bound approach of the Kapolei Parkway to offset the increase in project traffic along the Parkway
	Kapolei Parkway-Regional Commercial Center Driveway	Provide right-turn lane for high volume of traffic entering from Waianae-bound Kapolei Parkway
		Provide traffic signal control for the intersection when warranted by traffic conditions
Kapolei Parkway-Road D	Provide right-turn lane for high volume of traffic entering from Waianae-bound Kapolei Parkway	
2020	Kapolei Parkway-Kamokila Boulevard	Provide a second (double) left-turn lane on Honolulu-bound Kapolei Parkway to allow more signal green time for the Waianae-bound through traffic
	Kapolei Parkway-Kalaeloa Boulevard	Provide right-turn lane on makai-bound Kalaeloa Boulevard to accommodate increased volume of right turns
		Provide a second (double) left-turn lane and a right-turn lane on the Honolulu-bound approach of the Kapolei Parkway to offset the increase in project traffic along the Parkway
	Kapolei Parkway-Regional Commercial Center Driveway	Provide right-turn lane for high volume of traffic entering from Waianae-bound Kapolei Parkway
		Provide traffic signal control for the intersection when warranted by traffic conditions
	Kapolei Parkway-Hanua Street Extension	Provide right-turn lane on makai-bound Hanua Street to accommodate increased volume of right turns
		Provide right-turn lane on the Honolulu-bound approach of the Kapolei Parkway to offset the increase in project traffic along the Parkway

1.4 ALTERNATIVES CONSIDERED

In addition to the Proposed Action (urbanization of the approximately 174.2-acre Petition Area), the following development alternatives were considered for the project site:

- No Action
- 'Ewa Development Plan Alternative

The No Action Alternative assumes only uses permitted within the Agricultural District would be developed within the Petition Area, including golf course fairways and parks. The No Action Alternative would retain a pocket of State Agricultural District land surrounded by State Urban District land, which is inconsistent with the City and County's General and Development Plan objectives to direct growth to the 'Ewa Region. Only 15 acres of the Petition Area consist of soil classified as "good" for cultivation and these 15 acres exist as three noncontiguous irregularly-shaped areas along the Petition Area boundary. The remaining 126 acres of the Petition Area are characterized as Coral Outcrop, and are classified as "poor" soils for crop cultivation. Most of the former sugar cane and pineapple land remains fallow; therefore, there is no shortage of agricultural land available on O'ahu for diversified crops. The pockets of irregularly shaped areas of good soil are a challenge to efficient farming.

The *'Ewa Development Plan ('Ewa DP)* Alternative assumes a development pattern similar to what is shown in the 'Ewa DP Urban Land Use Map: medium/low density residential above the OR&L ROW (i.e., similar to the Proposed Action but without any golf course fairways) and industrial below. The Alternative would result in more intensive development than the Proposed Action, would perpetuate the division between land uses north and south of the OR&L ROW, and would require a higher proportion of land dedicated for roadways and other impervious surfaces to service it. The Alternative would provide additional industrial lands, a market segment that is undergoing significant price increases due to high demand and low supply, and would add an estimated 940 jobs (projected industrial job growth for the Kalaeloa/JCIP area – over 8,600 jobs in the next 25 years -- would not be affected by the Proposed Action or the light industrial alternative given the available land supply and projected job density factors).

1.5 SUMMARY OF UNRESOLVED ISSUES

The following unresolved issues have been identified:

- Density of regional commercial space. On the east side of Kapolei West a 23.2-acre parcel is identified for a regional commercial use. An adjacent 18-acre parcel, which is outside of the project area, could be combined with the Kapolei West parcel into one development. Should that occur, any changes in project density will be addressed in a subsequent traffic study.
- State review and approval of the archaeological inventory survey, including data recovery and testing of Site 50-80-12-4893. At SHPD's request, this filled sinkhole was tested. Test results confirmed the original recommendation presented in the Draft EIS that no further work was necessary. This information was provided to SHPD on May 25, 2005. Petitioner is currently waiting for its approval.
- Identification of proposed mitigation to address impacts to the O'ahu Railroad and Land right-of-way. Ongoing discussions are expected to continue between the Petitioner, DOT, HRA, and SHPD regarding ways to minimize impacts on the historic ROW. An initial list of potential mitigation measures is presented in the Final EIS for discussion.
- Extension of electrical and telephone service to the project. As with previous projects, Petitioner recognizes that consultations with HECO and Hawaiian Telcom, Inc. are expected to continue into the design phase of the project.
- Timing of the West Kalaeloa drainage channel. Ultimately, the Kapolei West project will drain into the West Kalaeloa regional drainage channel that accommodates several future projects. Until the regional drainage channel is needed as a result of the other projects, the Petition Area's drainage can be accommodated with interim detention basins.

1.6 SUMMARY OF COMPATIBILITY WITH LAND USE PLANS AND POLICIES

The Proposed Action is generally compatible with and supportive of relevant State and County land use policies, plans and controls, as described in Chapter 3. Given the competing nature of many of these plans, policies and objectives, the Proposed Action supports many while is inconsistent with others.

1.7 NECESSARY PERMITS AND APPROVALS

Development of the proposed Petition Area would require a number of permits and approvals from State and County agencies. A summary of possible required approvals is provided below. Permits and approvals required for the Proposed Action would be pursued following approval of the Land Use District Boundary Amendment Petition. It is assumed that the permits and approvals are required for both the Petition Area and the remaining Kapolei West project area, unless noted otherwise.

<u>Approval Required</u>	<u>Authority</u>
State Land Use District Boundary Amendment (Petition Area only)	State of Hawai'i, Land Use Commission
National Pollutant Discharge Elimination System (NPDES) Permit	State of Hawai'i, Department of Health
Water Use Permits	State of Hawai'i, Department of Land and Natural Resources, Commission on Water Resources Management
Construction Plan Approval	State of Hawai'i, Department of Transportation
Construction and Use/Occupancy Permits	State of Hawai'i, Department of Transportation
City and County of Honolulu Zone Change	Honolulu City Council
City and County of Honolulu Special Management Area Permit	Honolulu City Council
Project Master Plan	City and County of Honolulu, Department of Planning and Permitting
Water Master Plan	City and County of Honolulu, Board of Water Supply
Drainage Master Plan	City and County of Honolulu, Department of Planning and Permitting

<u>Approval Required</u>	<u>Authority</u>
Wastewater Master Plan	City and County of Honolulu, Department of Planning and Permitting
Roadway Master Plan	City and County of Honolulu, Department of Transportation Services
Subdivision Approvals	City and County of Honolulu, Department of Planning and Permitting
Grading Permits	City and County of Honolulu, Department of Planning and Permitting
Building Permits	City and County of Honolulu, Department of Planning and Permitting

1.8 STATEMENT OF PURPOSE OF AND NEED FOR ACTION

The Petitioner has filed a Petition for a State Land Use District Boundary Amendment to reclassify approximately 174.2 acres of the 546.8-acre Kapolei West project area from the Agricultural District to the Urban District (Docket No. A04-753). Reclassification from the Agricultural District to the Urban District (“Proposed Action”) would allow the Petitioner to consolidate the 174.2-acre Petition Area with an adjoining 372.6-acre parcel designated as Urban in 1991 for the development of Kapolei West. In the event that the request for reclassification is not approved and the Petition Area remains within the State Agricultural District, the Petitioner would proceed with development of the adjoining 372.6-acre parcel for golf course, residential and commercial uses. Development within the Petition Area would be consistent with the State Agricultural District standards.

1.9 PURPOSE AND NEED FOR THIS ENVIRONMENTAL IMPACT STATEMENT

The purpose of this EIS is to disclose and provide information on all known or potential effects that the Proposed Action may have on the environment, economic and social welfare of the community and State. It describes the potential impacts of the Proposed Action, both beneficial and adverse, and proposes measures to either avoid or minimize adverse impacts to the environment. A discussion of alternatives considered in addition to the Proposed Action is presented in Chapter 7.

The EIS is required because the Proposed Action may involve:

- (1) use of a historic site (i.e., planned roadways and golf cart paths cross the OR&L ROW which is listed on the National Register of Historic Places) in accordance with §343-5 (a)(4) HRS;
- (2) use of State Lands (i.e., OR&L ROW and State-owned roadways) in accordance with §343-5 (a)(1), HRS; and

- (3) an amendment to existing county general plans where the amendment would result in designations other than agriculture, conservation or preservation in accordance with §343-5 (a)(6), HRS.

In addition to the Land Use District Boundary Amendment being sought, the Petitioner will be submitting a zone change application to the City and County of Honolulu for the Kapolei West project (including the Petition Area). The 'Ewa DP requires an environmental assessment be prepared for projects involving significant zone changes, such as the Kapolei West project. According to the 'Ewa DP, a significant zone change involves an application that involves a zone change of more than 25 acres or more to any zoning district or combination of zoning districts, excluding preservation and agricultural zoning districts; a change of more than 10 acres to the Residential or Country zoning district; a change of more than 5 acres to the Apartment, Resort, Commercial; Industrial, or Mixed use zoning district; or would have major social, environmental, or policy impacts, or cumulative impacts due to a series of applications in the same area. Therefore, this EIS is also intended to satisfy the City and County of Honolulu's "significant" zone change requirement.

1.10 ORGANIZATION

The EIS is organized into 13 different chapters to address the content requirements set forth in Section 11-200-17, HAR.

1. Introduction and Summary
2. Project Description
3. Relationship of the Proposed Project to Land Use Plans, Policies and Controls
4. Assessment of Affected Environment, Probable Impacts and Mitigation:
Physical Environment
5. Assessment of Affected Environment, Probable Impacts and Mitigation:
Socio-Economic Environment
6. Assessment of Affected Environment, Probable Impacts and Mitigation:
Public Facilities and Services
7. Cumulative Impacts
8. Alternatives to the Proposed Action
9. Irreversible and Irrecoverable Commitments of Resources
10. Relationship Between Local Short-Term Uses of the Environment and Maintenance and
Enhancement of Long-Term Productivity
11. References
12. Parties Consulted During the Preparation of the Draft Environmental Impact Statement
13. Parties Consulted During the Preparation of the Final Environmental Impact Statement

2.0 Project Description



2.0 PROJECT DESCRIPTION

2.1 LOCATION AND OWNERSHIP

The 174.2-acre Petition Area is located approximately 20 miles from downtown Honolulu on the western side of O‘ahu in the District of ‘Ewa, within the ahupua‘a of Honouliuli. It is strategically located below the Waianae Mountain Range between the City of Kapolei and the Ko Olina Resort. Surrounding land uses include the approximate 372.6-acre Urbanized Area of the Kapolei West project to the north; the Ko Olina Resort and golf course to the west; Kalaeloa Barbers Point Harbor and the Kapolei Business Park and the James Campbell Industrial Park to the south; and the western boundary of the City of Kapolei and Kalaeloa Boulevard to the east (Figure 1).

The Petition Area consists of portions of three separate Tax Map Key (TMK) parcels (9-1-14: por. 33; and 9-1-15: por. 4 and por. 20) and is bisected by the O‘ahu Rail and Land Company (OR&L) Railroad right-of-way (ROW) (Figure 2).

The Petitioner currently holds fee ownership of the Petition Area north of the OR&L ROW. The Petition Area south of the OR&L ROW is owned by the Petitioner as a tenant in common. The Estate has authorized the Petitioner to act as its agent for the development of its lands within the Petition Area. The OR&L ROW is owned by the State of Hawai‘i.

The Petitioner proposes to combine the Petition Area with the larger, 372.6 acre urbanized parcel to the north of the Petition Area (Urbanized Area) to form Kapolei West, an integrated, master-planned residential and golf community that encompasses a total project area of approximately 546.8 acres. The estimated 372.6 acres that comprise the Urbanized Area of the Kapolei West project encompasses two TMK parcels (9-1-15: por. 4 and 18) owned in fee by the Petitioner.

Table 3 presents the approximate TMK acreages for the Petition Area and the Kapolei West project site. Figures 1 and 2 present the general location and the TMK parcels for the Petition Area and the Urbanized Area.

Table 3
Kapolei West Tax Map Key Acreage

TMK	Acreage (approx.)
9-1-14: por. 33	55.5
9-1-15: por. 4	98.6
9-1-15: por. 20	20.1
State Land Use District Boundary Amendment Petition Area	174.2
9-1-15: por. 4	366.7
9-1-15:18	5.9
Urbanized Area	372.6
TOTAL PROJECT AREA	546.8

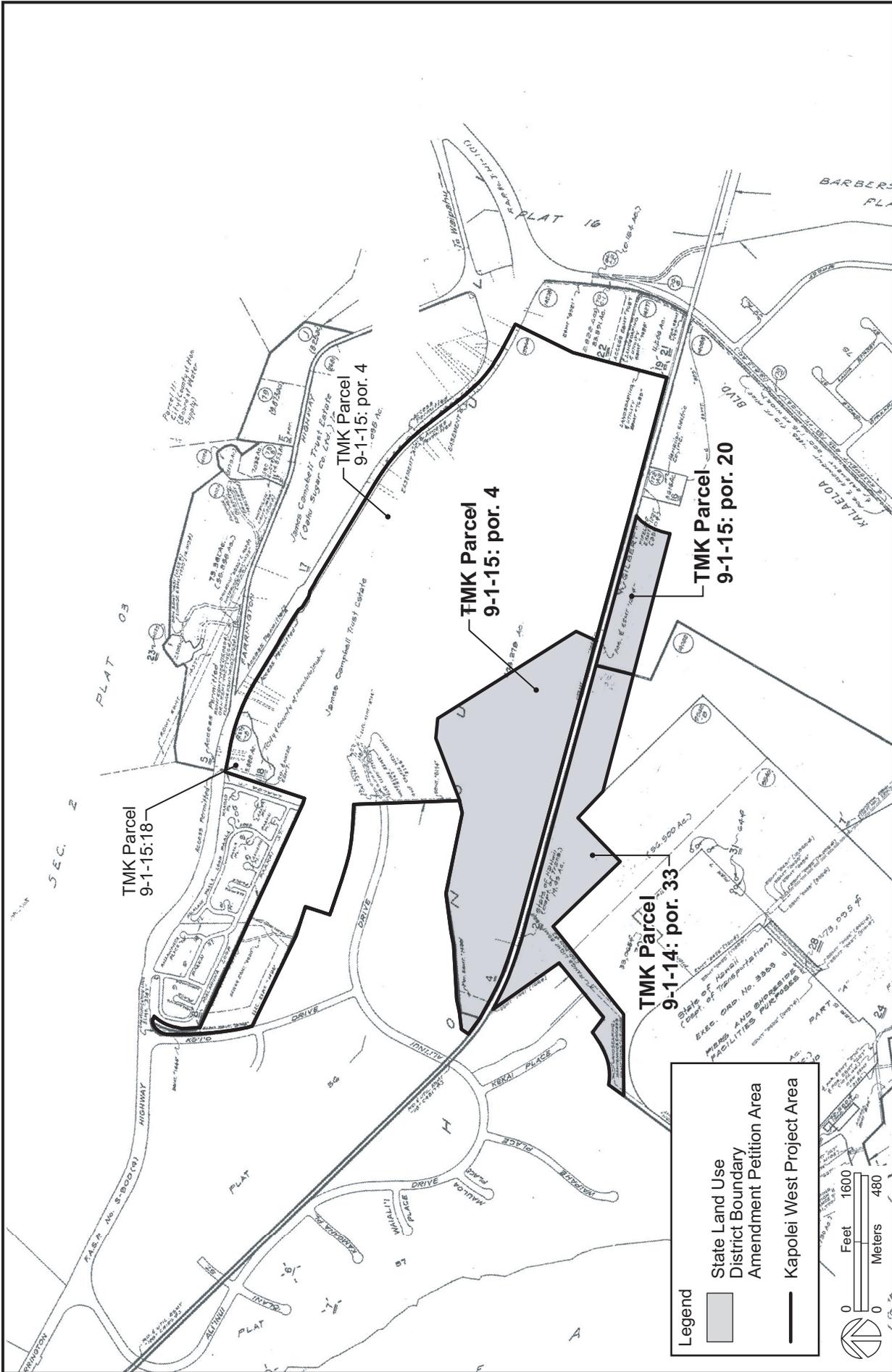


Figure 2

Tax Map Key Parcels
 Kapolei West Expansion Area
 O'ahu, Hawaii

2.2 BACKGROUND

Development of the 174.2-acre Petition Area and the adjacent 372.6-acre Urbanized Area is consistent with State and City plans and policies that direct future urban development and population growth to the 'Ewa region of O'ahu. According to the City and County of Honolulu *General Plan* and the *'Ewa DP*, the 'Ewa region is designated as the island's Secondary Urban Center, and is intended to be the residential, commercial and employment center of West O'ahu where major economic activity, housing development, and government services are concentrated. As a result, the 'Ewa region has witnessed tremendous growth within the past 20 years. Recent developments include the development of Ko Olina Resort and the City of Kapolei and its surrounding residential communities, and the expansion of Campbell Industrial Park, the Kapolei Business Park and Kalaeloa Barbers' Point Harbor. Despite the urbanization spreading through the region and various planning efforts to develop the site, the Kapolei West project area remains vacant.

The first proposal planned for the Kapolei West project area was proposed by West Beach Estates in 1989 (Wilson Okamoto 1989). Known as Ko Olina Phase II, the project area encompassed the 372.6-acre parcel north of the Petition Area. The proposed development, which consisted of two championship golf courses and commercial and retail uses, was intended to provide amenities that would allow for the future expansion of the existing Ko Olina resort. As a result of changing market conditions, plans for the Ko Olina Phase II project were revised in 1991 to include an 18-hole golf course, 3,500 low and medium density residential units, commercial development, park space, and a 0.5-acre public transit facility (Wilson Okamoto 1991). Based on the revised 1991 development proposal, the Ko Olina Phase II project area was reclassified by the Land Use Commission from the Agricultural District to the Urban District in 1991 (Docket No. A90-655) (Appendix A). The City and County of Honolulu 'Ewa DP was subsequently revised to reflect the proposed uses (Bill No. 132 (1990), CD-1).

With stagnant economic and market conditions dominating Hawai'i's economy during most of the 1990s, West Beach Estates relinquished its real property interests in Ko Olina Phase II in 1998. In 2000, Seaside at Kapolei, LLC acquired the option to purchase the 372.6-acre urbanized parcel from the Estate. Seaside proposed an 18-hole golf course, 2,900 low and medium density residential units, commercial development, and park space. In comparison to the Ko Olina Phase II development plan that included a residential component of 3,500 residential units on approximately 156 acres of land and a 0.5-acre public transit facility, Seaside's proposal featured 2,900 residential units on nearly 120 acres of land without a transit facility, resulting in a slightly smaller project area with less residential units and a higher overall residential density.

In 2003, Seaside at Kapolei, LLC dropped its option to purchase the 372.6-acre urbanized parcel. Since then, the Petitioner has been involved in ongoing efforts to develop the property for residential, commercial and recreational uses. The Petitioner proposes to expand the boundaries of previous development proposals and incorporate the approximate 174.2-acre Petition Area for the development of Kapolei West, a master-planned residential and golf community on 546.8 acres. Land uses proposed for Kapolei West are consistent with the land uses planned for both the Ko Olina Phase II and Seaside projects. However, the intensity of

use associated with Kapolei West is less, due to a significant reduction in the number of residential units and an increase in the acreage dedicated to parks, public facilities, and open space (based on current and projected market conditions).

Table 4 presents a summary of past development proposals planned for the Kapolei West project area. Previous proposals, which did not include the Petition Area, were limited to the 372.6-acre Urbanized Area. The Kapolei West project, which includes the approximate 174.2-acre Petition Area and the 372.6-acre Urbanized Area, is generally consistent with the land uses formerly proposed for the property.

Table 4
Summary of Current and Past Development Proposals

Land Use	Kapolei West (2004)			Seaside (2001)			Ko Olina Phase II (1991)			Ko Olina Phase II (1989)		
	Area (ac.)	Units	Density (du/ac.)	Area (ac.)	Units	Density (du/ac.)	Area (ac.)	Units	Density (du/ac.)	Area (ac.)	Units	Density (du/ac.)
Golf Course	212.7			151.3			156.0			304.6		
Low Density Residential	117.2	869	7.4	66.1	900	13.6	105.5	1,500	14.2	--		
Medium Density Residential	88.6	1,351	15.2	50.7	2,000	39.4	50.7	2,000	39.4	--		
Mixed Use/ Residential	10.0	150	15.0									
Neighborhood Commercial	2.0			--			--			--		
Regional Commercial	23.2			32.9			32.9			40.0		
Middle School	15.5											
Transit	5.8			--			0.5			--		
Parks	24.8			5.8			5.8			9.5		
Circulation/Open Spaces	47.0			17.0			21.2			18.5		
TOTAL	546.8	2,370	11.0	323.8	2,900	24.8	372.6	3,500	22.4	372.6		

2.3 EXISTING AND SURROUNDING LAND USES

Land uses surrounding the Petition Area include the Ko Olina resort and golf course and the Ko Olina Marina to the west; the vacant lands of Kapolei West's Urbanized Area to the north; and a Hawaiian Electric Company (HECO) electric substation facility to the east. Overhead electrical power lines run north from the substation towards the H-1 Freeway. Kalaeloa Boulevard and the City of Kapolei are located further east. Hawaiian Cement and its quarry, and the Kalaeloa Barbers Point Harbor and Campbell Industrial Park are to the south. The OR&L ROW runs

through the entire Petition Area, forming the northeastern boundary and transecting the western half of the Petition Area. A 40-foot building setback runs along both sides of the OR&L ROW. Other surrounding uses north of the Petition Area include the H-1 Freeway/Farrington Highway, Kamokila Park, the residential communities of Honokai Hale, Nanakai Gardens and Ko Olina Fairways. Figure 1 presents the land uses surrounding the Petition Area (see Section 2.1).

Large portions of the Petition Area are currently vacant and unutilized, with the exception of the OR&L ROW used by the Hawaiian Railway Society; a small agricultural enterprise occupying the southeast corner of the property; and quarrying and stockpiling activities of the adjacent Hawaiian Cement quarry within and adjacent to the Petition Area's southern boundary. The Estate's lease agreement with Aloun Farm is scheduled to expire in 2007. Hawaiian Cement's lease agreement involves rights to mine sand within the Petition Area; the terms of the lease are scheduled to expire to in 2010.

A Coast Guard Range Light used to navigate entry into Kalaeloa Barbers Point Harbor is located within the southernmost tip of the Petition Area. The proposed residential development in the vicinity of the Coast Guard facility would be planned and designed to ensure compatibility between the uses.

Ongoing and future developments planned for the area surrounding the Kapolei West property include the Ko Olina Resort to the west and the City of Kapolei to the east. Within the Ko Olina Resort, construction of new single and multi-family homes and planning efforts to develop an aquarium, commercial center, new hotel and time share complex are underway. To the east, the City of Kapolei is fulfilling the promise of becoming O'ahu's second city. To date, over 1.8 million square feet (msf) of commercial, office, retail and civic space has been constructed. An additional 2.0 msf of residential uses and approximately 1.8 msf of commercial, office, retail, civic and mixed use residential is planned for construction over the next ten years.

2.4 PROJECT DESCRIPTION

The Proposed Action involves the reclassification of approximately 174.2 acres of land from the Agricultural District to the Urban District. Urbanization of the Petition Area would enable full development of Kapolei West as described in this section. In the event that the Petition Area remains within the State Agricultural District (i.e., No Action), the Petitioner would proceed with development of the Urbanized Area for golf course, residential and commercial uses. The Petition Area would be developed in accordance with the Agricultural District use standards.

The proposed Kapolei West development concept includes an 18-hole championship golf course with an estimated 2,370 low and medium density residential units, parks, circulation and open spaces (Figure 3). Planned recreational amenities consist of neighborhood parks, recreational amenities developed within the proposed residential parcels, and a pedestrian pathway system to link neighborhoods. As proposed, the project provides a positive transition for the area between the Ko Olina Resort and the City of Kapolei. At the eastern end of the project area, regional commercial and transit/mixed-use areas are planned to enhance the City

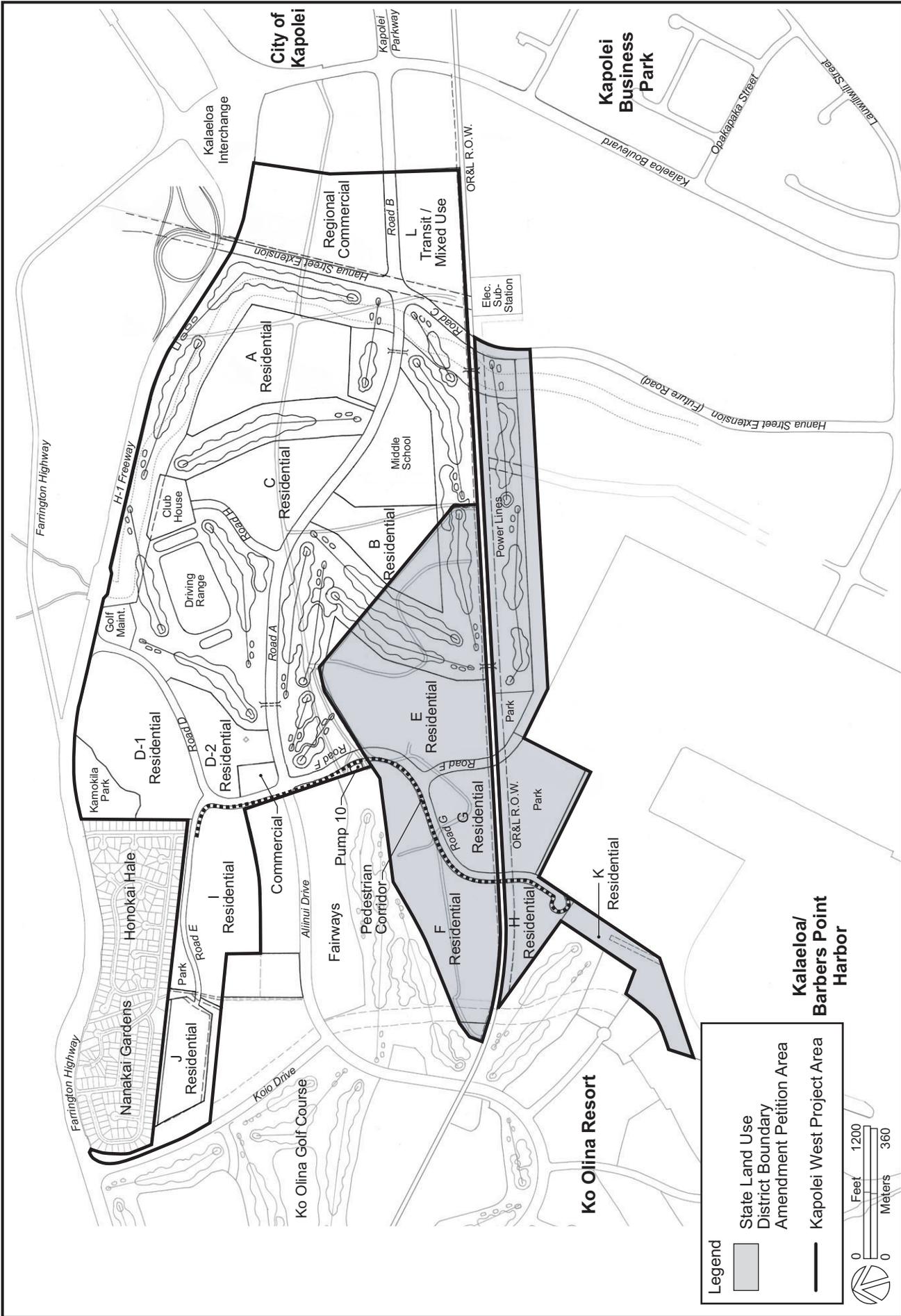


Figure 3

Project Master Plan
Kapolei West Expansion Area
 O'ahu, Hawai'i

of Kapolei and support the surrounding residential communities and the proposed Kapolei West community. The elements of the master plan are described in this section following Table 5A.

Table 5A
Kapolei West Land Use Summary

Land Use	Petition Area		Urbanized Area		Total Project Area		
	Area (acres)	Units	Area (acres)	Units	Area (acres)	Units	Density (units/ac.)
Golf Course	59.9		152.8		212.7		
Low Density Residential	9.3	11	107.9	858	117.2	869	7.4
Medium Density Residential	77.2	1,170	11.4	181	88.6	1,351	15.2
Mixed Use/Residential			10.0	150	10.0	150	15.0
Neighborhood Commercial			2.0		2.0		
Regional Commercial			23.2		23.2		
Middle School			15.5		15.5		
Transit			5.8		5.8		
Parks	17.1		7.7		24.8		
Circulation and Other Open Spaces	10.7		36.3		47.0		
TOTAL	174.2	1,181	372.6	1,189	546.8	2,370	11.0

Table 5A summarizes the proposed land uses and development acreages for the Petition Area and the larger project area. Proposed land uses within the Petition Area consist of golf course, low and medium-density residential, parks, and circulation/other open spaces.

Golf Course

The proposed golf course consists of a 7,300-yard (back tees), 18-hole championship golf course with a clubhouse facility, parking lot, maintenance facility, and driving range on approximately 213 acres. The proposed golf course is intended to complement the Ko Olina course and reinforce Ko Olina/Kapolei West as one of O'ahu's premier golf oriented communities. Golfers would be challenged by the length and dramatic layout of the Kapolei West course. Golf course features such as water hazards, tree massing, bunkers, mounds, and

earth berms would be created with grading and landscaping. An existing regional drainage channel that runs parallel to the H-1 Freeway and cuts south towards the ocean would be retained and incorporated into the several of the golf course fairways as flood basins to detain stormwater flows. Tee boxes and greens would be elevated and/or constructed on the sides of these basins to minimize potential for flood damage. The golf course is planned as a private, daily fee course, to accommodate, residents of Kapolei West neighborhoods, the general public, and guests visiting the Ko Olina Resort.

The Petition Area includes about 59.9 acres of golf course development. Three complete fairways (6th, 13th and 14th fairways) and portions of two other fairways (5th and 15th) are planned to extend into the Petition Area. Two golf cart paths would be constructed to cross the OR&L ROW within the Petition Area (linking the 12th to 13th fairways and the 14th to 15th fairways), similar to the existing golf cart crossings at the Ko Olina golf course.

Low and Medium Density Residential

The residential component of the Kapolei West community includes an estimated 2,370 low and medium-density residential homes planned on approximately 216 acres of land. The proposed residential community would feature approximately 870 low density homes on about 117 acres of land, and approximately 1,350 medium density homes on approximately 89 acres of land. The low density homes would range from 1.2 to 8.7 dwelling units per acre (du/acre), with an average density of 7.4 du/acre. The medium density component would range from 10.0 to 18.0 du/acre, with an average density of 15.2 du/acre. Medium density residential is also planned as part of the transit/mixed use parcel to the east of the project site. Development of the approximate 15.8-acre transit/mixed use parcel is planned to include approximately 150 residential units at a density of approximately 15.0 du/acre.

Overall, 61 percent or approximately 1,450 of the 2,370 homes proposed for development at Kapolei West are projected to be purchased as primary residences for persons already residing full-time on O'ahu. The remaining 39 percent, or about 920 homes, are planned as secondary residences for persons residing off-island.

Kapolei West Housing Type (units)

Area	Market Segment		Total
	Primary	Secondary	
Petition Area	520	660	1,180
Urbanized Area	930	260	1,190
Total	1,450	920	2,370

Nearly 50 percent of the total 2,370 homes (1,180 homes) are located in the Petition Area (the remaining 50 percent, or an estimated 1,190 homes, are within the Urbanized Area). The Petition Area includes about 1,170 medium density homes on approximately 77 acres of land and 11 low density homes on about 9.3 acres of land, within five distinct neighborhoods (and a portion of a sixth). One parcel fronts on the Ko Olina Resort golf course's 4th and 5th fairways, another fronts on the 3rd, 15th, 16th and 17th fairways of the Kapolei West golf course, another fronts on Ko Olina's 8th fairway, and a fourth parcel extends to the inland edge of the Ko Olina Marina with some frontage on Ko Olina's 7th and 8th fairways. Of the 1,180 homes in the

Petition Area, approximately 520 are intended to be primary residences (44 percent), with the remaining 660 homes (56 percent) intended as secondary residences. Private recreational amenities such as pedestrian greenbelt pathways, play courts, tot lots, and passive gathering areas are planned to be provided within the residential parcels to encourage social interaction and an active lifestyle.

Table 5B presents the acreages, densities and corresponding land uses for the individual parcels shown in the project master plan (Figure 3). The densities shown on the parcel summary are gross unit densities developed to guide planning assumptions. While the overall unit count (2,370 units) will remain unchanged, densities and unit counts within the various residential areas will likely be adjusted as the project moves closer to actual development. The mix of housing types would be determined during the design phase for each parcel.

Table 5B
Parcel Summary

Parcel	Land Use	Area (ac)	Units	Density
A	Residential (Low Density)	23.8	190	8.0
B	Residential (Medium Density)	15.1	245	16.2
C	Residential (Low Density)	18.8	150	8.0
D-1	Residential (Low Density)	25.3	220	8.7
D-2	Residential (Low Density)	10.3	90	8.7
E	Residential (Medium Density)	27.1	271	10.0
F	Residential (Medium Density)	28.3	509	18.0
G	Residential (Medium Density)	10.0	180	18.0
H	Residential (Medium Density)	8.1	146	18.0
I	Residential (Low Density)	20.0	140	7.0
J	Residential (Low Density)	9.7	68	7.0
K	Residential (Low Density)	9.3	11	1.2
L	Mixed Use Residential	10.0	150	15.0
	Sub Total	215.3	2,370	11.0
	Transit	5.8		
	Regional Commercial	23.2		
	Neighborhood Commercial	2.0		
	Elementary School	6.0		
	18-hole Golf Course/Drainage Way	206.6		
	Golf Clubhouse	3.8		
	Golf Maintenance Facilities	2.3		
	Neighborhood Parks	24.8		
	Pedestrian Corridors	1.5		
	Public Roads/Other Open Spaces	45.5		
	Sub Total	331.5		
	TOTAL	546.8	2,370	11.0

Neighborhood Commercial Center

An approximately two-acre parcel located near the heart of the resort community (north of the Petition Area) is intended to provide neighborhood-serving retail services in support of the surrounding neighborhoods. A commercial density of 0.25 floor area ratio (FAR) is proposed (approximately 22,000 square feet of floor area). Centrally located along the proposed Kapolei Parkway at the intersection with Road "D", the neighborhood commercial center would be readily accessible to surrounding residential areas, and within walking distance of the existing communities of Honokai Hale, Nanakai Gardens and Ko Olina Fairways. The center would provide retail services such as a convenience store, dry cleaning, professional offices, and other retail services such as an espresso bar, small restaurant, and ice cream shop. The center is intended to become a popular meeting place for Kapolei West residents and guests. A mixed use residential component will be considered if market conditions warrant.

Regional Commercial

An approximate 23.2-acre parcel at the northeastern corner of the project area (northeast of the Petition Area) is planned to accommodate retail, commercial and business activities to complement Kapolei's expanding urban center and support the proposed Kapolei West community. A density of 0.25 FAR is proposed (approximately 253,000 square feet of floor area). Regional commercial activities such as retail, office spaces, restaurants and business services are intended to complement commercial activities located in the nearby City of Kapolei. The site is surrounded by highway facilities (H-1, Kapolei Parkway and the proposed Hanua Street extension), is adjacent to an 18-acre regional commercial parcel, and has excellent automobile access.

Middle School Site

A 15.5-acre middle school site is identified within a residential area adjacent to the proposed Kapolei Parkway (north of the Petition Area). The Petitioner has initiated discussions with the DOE regarding the proposed Middle School, and intends to comply with the DOE's fair share requirements for school facilities.

Transit/Mixed Use Parcel

An approximately 15.8-acre parcel located along the southeastern corner of the project area (east of the Petition Area) is planned for transit and mixed use development. Land adjacent to the intersection of Kapolei Parkway and the proposed Hanua Street extension is reserved for a future public transit facility. The adjacent mixed-use residential and commercial component is planned to feature approximately 100,000 square feet of retail and commercial uses, and approximately 150 multi-family units at a proposed density of approximately 15 du/acre.

Parks

As proposed, Kapolei West features approximately 24.8 acres of park space divided among four separate parks. Of the 24.8 acres of park space, approximately 17.1 acres are located within the Petition Area. Planned parks consist of a 1.8-acre passive mini park to the south of Honokai Hale subdivision (north of the Petition Area), an approximately 14.3-acre neighborhood park south of the OR&L ROW (within the Petition Area), and an approximately 2.8-acre passive mini park adjacent to the golf course south of the OR&L ROW (also within the Petition Area). The 14.3-acre neighborhood park would include both active and passive recreational uses. The

existing 5.9-acre Kamokila Community Park owned by the Estate is proposed to be dedicated to the City and County of Honolulu. Additional private recreational amenities and open spaces would be provided within each of the residential neighborhoods (e.g., pedestrian paths, play courts, recreation centers, etc.).

Circulation and Other Open Spaces

The Kapolei West development includes an estimated 47 acres of roadways, pedestrian and bicycle corridors, and passive open space. Approximately 10.7 acres of the Petition Area are planned for circulation and other open spaces.

Vehicular/Pedestrian Access. Vehicular access to Kapolei West is planned via a new segment of Kapolei Parkway connecting to Aliinui Drive to the west and Kalaeloa Boulevard to the east. Two future roadways, the Hanua Street extension on the east and a planned roadway on the west, would bisect the project and provide additional access points. A new roadway connection to Farrington Highway (Road "D") would provide limited highway access for Kapolei West residents, similar to the limited access Koio Drive in Ko Olina. The Road "D" intersection with the H-1 Freeway corresponds with the location of a potential diamond interchange planned to service the proposed Makaiwa Hills development. Three new roadways, including two smaller neighborhood streets and the Hanua Street extension, are planned to cross the OR&L ROW. Access to the Petition Area would be from the Kapolei Parkway via Road "G". The Project Master Plan (Figure 3) indicates a possible easterly extension of Road "F" from the Petition Area, along the interior of the Kalaeloa Harbor industrial area, possibly connecting to the proposed Hanua Street extension and/or Kalaeloa Boulevard. This is a conceptual alignment that could be for limited access, emergency purposes, or part of a looped roadway network. The feasibility and use of this possible connection would be evaluated as plans for the area to the south of the Petition Area evolve.

A network of multi-purpose pathways is planned to link the neighborhoods and park spaces. Roadways would be designed to encourage pedestrian and bicycling activities, and a new pedestrian corridor would provide access from Honokai Hale, Nanakai Gardens and Kapolei West and Ko Olina neighborhoods to park spaces south of the OR&L ROW within the Petition Area. No direct roadway connections would be made between Kapolei West and the adjacent communities of Honokai Hale and Nanakai Gardens in deference to strong community sentiment against adding additional traffic to their internal streets.

Public Transit. Most of the residential areas would be within a five-minute walk of public transit along the Kapolei Parkway. The location of bus stops would be coordinated with the City DTS and TheBus staffs. Convenient pedestrian linkages to the bus stop locations would be provided within each of the residential parcels through the layout of the internal street system and/or greenways. The Middle School is sited to allow convenient and safe access to a public transit stop. The proposed transit/mixed use parcel at the east end of the Kapolei West development would provide a convenient place for transferring from a private automobile or bicycle to public transit.

Bicycles. A network of bicycle lanes and greenways would link the residential areas to the Middle School. Internal local streets would be designed to maintain low speeds of about 20 miles per hour to provide a safe environment for shared use by bicycles.

Infrastructure

Development of the Kapolei West project, including the Proposed Action, would require substantial on- and off-site infrastructure improvements including potable and non-potable water systems, storm drainage systems, and electrical power and telecommunications systems. The potable and non-potable water systems would require additional storage reservoirs constructed adjacent to the existing Barbers Point 215 reservoirs, located north of the project site.

2.5 PROJECT PHASING

Construction of the entire Kapolei West project is intended to be implemented within a 15-year period, with development of the Petition Area anticipated to commence in the 2008 timeframe. Home deliveries for the entire Kapolei West project are expected to commence in 2008 after land use approvals are granted, allowing for construction of the total 2,370 residential units between 2008 and 2020. Residential home production for the entire Kapolei West project is planned at an average rate of 182 units per year, with absorption projected at 112 units per year for the primary resident housing units, and 71 units per year for the nonresident housing units. As noted, of the total 2,370 residential units proposed, an estimated 1,180 units are within the Petition Area. Based on the projected absorption rates of 112 primary resident housing units per year and 71 nonresident housing units per year, the approximate 1,180 homes proposed for the Petition Area could take an estimated 9 years to build out.

Development of the golf course and the regional commercial facilities would occur during the early phases of development, along with construction of the residential components in the Petition Area and the Kapolei West Urbanized Area. The transit/mixed use and neighborhood commercial parcels would be developed as demand dictates. The Kapolei Parkway would be constructed as development of adjacent lots occurs. The extension of Hanua Street to the H-1 Freeway would be needed later to service the growing industrial and commercial harbor operations.

2.6 PROJECTED DEVELOPMENT COSTS

Development costs for the Petition Area are estimated to total \$444.0 million, including on- and off-site infrastructure, vertical construction, landscaping and soft costs such as professional services, administration of operating subsidiaries, and marketing. Of the total estimated development costs, residential construction is projected to cost \$291.0 million, and on- and off-site infrastructure costs are projected to cost \$98.5 million. The remaining costs are attributed to other costs such as professional services, operating subsidiaries, and marketing expenditures.

2.7 COMMUNITY OUTREACH

The Petitioner has sought community input into the plan and would continue to do so. Thus far it has made presentations to the Makakilo/Kapolei/Honokai Hale Neighborhood Board #34 (July 28, 2004), Honokai Hale/Nanakai Gardens Community Association (June 6, 2004) and the Ko Olina Fairways Association of Apartment Owners (January 19, 2005) in an effort to keep the communities nearest to the project area informed of the project. It has also briefed the City and County Department of Planning and Permitting (DPP) and DOE staff on several occasions to keep the agencies apprised of the plan development process and to solicit input.

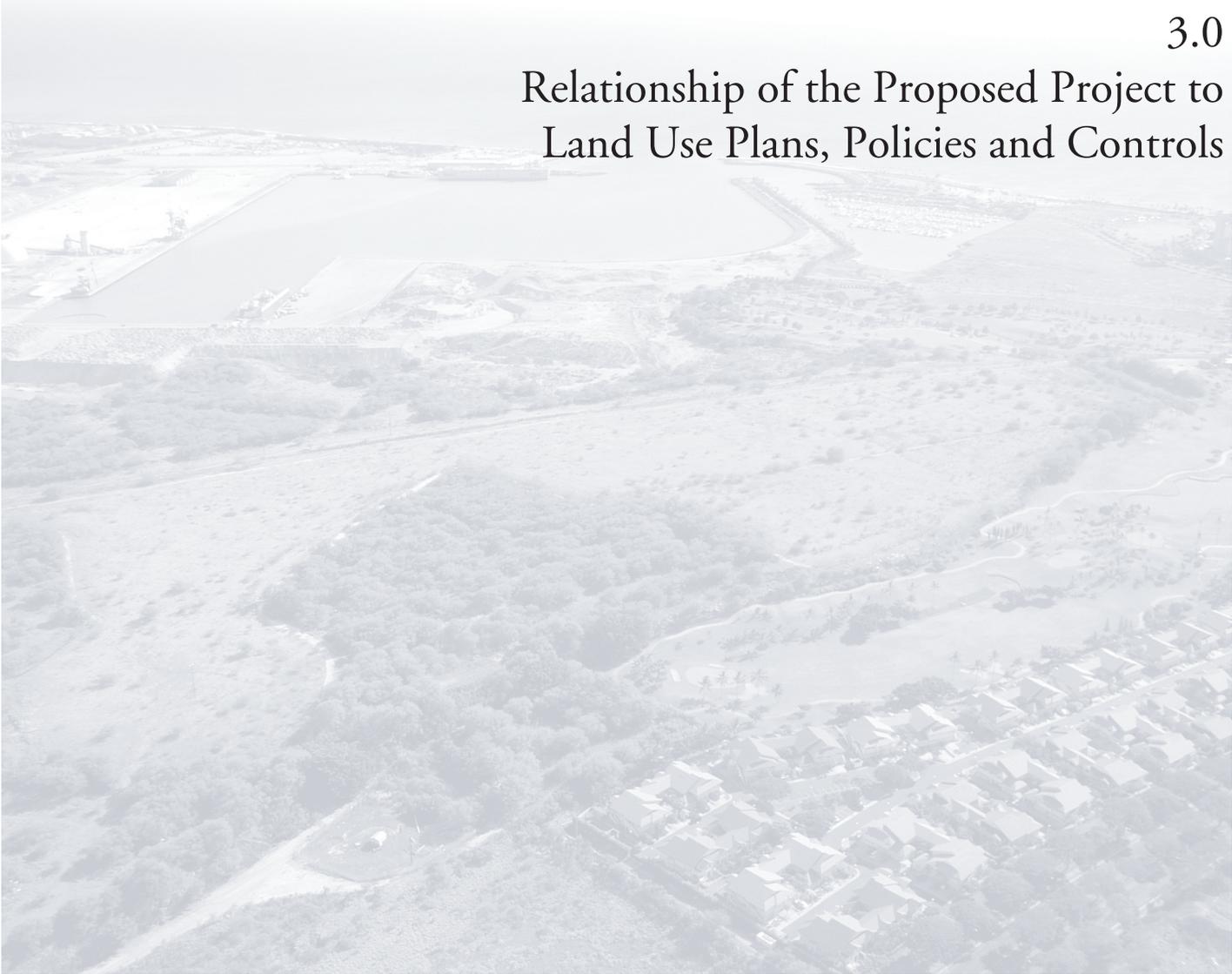
In general, community members are supportive of growth in the 'Ewa region, particularly as it relates to the provision of new public facilities and retail shopping venues. Community leaders have been instrumental in encouraging public and private investment in the 'Ewa region to fulfill the vision of establishing Kapolei as O'ahu's second urban center. Concerns about growing pains however, such as traffic congestion and school overcrowding, are widespread. Development of the regional commercial center at the eastern edge of the Kapolei West project was perceived as a benefit to residents living to the west of the City of Kapolei, as it would provide a convenient alternative to shopping in the city. Residents of Ko Olina expressed concern about connecting the resort's main thoroughfare, Aliinui Drive, with the Kapolei Parkway as it might increase traffic within the Ko Olina Resort and put pressure on limited beach parking. Requests were made by the Honokai Hale/Nanakai Gardens Community Association to preserve viewplanes of existing homes and provide landscape buffers to soften the impact of new downslope development. As a measure of community support for the project, the Makakilo/ Kapolei/Honokai Hale Neighborhood Board voted 8 –1 to support the development of the Kapolei West project (including the Petition Area).

The Petitioner would continue to participate in community outreach during the development process. In addition, pre-assessment consultation as part of the draft environmental assessment preparation and the subsequent EISPN included a wide range of government agencies, community organizations, and neighborhood groups. Important ideas that have surfaced via community outreach and have helped focus the plan include:

- A pedestrian pathway connection linking the adjacent communities of Honokai Hale, Nanakai Gardens and Ko Olina Fairways to Kapolei West via an internal greenbelt trail.
- A new Farrington Highway roadway connection that avoids connecting through Honokai Hale (Road "D").
- Relocating the neighborhood retail center closer to the western border with Ko Olina, in recognition of providing service to the greater Kapolei West/Ko Olina community.
- Minimize changes to the natural drainage pattern and incorporate drainage within the golf course to maximize on-site detention.

3.0

Relationship of the Proposed Project to
Land Use Plans, Policies and Controls



3.0 RELATIONSHIP OF THE PROPOSED PROJECT TO LAND USE PLANS, POLICIES AND CONTROLS

3.1 STATE OF HAWAII

3.1.1 *Hawai'i State Plan*

The *Hawai'i State Plan*, established through the State's legislative process, represents public consensus regarding expectations for Hawai'i's future. Chapter 226, Hawai'i Revised Statutes (HRS), as amended, describes the purpose of the State Plan as follows:

"[it] shall serve as a guide for the future long-range development of the State; identify the goals, objectives, policies, and priorities for the State of Hawai'i; provide the basis for determining priorities and allocating limited resources, such as public funds, services, manpower, land, energy, water, and other resources; improve coordination of state and county plans, policies, programs, projects, and regulatory activities; and establish a system for plan formation and program coordination to provide for an integration of all major state and county activities" (Chapter 226-1, HRS; Findings and Purpose).

The Proposed Action, as well as the entire Kapolei West project, conforms to most applicable goals, objectives, policies and guidelines of the Hawai'i State Plan. The proposed development is substantially consistent with most applicable policy areas, including the following:

Section 226-5 Objective and policies for population.

Section 226-5(b)(1) Manage population growth statewide in a manner that provides increased opportunities for Hawai'i's people to pursue their physical, social, and economic aspirations while recognizing the unique needs of each county.

Section 226-5(b)(3) Promote increased opportunities for Hawai'i's people to pursue their socio-economic aspirations throughout the islands.

Section 226-5(b)(7) Plan the development and availability of land and water resources in a coordinated manner so as to provide for the desired levels of growth in each geographic area.

Discussion: The Petition Area is located in the 'Ewa region of west O'ahu, which is designated in State and City policies as the location of O'ahu's secondary urban center. The 'Ewa region is planned to accommodate a major share of O'ahu's future growth, with public investment in infrastructure and public facilities supporting the future development and economic activity being encouraged in the region. The City and County of Honolulu has identified the 'Ewa region to accommodate up to 64,000 new homes in master planned residential communities. The proposed development would provide approximately 1,180 residential units to support of employment centers at Ko Olina, the City of Kapolei and Campbell Industrial Park.

Sustainable yield for the 'Ewa-Kunia Aquifer System is 16.0 million gallons per day (mgd). Currently, 0.543 mgd of the 'Ewa-Kunia Aquifer's sustainable yield is unallocated and 4.0 mgd of the allocated share is unused, resulting in a theoretical unused balance of 4.5 mgd available for future withdrawals. Based on the sustainable yields of the aquifer and the present unallocated and unused supply, the available supply of water is sufficient to support the proposed development.

Section 226-6 Objectives and policies for the economy - in general.

Section 226-6(a)(1) Increased and diversified employment opportunities to achieve full employment, increased income and job choice, and improved living standards for Hawai'i's people.

Section 226-6(b)(10) Stimulate the development and expansion of economic activities which will benefit areas with substantial or expected employment problems.

Section 226-6(b)(14) Promote and protect intangible resources in Hawai'i, such as scenic beauty and the aloha spirit, which are vital to a healthy economy.

Discussion: Development of the Petition Area could provide some 260 long-term permanent jobs during operations. Direct operational jobs could include a variety of types and levels of work, including opportunities in real estate brokerage, management, sales and marketing, golf course operations, maintenance and engineering, retail, entertainment and landscaping. (See Section 5.3.2 Employment for estimated employment.)

The Petition Area and entire Kapolei West project area is comprised of former agricultural lands that have been idle for some time. The undeveloped character of the Petition Area contrasts with the landscaped environment of the adjacent Ko Olina resort and golf course and the surrounding residential and commercial uses, appearing as a pocket of idle scrublands surrounding by urban development. Development of the Petition Area would introduce urban forms to an undeveloped area, thereby changing the *makai* view from the H-1 Freeway.

Section 226-7 Objectives and policies for the economy-- agriculture.

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

Section 226-7(b)(10) Assure the availability of agriculturally suitable lands with adequate water to accommodate present and future needs.

Discussion: The City and County of Honolulu 'Ewa DP identifies the Petition Area for future urban development. The Petition Area consists of former agricultural lands that are no longer used for agricultural production. The Petition Area lands are nonessential

to the continuation of diversified agriculture on the island due to the ample supply of former plantation agriculture lands now available for alternative agricultural uses.

Section 226-8 Objective and policies for the economy - visitor industry.

Section 226-8(b)(3) Improve the quality of existing visitor destination areas.

Section 226-8(b)(4) Encourage cooperation and coordination between the government and private sectors in developing and maintaining well-designed, adequately serviced visitor industry and related developments which are sensitive to neighboring communities and activities.

Discussion: The Petition Area is strategically positioned adjacent to the Ko Olina resort and golf course. The proposed residential and golf course uses are intended to enhance the Ko Olina resort and the existing resort communities. The Petition Area would bridge the resort second home and visitor attractions of Ko Olina and create a seamless transition between the resort and the City of Kapolei. The residential population living in the Petition Area would expand the customer base for existing commercial and recreational amenities operating at Ko Olina, thereby providing positive benefits for the retail and commercial establishments within the resort. Conversely, the planned golf course would function as an additional amenity for guests visiting the resort.

Section 226-12 Objective and policies for the physical environment - scenic, natural beauty, and historic resources.

Section 226-12(b)(1) Promote the preservation and restoration of significant natural and historic resources.

Section 226-12(b)(3) Promote the preservation of views and vistas to enhance the visual and aesthetic enjoyment of mountains, ocean, scenic landscapes, and other natural features.

Section 226-12(b)(4) Protect those special areas, structures, and elements that are an integral and functional part of Hawai'i's ethnic and cultural heritage.

Discussion: No threatened or endangered plant or animal species are present within the Kapolei West project area, including the Petition Area. Significant historic sites located in the Petition Area include the OR&L ROW, the Gilbert Trig Station, two existing archaeological preserves, and several other archaeological sites (see Section 4.9). The proposed development would preserve and restrict access to the sensitive sites, and comply with all requirements of the SHPD. The OR&L ROW is listed on the National Register of Historic Places and is currently used by the Hawaiian Railway Society for cultural and educational purposes. A minimum 40-foot setback would be maintained along the OR&L ROW. Proposed roadway and golf path crossings would be limited to maintain the integrity of the OR&L ROW and minimize impacts to use of the ROW. The Petitioner has consulted SHPD to determine the effect of the proposed development on historic sites; SHPD response is pending.

The Petition Area was not associated with traditional cultural practices for subsistence, cultural or religious purposes and does not provide access to other areas in order to exercise those practices. Therefore, the proposed development would have minimal or no impact on Hawaiian culture, its practices and traditions.

The proposed development would not obstruct significant panoramic views of the shoreline and urban Honolulu from the H-1 Freeway. The proposed residential development would be limited in height to preserve existing views from mauka areas. In addition, the golf course and park spaces would provide open space relief in contrast to the surrounding industrial uses at Kalaeloa Barbers Point Harbor and Campbell Industrial Park.

Section 226-13 Objectives and policies for the physical environment - land, air, and water quality.

Section 226-13(b)(7) Encourage urban developments in close proximity to existing services and facilities.

Discussion: The Petition Area lies between established communities (Honokai Hale and Nanakai Gardens subdivisions), the Ko Olina resort and golf course, the expanding City of Kapolei, Kalaeloa Barbers Point Harbor and its related industrial uses, and a major proposed community (Makaiwa Hills). Development of urban uses in the Petition Area would support the economic and population growth in the region and would help to relieve development pressures on rural and urban fringe areas.

Section 226-15 Objectives and policies for facility systems - solid and liquid wastes.

Section 226-15(b)(1) Encourage the adequate development of sewerage facilities that complement planned growth.

Section 226-15(b)(2) Promote re-use and recycling to reduce solid and liquid wastes and employ a conservation ethic.

Discussion: The Kapolei interceptor sewer line, a two-mile relief sewer to the Honouliuli Sewage Treatment Plant, is currently under construction. When completed, the sewer line will provide sewer conveyance capacity for developments in the Kapolei region, including Ko Olina, Kapolei West, and the City of Kapolei. Wastewater generated by the Petition Area would be conveyed to and treated at the Honouliuli Wastewater Treatment Plant. Development of the Petition Area would not commence until DPP confirms that adequate capacity exists and approves the project sewer master plan and sewer connection permit. Design strategies and construction technologies that support the use of recycled materials and conservation and recycling practices would be incorporated as appropriate.

The use of non-potable water is planned for golf course and landscaping irrigation. In addition, project construction would incorporate water conservation measures, where possible.

Section 226-16 Objective and policies for facility systems - water.

Section 226-16(b)(1) Coordinate development of land use activities with existing and potential water supply.

Section 226-16(b)(6) Promote water conservation programs and practices in government, private industry, and the general public to help ensure adequate water to meet long-term needs.

Discussion: Based on an analysis of groundwater resources prepared for the Kapolei West project, the available supply of potable water from the 'Ewa-Kunia Aquifer System should be adequate to support the Petition Area. A water master plan would be prepared and submitted to the Board of Water Supply (BWS) for review and approval. Actual water commitments would not be issued until building permit applications are submitted. Under current BWS policy, water use allocations are granted in incremental amounts as construction plans are approved or building permits are obtained. Appropriate design and landscaping measures to encourage water conservation and minimize water consumption would be incorporated as appropriate.

Section 226-18 Objectives and policies for facility systems – energy/telecommunications.

Section 226-18(c)(4) Promote all cost-effective conservation of power and fuel supplies through measures including: (a) development of cost-effective demand-side management programs; (b) education; and (c) adoption of energy-efficient practices and technologies.

Section 226-18(c)(7) Promote alternate fuels and energy efficiency by encouraging diversification of transportation modes and infrastructure.

Section 226-18(c)(8) Support actions that reduce, avoid, or sequester greenhouse gases in utility, transportation, and industrial sector applications.

Discussion: The City and County of Honolulu Energy Code would be considered during the development process. Design and construction of the proposed facilities would incorporate sustainable design and energy conservation practices and technologies, where appropriate and feasible.

Development of the Petition Area would enhance the development of the “second city” at Kapolei. The proposed development would provide additional residential and employment opportunities for O’ahu residents to live and work within the ‘Ewa region. In support of the regional growth, the project may contribute to the reduction in the number of commuters traveling between downtown Honolulu and ‘Ewa region, which in turn would reduce fossil fuel consumption and automobile emissions.

Section 226-19 Objectives and policies for socio-cultural advancement - housing.

Section 226-19 (b)(3) Increase homeownership and rental opportunities and choices in terms of quality, location, cost, densities, style, and size of housing.

Section 226-19 (b)(5) Promote design and location of housing developments taking into account the physical setting, accessibility to public facilities and services, and other concerns of existing communities and surrounding areas.

Section 226-19 (b)(6) Facilitate the use of available vacant, developable, and underutilized urban lands for housing.

Discussion: The Petition Area would provide approximately 1,180 residential units in a variety of housing types, densities, and prices, including market-priced single family homes and townhomes that would be available to buyers and residents with a range of incomes. The Petition Area's location in the 'Ewa region ensures that adequate public and community services as well as employment opportunities are accessible to residents. A percentage of the residential development would provide affordable housing opportunities in accordance with City and County guidelines and requirements.

The Petition Area represents approximately 30% of the master-planned Kapolei West community. The remaining 70% is within the State Urban District. Development of the Petition Area in conjunction with the adjacent Urbanized Area would allow the Petitioner to improve vacant lands between the Ko Olina golf course and the eastern boundary of the Kapolei West project, thereby enhancing the overall marketability and buyer appeal of the master-planned Kapolei West community. In the event that the request for reclassification is not approved, the Petitioner would proceed with development of the Urbanized Area and the majority of the Petition Area would remain in its current, unimproved state.

Section 226-21 Objectives and policies for socio-cultural advancement - education.

Section 226-21(b)(2) Ensure the provision of adequate and accessible educational services and facilities that are designed to meet individual and community needs.

Discussion: The Kapolei West project includes the provision of a middle school site to serve the project and the surrounding region. The Petitioner has initiated discussion with the DOE to meet the school requirements generated by the development, contributing on a fair-share basis.

Section 226-103 Economic priority guidelines.

Section 226-103(d)(1) Identify, conserve and protect agricultural and aquacultural lands of importance and initiate affirmative and comprehensive programs to promote economically productive agricultural and aquacultural uses of such lands.

Section 226-103(d)(10) Support the continuation of land currently in use for diversified agriculture.

Discussion: The project would not adversely affect the growth of diversified agriculture because ample land is available in Hawai'i to accommodate the growth of diversified agriculture. The limiting factor to the growth of diversified agriculture is not the land supply, but rather the size of the market for crops that can be grown profitably in Hawai'i (See Section 4.4.2). Furthermore, these policies, which were written before the major contraction of plantation agriculture in the 1990s, assume implicitly that profitable agricultural activities would be available to utilize these agricultural lands. This is now a questionable assumption in view of the enormous contraction of plantation agriculture, the abundant supply of land that is available for diversified agriculture, and the slow absorption of land being utilized for diversified agriculture.

Section 226-104 Population growth and land resources priority guidelines.

Section 226-104(b)(1) Encourage urban growth primarily to existing urban areas where adequate public facilities are already available or can be provided with reasonable public expenditures, and away from areas where other important benefits are present, such as protection of important agricultural land or preservation of lifestyles.

Section 226-104(b)(2) Make available marginal or nonessential agricultural lands for appropriate urban uses while maintaining agricultural lands of importance in the agricultural district.

Discussion: The Petition Area is located in the 'Ewa region, surrounded by existing residential communities, the Ko Olina resort and golf course, the City of Kapolei and the industrial activities associated with Kalaeloa Barbers Point Harbor. The proposed project supports the City's directed growth policies that encourage residential and commercial development in the 'Ewa region. The Petition Area has been identified for future urbanization in the 'Ewa DP, and is contiguous with existing and proposed urban development. Due to its position between either existing or planned urban development, use of the Petition Area for long-term agriculture production is not feasible.

According to the Agricultural Lands of Importance to the State of Hawai'i (ALISH) rating system, a small percentage of soils in the Petition Area are prime agricultural lands (about 10 acres or 6%). The remaining soils are classified as other (about 22 acres or 12%) or are unrated (about 142 acres or 82%). Urbanization of the Petition Area would result in the loss of about 15 acres of good agricultural lands, approximately 0.05 percent of the 28,300 acres of former plantation agricultural lands released since 1990 that remain largely available for diversified agriculture.

Section 226-106 Affordable Housing.

Section 226-106(8) Give higher priority to the provision of quality housing that is affordable for Hawai'i's residents and less priority to development of housing intended primarily for individuals outside of Hawai'i.

Discussion: The market assessment prepared for the Kapolei West project projected that the Petition Area would supply an estimated 510 homes oriented toward primary residents and about 640 units oriented toward resort/second home buyers due to the property's location adjacent to the vacation and second home market at the Ko Olina resort and golf course. Although the Petition Area is projected to have a greater percentage of second home products (56%) than primary home products (44%), the overall Kapolei West development (including both the Petition Area and the Urbanized Area) is projected to attract a buyer market mix comprised of about 61% primary residents (1,450 primary homes) and 39% non-residents (910 secondary homes). Development of the Kapolei West project would comply with City requirements for the provision of affordable housing opportunities.

3.1.2 State Functional Plans

The Hawai'i State Plan directs the appropriate State agencies to prepare functional plans for their respective program areas, including: agriculture, conservation lands, education, employment, energy, health, higher education, historic preservation, housing, human services, recreation, tourism, transportation and water resources development. While the Hawai'i State Plan establishes long-term objectives for Hawai'i, the State functional plans serve as the primary implementing vehicle for the Hawai'i State Plan and delineate specific strategies of policies and priority actions that should be addressed in the short term.

The State Functional Plans have been adopted by the Hawai'i State Legislature and approved by the Governor. The plans set forth "...the policies, statewide guidelines, and priorities within a specific field of activity, when such activity or program is proposed, administered, or funded by any agency of the State" (Section 226-2 HRS). Each functional plan contains objectives to be achieved and policies to be pursued within the specific areas. "...Such policies shall address major programs and the locations of major facilities" (Section 226-57(b) HRS).

The Hawai'i State Plan mandates that the State Functional Plans "...shall be taken into consideration in amending the county general plans" (section 2326-52 (a)(3) HRS). The proposed project generally supports the objectives and policies of the following State Functional Plans:

State Housing Functional Plan

The Housing Finance and Development Corporation coordinated the preparation of this functional plan. The Plan provides a comprehensive strategy for the development, preservation and management of housing within the State to meet Hawai'i's future housing needs. Areas of concern addressed in the Plan include homeownership, rental housing, rental housing for the

elderly and other special need groups, and designating and acquiring land that is suitable for residential development.

Issue Area: Homeownership

Policy A(2): Encourage increased private sector participation in the development of affordable for-sale housing units.

Policy A(3): Ensure that (1) housing projects and (2) projects which impact housing provide a fair share/adequate amount of affordable homeownership opportunities.

Issue Area: Rental Housing for the Elderly and Other Special Needs Groups

Policy C(7): Integrate special needs housing in new and existing neighborhoods

Discussion: The project, which is being proposed by a private landowner, would provide housing units in a variety of style and price. Housing products, including both single-family and multi-family units, supplied by the Kapolei West project (including both the Petition Area and the Urbanized Area) would meet State and County guidelines and requirements for pricing and percentage of affordable homes to market homes. In addition, the developer would consider the development of group housing to accommodate persons with special needs.

State Transportation Functional Plan

The State Department of Transportation coordinated the preparation of the State Transportation Functional Plan. The Plan identifies specific strategies and policies to develop a balanced, efficient and economical multi-modal transportation system. Areas of concern addressed in the Plan include congestion, economic development, funding and education.

Issue Area I. Congestion

Policy I.A.1. Increase transportation capacity and modernize transportation infrastructure in accordance with existing master plans and laws requiring accessibility for people with disabilities.

Policy I.B.1. Close the gap between where people live and work through decentralization, mixed zoning and related initiatives.

Implementing Action I.B.1.a. Promote the development of the 'Ewa Second City to provide jobs near homes.

Implementing Action I.B.1.a. Promote the development of jobs near homes. Examples are residential condominiums in the Kakaako area to allow employees to live close to their downtown offices and employee housing built by resort developers in close proximity to resorts.

Discussion: The Petition Area is advantageously located between the City of Kapolei and the resort community of Ko Olina. Development in this area would provide transition between the resort uses at Ko Olina and the City of Kapolei's commercial, residential and civic activities. The proposed homes, park and golf course would provide residential, recreational, and employment opportunities in close proximity to both Ko Olina resort and the City of Kapolei, supporting the growth of O'ahu's secondary urban center.

State Agriculture Functional Plan

Preparation of the Agriculture Functional Plan was coordinated by the Department of Agriculture. The Plan identified land and water as one of four issue areas, which is discussed below. The proposed project is not relevant to the other three issue areas (i.e., Industry Research and Development; Agricultural Pests and the Environment; and Services and Infrastructure).

Issue Area: Land and Water

Implementing Action H(2)(c): Administer land use district boundary amendments, permitted land uses, infrastructure standards, and other planning and regulatory functions on important agricultural lands and lands in agricultural use, so as to ensure the availability of agriculturally suitable lands and promote diversified agriculture.

Discussion: The project would not have a detrimental effect on the diversified agriculture industry in Hawai'i. The supply of agricultural lands far exceeds its demand due to the enormous contraction in plantation agriculture.

3.1.3 State Land Use Law

The State Land Use Commission, pursuant to Chapter 205, HRS, has classified all lands in the State of Hawai'i into one of four land use districts. The four land use districts are: (1) Conservation; (2) Agriculture; (3) Urban; and (4) Rural. Figure 4 shows the State land use district boundaries in relation to the Petition Area. The Petition Area is in the Agricultural District.

A State Land Use District Boundary Amendment for reclassification from the Agricultural District to the Urban District is being sought. The Petitioner proposes to combine the Petition Area with an adjacent parcel of approximately 372.6 acres designated as Urban for the Kapolei West project. The Commission approved the reclassification of the 372.6-acre parcel from the Agricultural District to the Urban District in 1991 for the Ko Olina Phase II development (Docket No. A90-655) (Appendix A).

The State Land Use Commission Administrative Rules (Title 15-15, HAR, adopted November 1999), states that an application for a land use district boundary amendment shall not be approved "unless the proposed boundary amendment is reasonable, not violative of Section

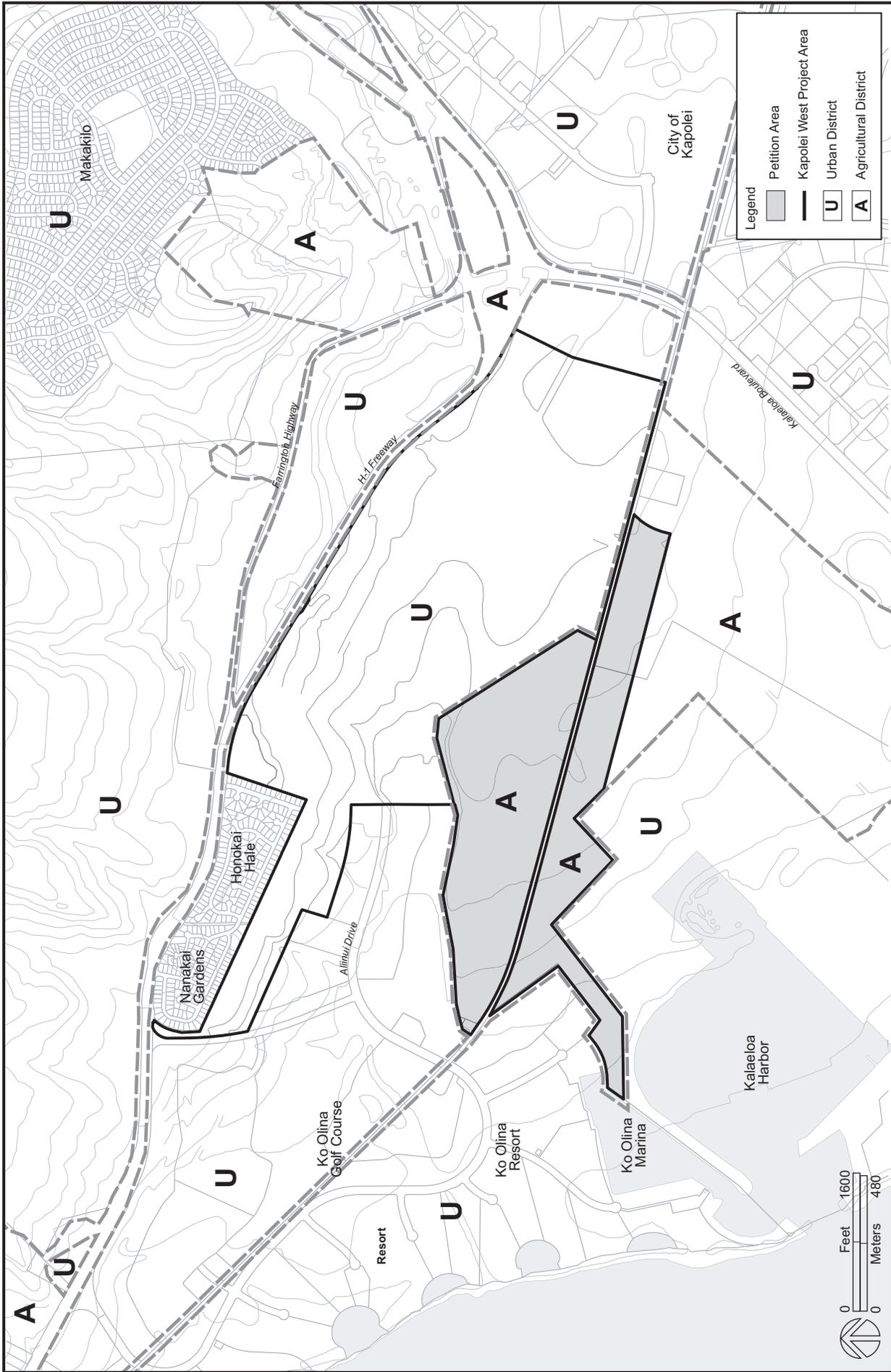


Figure 4

State Land Use District Boundaries

Kapolei West Expansion Area
 O`ahu, Hawai`i

205-2, HRS and consistent with the polices and criteria established pursuant to Sections 205-16, 205-17 and 205A-2, HRS” (Hawai‘i Land Use Commission Rules, Section 15-15-77(a)). In reviewing petitions for reclassification of district boundaries, the Commission must consider six specific criteria (15-15-77(b), HAR). The criteria are presented below, followed by a brief discussion of each criterion.

(1) The extent to which the proposed reclassification conforms to the applicable goals, objectives, and policies of the Hawai‘i state plan and relates to the applicable priority guidelines of the Hawai‘i state plan and the adopted functional plans;

Discussion: The proposed project conforms to most applicable goals, objectives and policies and guidelines of the *Hawai‘i State Plan* and the adopted functional plans, including the policies and objectives discussed in Sections 3.1 and 3.2. Given the competing nature of many of these plans, policies and objectives, the Proposed Action supports many while is inconsistent with others.

(2) The extent to which the proposed reclassification conforms to the applicable district standards;

Discussion: As defined in Section 15-15-18 of the Hawai‘i Administrative Rules, the applicable standards for determining the boundaries for the Urban District are as follows:

- (1) It shall include lands characterized by "city-like" concentrations of people, structures, streets, urban level of services and other related land uses;
- (2) It shall take into consideration the following specific factors:
 - (A) Proximity to centers of trading and employment except where the development would generate new centers of trading and employment;
 - (B) Availability of basic services such as schools, parks, wastewater systems, solid waste disposal, drainage, water, transportation systems, public utilities, and police and fire protection; and
 - (C) Sufficient reserve areas for foreseeable urban growth;
- (3) It shall include lands with satisfactory topography, drainage, and reasonably free from the danger of any flood, tsunami, unstable soil condition, and other adverse environmental effects;
- (4) Land contiguous with existing urban areas shall be given more consideration than non-contiguous land, and particularly when indicated for future urban use on state or county general plans;

- (5) It shall include lands in appropriate locations for new urban concentrations and shall give consideration to areas of urban growth as shown on the state and county general plans;
- (6) It may include lands which do not conform to the standards in paragraphs (1) to (5):
 - (A) When surrounded by or adjacent to existing urban development; and
 - (B) Only when those lands represent a minor portion of this district;
- (7) It shall not include lands, the urbanization of which would contribute toward scattered spot urban development, necessitating unreasonable investment in public infrastructure or support services; and
- (8) It may include lands with a general slope of twenty per cent or more if the commission finds that those lands are desirable and suitable for urban purposes and that the design and construction controls, as adopted by any federal, state, or county agency, are adequate to protect the public health, welfare and safety, and the public's interests in the aesthetic quality of the landscape.

Discussion: The project is consistent with the urban standards, including its location contiguous to existing urban areas and its proximity to existing and proposed employment centers. Services such as schools, parks, wastewater systems, water, sanitation, and police and fire protection are or would be available to serve the Petition Area. The Petition Area is within the City and County of Honolulu's Urban Growth Boundary and has been identified for future urban growth in the 'Ewa DP. It is highly developable, with satisfactory topography and drainage, and is free from natural hazard potential, such as flooding or tsunami inundation.

(3) The impact of the proposed reclassification on the following areas of state concern: (A) Preservation or maintenance of important natural systems or habitats; (B) Maintenance of valued cultural, historical, or natural resources; (C) Maintenance of other natural resources relevant to Hawaii's economy, including, but not limited to, agricultural resources; (D) Commitment of state funds and resources; (E) Provision for employment opportunities and economic development; and (F) Provision for housing opportunities for all income groups, particularly the low, low-moderate, and gap groups;

Discussion: There are no federally threatened or endangered species within the Petition Area although the Hawaiian Owl may forage in the area (State-endangered). Significant historic and archaeological resources would be preserved, managed and protected in accordance with SHPD requirements. Less than 20% of the Petition Area is classified as prime or unique agricultural lands, while the majority (82%) is unrated. Furthermore, the Petition Area is no longer used for intensive agricultural production,

and future agricultural use is limited due to its location surrounded by existing or proposed urban uses. The project is being proposed by a private development entity, and would not involve federal, state or county funds, with the exception of some public funding that may be used for regional roadway improvements. The development of 1,180 residential units would provide housing opportunities for all income groups, and would contribute to increased employment opportunities and the overall economic growth of the 'Ewa region.

(4) In establishing the boundaries of the districts in each county, the commission shall give consideration to the general plan of the county in which the land is located;

Discussion: Section 3.2.1 discusses the project's conformance with the City and County of Honolulu *General Plan*.

(5) The representations and commitments made by the Petitioner in securing a boundary change, including a finding that the Petitioner has the necessary economic ability to carry out the representations and commitments relating to the proposed use or development;

Discussion: The Petitioner has submitted current financial statements as part of the Land Use District Boundary Amendment petition (Docket No. A04-753). Review of the financial statements show that the Petitioner has the necessary economic ability to carry out the proposed development.

(6) Lands in intensive agricultural use for two years prior to date of filing of a petition or lands with a high capacity for intensive agricultural use shall not be taken out of the agricultural district unless the commission finds either that the action: (A) will not substantially impair actual or potential agricultural production in the vicinity of the subject property or in the county or state; or (B) is reasonably necessary for urban growth.

Discussion: Less than 10 percent (about 15 acres) of lands within the Petition Area are considered to have a high capacity for intensive agricultural use. Although the Petition Area was formerly used for intensive sugarcane production, the majority of the property is currently fallow, with the exception of a several acres south of the OR&L ROW currently being used for small-scale agriculture. Due to the recent release of lands previously used for plantation agriculture, ample land is available for agricultural use; therefore, the reclassification of the Petition Area from the Agricultural District to Urban would not substantially impair actual or potential agricultural production in the county or state. Based on the 'Ewa DP Urban Land Use Map that identifies the Petition Area for urban use, it is reasonable to conclude that the Petition Area is necessary for future urban growth.

3.1.4 Environmental Impact Statement Law (Chapter 343, HRS)

According to Section 11-200-5, Hawai'i Administrative Rules, Chapter 343, HRS shall apply to persons who are required to obtain an agency approval prior to proceeding with implementing

actions which are either located in certain specified areas, or actions that require certain types of amendments to existing county general plans. The provisions of Chapter 343, HRS also require that the significance of an action's potential impacts shall be assessed at the earliest practicable time.

Provisions of Chapter 343, HRS require environmental review for various actions, including actions that "propose the use of state or county lands or the use of state or county funds..." (Section 343-5(a)(1), HRS) and that "propose any use within any historic site as designated in the National Register or Hawai'i Register..." (Section 343-5(a)(4), HRS). The Proposed Action is subject to the provisions of Chapter 343, HRS because the proposed roadway and golf path crossings are planned to cross the OR&L ROW, a historic site listed on the National Register of Historic Places (Site No. 50-80-12-9714) owned by the State of Hawai'i Department of Transportation. Offsite project infrastructure and major intersection improvements will also be constructed under/within State roadway ROWs.

Section 343-5 (a)(6), HRS, notes that the provisions of Chapter 343 apply to "any amendment to existing county general plans where the amendment would result in designations other than agriculture, conservation or preservation..." A State Attorney General opinion (Opinion No. 85-30) has broadened the scope of the definition of county general plans to include "...non-county initiated actions which propose amendment or change to a county's planning documents, however denominated, and development plans or otherwise, and which would result in a designation other than agriculture, conservation or preservation." The 'Ewa DP is currently undergoing 5-year review; the Kapolei West project will be considered during the revision process.

In addition to the Land Use District Boundary Amendment currently being sought, the Petitioner will be submitting a zone change application to the City and County of Honolulu for the Kapolei West project (including Petition Area). According to the 'Ewa DP, projects that meet the City and County's definition of "significant" zone changes, such as the Kapolei West project, require an environmental assessment. According to the 'Ewa DP, a significant zone change involves an application that involves a zone change of more than 25 acres or more to any zoning district or combination of zoning districts, excluding preservation and agricultural zoning districts; a change of more than 10 acres to the Residential or Country zoning district; a change of more than 5 acres to the Apartment, Resort, Commercial; Industrial, or Mixed use zoning district; or would have major social, environmental, or policy impacts, or cumulative impacts due to a series of applications in the same area. Therefore, this EIS is also intended to satisfy the City and County.

3.1.5 Coastal Zone Management Program

Objectives and policies of the Coastal Zone Management Program are described in Chapter 205A-2, Hawai'i Revised Statutes, Part I. The Petition Area lies within the State's Coastal Zone Management Area, which includes all lands of the State and the area extending seaward from the shoreline. Potential impacts to the coastal zone relate to storm drainage and wastewater disposal. Impacts resulting from project storm drainage would be mitigated by compliance with

National Pollutant Discharge Elimination System (NPDES) permit conditions. Wastewater generated from the project would be appropriately treated at the municipal Honouliuli Wastewater Treatment Plant prior to deep ocean discharge.

Part II of Chapter 205A, Hawai'i Revised Statutes contains the general objectives and policies upon which all counties within the State of Hawai'i, including the City and County of Honolulu, have established Special Management Areas (SMAs). Approximately 400 feet of the southernmost tip of the Petition Area borders the Ko Olina Marina; about 1.1 acres are within the City and County's Special Management Area. The specific provisions of the county SMA are discussed in Section 3.2.4.

The project's conformance with objectives of the Coastal Zone Management Program is discussed below:

Recreational Resources

Objective: Provide coastal recreational opportunities accessible to the public.

Discussion: Development of the Petition Area would include park and recreational facilities, including a public neighborhood park to serve the Petition Area and residents of Ko Olina and the City of Kapolei, multi-purpose pathways to accommodate pedestrian and bicycle traffic, and private recreational centers and open space areas. The 17 acres planned for the Petition Area, as well as the 23.8 acres planned for the entire Kapolei West project (both Petition Area and Urbanized Area), exceed the City and County Park Dedication Ordinance requirements for this type of development.

Historic Resources

Objective: 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.

Discussion: Despite the extensive agriculture-related land modification during the last century, several significant historic and archaeological sites have been identified in the Petition Area, including: a burial cave; two sinkholes; a temporary habitation site; an upright stone with walled enclosure; the OR&L ROW; and the Gilbert Trig Station. Each of these sites would be preserved or documented in accordance with SHPD requirements. Although the proposed developments will not alter these structures, the SHPD would be consulted prior to construction around the site to identify any appropriate mitigative measures. The SHPD has determined that the proposed development in areas to the north of the OR&L ROW would have "no effect" on significant historic sites. An archaeological inventory survey conducted by Cultural Surveys Hawai'i, Inc. (CSH) for the Petition Area south of the OR&L ROW has been submitted to SHPD for review and is pending determination.

Scenic and Open Space Resources

Objective: Protect, preserve and where desirable, restore or improve the quality of coastal scenic and open space resources.

Discussion: The project would alter some makai views from the H-1 Freeway and surrounding residential areas. Unused agricultural lands that appear as undeveloped, open space would be replaced with urban uses. Residential buildings would be limited in height and would not obstruct makai views from the H-1 Freeway. Significant panoramic ocean views and distant vistas of downtown Honolulu would not be obstructed. The golf course and park areas would preserve existing views and provide visual relief from the surrounding urban and industrial uses.

Coastal Ecosystems

Objective: Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.

Discussion: Grading and drainage for the development would comply with the DOH Administrative Rules and City and County ordinances and standards. Storm runoff from the developed areas would be directed to the golf course to control the volume and quality of runoff discharged from the site. Drainage system improvements for the proposed developments would be designed to comply with applicable ordinances and with the City's latest drainage standards, which provide detention and retention design requirements for such proposed developments. A detailed drainage master plan would be prepared and submitted to DPP for review and approval.

Economic Uses

Objective: Provide public or private facilities and improvements important to the State's economy in suitable locations.

Discussion: The Petition Area is appropriately located in the 'Ewa region, designated by City policies as O'ahu's secondary urban center to accommodate future urban growth and development. The project would connect the resort areas of Ko Olina to the residential and commercial uses of the City of Kapolei, providing an effective transition between the two areas to enhance the region's economic viability.

Coastal Hazards

Objective: Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution.

Discussion: The project area is not in an identified flood hazard area or tsunami inundation zone. The Petitioner would coordinate the provision of warning sirens and

siren support infrastructure, and public hurricane emergency shelters with the State Department of Defense and the City and County of Honolulu O'ahu Civil Defense Agency.

Managing Development

Objective: Improve the development and review process, communication and public participation in the management of coastal resources and hazards.

Public Participation

Objective: Stimulate public awareness, education, and participation in coastal management.

Discussion: The Petitioner has made presentations on the Kapolei West project to the Makakilo/Kapolei/Honokai Hale Neighborhood Board #34 (July 28, 2004), Honokai Hale/Nanakai Gardens Community Association (June 6, 2004) and the Ko Olina Fairways Association of Apartment Owners (January 19, 2005) in an effort to keep the communities nearest to the project area informed of the project. The Petitioner would continue to participate in community meetings during the development process. In addition, pre-assessment consultation as part of the draft environmental assessment preparation and the subsequent EISPN included a wide range of government agencies, community organizations, and neighborhood groups (see Section 12.2).

According to Section 21-2.40-2, ROH, zone change applicants shall present the project to the neighborhood board of the district where the project will be located, and make a good faith effort to notify all owners of property within 300 feet of the affected property's boundaries of the applicant's proposed use of the property. The Petitioner will comply with the notification requirements of the ROH.

Beach Protection

Objective: Protect beaches for public use and recreation.

Discussion: Project drainage structures would not interfere with public recreational and waterline activities, or result in beach erosion.

Marine Resources

Objective: Implement the State's ocean resources management plan.

Discussion: This project would not affect the State's implementation of its ocean resources management plan.

3.2 CITY AND COUNTY OF HONOLULU

3.2.1 General Plan

The General Plan for the City and County of Honolulu was adopted in 1977, and has been subsequently amended (most recently in 2002). The Plan is a comprehensive statement of the long-range social, economic, environmental and design objectives for the general welfare and prosperity of the people of O‘ahu. Included in the General Plan are broad policy statements that facilitate the attainment of the Plan’s objectives. As envisioned in the General Plan, ‘Ewa is designated as O‘ahu’s Secondary Urban Center, with major residential, commercial and employment development targeted for the region.

This section analyzes the impacts of the project with respect to the relevant General Plan objectives, policies and programs. The Petition Area, and the entire Kapolei West project (including the Petition Area and the Urbanized Area), is consistent with the following General Plan objectives and policies:

I. Population, Objective C: To establish a pattern of population distribution that will allow the people of O‘ahu to live and work in harmony.

Policy 2: Encourage development within the secondary urban center at Kapolei and the ‘Ewa and Central O‘ahu urban-fringe areas to relieve developmental pressures in the remaining urban-fringe and rural areas and to meet housing needs not readily provided in the Primary Urban Center.

Policy 4: Direct growth according to Policies 1, 2 and 3 above by providing land development capacity and needed infrastructure to seek a 2025 distribution of O‘ahu’s residential population as follows:

Distribution of Residential Population	
<i>DP Area</i>	<i>% Share of 2025 Islandwide Population</i>
<i>Primary Urban Center</i>	<i>46.0</i>
<i>‘Ewa</i>	<i>13.0</i>
<i>Central O‘ahu</i>	<i>17.0</i>
<i>East Honolulu</i>	<i>5.3</i>
<i>Koolaupoko</i>	<i>11.6</i>
<i>Koolauloa</i>	<i>1.4</i>
<i>North Shore</i>	<i>1.7</i>
<i>Waianae</i>	<i>4.0</i>
<i>TOTAL</i>	<i>100.0</i>

Discussion: The Petition Area is located within the ‘Ewa region, which the General Plan identifies for future development. Urbanization of these lands would comply with City and County plans to direct population growth to ‘Ewa in an effort to relieve urban development pressures on rural and urban fringe areas. The project would provide residential, recreational and employment opportunities to support the planned growth of

the secondary urban center, including 1,180 homes in close proximity to the Ko Olina resort and the City of Kapolei.

The residential population of the 'Ewa region in 2000 was estimated at 69,000 persons, representing 7.8 percent of O'ahu's islandwide population. According to the City's *Annual Report on the Status of Land Use on O'ahu for Fiscal Year 2003*, the 2025 residential population for the 'Ewa DP area is projected to increase to approximately 164,000, representing 15.3 percent of the islandwide population. The projected population growth between 2000 and 2025 represents a 7.5 percent increase in the 'Ewa region's share of islandwide population, which is 2.3 percent more than the General Plan population distribution goal of 13 percent. Urbanization of the Petition Area would provide additional homes and amenities to accommodate the projected population growth.

II. Economic Activity, Objective A: To promote employment opportunities that will enable all the people of O'ahu to attain a decent standard of living.

Policy 1: Encourage the growth and diversification of O'ahu's economic base.

II. Economic Activity, Objective G: To bring about orderly economic growth on O'ahu.

Policy 1: Direct major economic activity and government services to the Primary Urban Center and the Secondary Urban Center at Kapolei.

Discussion: According to DPP's projections, the number of jobs in the 'Ewa DP area is projected to increase from 17,000 jobs in 1990 to over 70,000 by 2030. Development of the Petition Area would support a range of jobs, including short-term construction jobs, and professional, personal services, retail, entertainment, maintenance and engineering, and landscaping positions during the operational phase. The provision of jobs is necessary to support the economic development and urban expansion required for the 'Ewa region to become O'ahu's secondary urban center.

III. Natural Environment, Objective A: To protect and preserve the natural environment.

Policy 4: Require development projects to give due consideration to natural features such as slope, flood and erosion hazards, water-recharge areas, distinctive land forms, and existing vegetation.

Policy 7: Protect the natural environment from damaging levels of air, water and noise pollution.

Policy 8: Protect plants, birds, and other animals that are unique to the State of Hawai'i and the Island of O'ahu.

Discussion: The Petition Area is not in an identified flood hazard area or tsunami inundation zone. The project would incorporate low-impact and sustainable design strategies where appropriate, and would comply with all State and City development regulations. The project would not result in significant impacts to air or water quality, or noise level. The project would not impact threatened or endangered species. No candidate, proposed, or listed threatened or endangered species as set forth in the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1543), were found in the project area.

III. Natural Environment, Objective B: To preserve and enhance the natural monuments and scenic views of O'ahu for the benefit of both residents and visitors.

Policy 2: Protect O'ahu's scenic views, especially those seen from highly developed and heavily traveled areas.

Discussion: The Proposed Action would replace currently undeveloped or fallow land with residential and community support development. Consequently, views of these lands from the H-1 Freeway would be altered. Views of the distant shoreline, along with views of the 'Ewa Plain and downtown Honolulu would not be obstructed by the proposed residential development due to the limited building height and the natural topography. The proposed golf course and neighborhood park would preserve existing views and provide open space in contrast to the surrounding industrial and urban uses.

IV. Housing, Objective C: To provide the people of O'ahu with a choice of living environments which are reasonably close to employment, recreation, and commercial centers and which are adequately served by public utilities.

Policy 1: Encourage residential developments that offer a variety of homes to people of different income levels and to families of various sizes.

Policy 3: Encourage residential development near employment centers.

Discussion: DPP projections estimate that the inventory of housing units in the 'Ewa DP region will increase from 11,700 units in 1990 to 45,100 units in 2020 and 60,400 units in 2030, resulting in an additional 33,400 new housing units in 2020, and 48,700 additional units in 2030. The Petition Area would provide 1,180 homes in a variety of styles, densities and prices. The development would include affordable housing opportunities in compliance with City and County requirements. The Petition Area is strategically located between the City of Kapolei, the region's civic and commercial center, and the Ko Olina resort, and would provide residential and employment opportunities in close proximity to the region's major employment centers.

V. Transportation and Utilities, Objective A: To create a transportation system which will enable people and goods to move safely, efficiently, and at a reasonable cost; serve all people, including the poor, the elderly, and the physically handicapped, and offer a variety of attractive and convenient modes of travel.

Policy 1: Develop and maintain an integrated ground transportation system consisting of the following elements and their primary purposes: (a) Public transportation – for travel to and from work, and travel within Central Honolulu; (b) Roads and highways – for commercial traffic and travel in nonurban areas; (c) Bikeways – for recreational activities and trips to work, schools, shopping centers, and community facilities; and (d) Pedestrian walkways – for getting around Downtown and Waikiki, and for trips to schools, parks, and shopping centers.

Policy 5: Improve roads in existing communities to reduce congestion and eliminate unsafe conditions.

Discussion: The Kapolei West concept plan envisions a multi-purpose pedestrian walkway system linking the residential communities to the proposed commercial and community support components. Construction of pedestrian and bikeway systems would encourage non-motorized travel, thereby reducing local and regional traffic volumes. The project would include construction of new internal roadways and several improvements to existing transportation facilities to serve the additional population it would generate. The two proposed parks within the Petition Area and the proposed pedestrian greenbelt would abut/intersect with the proposed Pearl Harbor Historic Trail/Leeward Bikeway being planned by the City and State within the OR&L ROW. These are complementary uses that would enhance local and regional bicycle and pedestrian usage.

VII. Physical Development and Urban Design, Objective A: To coordinate changes in the physical environment of O'ahu to ensure that all new developments are timely, well designed, and appropriate for the areas in which they are located.

Policy 2: Coordinate the location and timing of new development with the availability of adequate water supply, sewage treatment, drainage, transportation, and public safety facilities.

Policy 4: Require new developments to provide or pay the cost of all essential community services, including roads, utilities, schools, parks, and emergency facilities that are intended to directly serve the development.

Discussion: Based on an analysis of groundwater resources prepared for the Kapolei West project, the available supply of potable water from the 'Ewa-Kunia Aquifer System should be adequate to support the Petition Area. A water master plan will be prepared and submitted to the BWS for review and approval. The project will include necessary roadway and utility system improvements, and all utility system improvements, including wastewater and drainage systems, would be planned and designed in accordance with State and City regulations. The Petitioner is committed to providing its fair proportionate

share for essential community services and facilities, including civil defense warning sirens and infrastructure, emergency hurricane shelters, parks, and a middle school site to serve the Kapolei region.

Policy 5: Provide for more compact development and intensive use of urban lands where compatible with the physical and social character of existing communities.

VII. Physical Development and Urban Design, Objective C: To develop a secondary urban center in 'Ewa with its nucleus in the Kapolei area.

Policy 2: Encourage the development of a major residential, commercial, and employment center within the secondary urban center at Kapolei.

Discussion: The Petition Area is contiguous to existing and planned urban development, including the Ko Olina resort, existing residential areas and the proposed Kapolei West project, the City of Kapolei, and the industrial enterprises surrounding Kalaeloa Barbers Point Harbor. Given its strategic location adjacent to the City of Kapolei, development of the Petition Area would serve to strengthen ongoing efforts to generate residential, commercial and economic growth within the secondary urban center at Kapolei. The proposed residential and recreational uses would complement the existing surrounding uses and provide for the continued development of the secondary urban center.

X. Culture and Recreation, Objective B: To protect O'ahu's cultural, historic, architectural, and archaeological resources.

Policy 2 Identify, and to the extent possible, preserve and restore buildings, sites, and areas of social, cultural, historic, architectural, and archaeological significance.

Discussion: SHPD has determined that the proposed development would have "no effect" on historic resources north of the OR&L ROW. An archaeological inventory survey conducted by CSH for the Petition Area south of the OR&L ROW has been submitted to SHPD for a determination of effect (currently pending review). Significant historic sites within the Petition Area, including the OR&L ROW, the Gilbert Trig Station, and five cultural sites, would be preserved and managed in accordance with SHPD requirements.

Objective D: To provide a wide range of recreational facilities and services that are readily available to all residents of O'ahu

Policy 9: Require all new developments to provide their residents with adequate recreation space.

Policy 10: Encourage the private provision of recreation and leisure-time facilities and services.

Discussion: The project would include park and recreational facilities, including a public neighborhood park to serve the both the Petition Area and residents of Kapolei West, Ko Olina and the City of Kapolei. The project would also provide private recreational centers, and multi-use pedestrian/bicycle pathways. Amenities included as part of the private recreational centers may consist of play courts, swimming pools, meeting facilities, and open space areas for active and passive recreation.

3.2.2 *'Ewa Development Plan*

The City and County of Honolulu's Development Plan program provides a relatively detailed framework for implementing General Plan objectives and policies on an area-wide basis. A total of eight DP areas have been established on O'ahu, including the *'Ewa DP* area in which the Petition Area is located. The plans for two of the areas (*'Ewa* and the Primary Urban Center) are entitled "Development Plans," as growth and supporting facilities would be directed to these areas over the next 20 years. Plans for the remaining six areas are now entitled "Sustainable Community Plans," since they are envisioned as areas where public actions would focus on supporting existing populations rather than supporting new growth.

The *'Ewa DP* was adopted in 1997 and is codified as Ordinance No. 97-49, ROH. In accordance with General Plan policies and objectives that identify *'Ewa* as O'ahu's secondary urban center, the *'Ewa DP* provides for significant economic and residential growth centered around the City of Kapolei. The *'Ewa DP*, which is currently undergoing five-year review, provides policies, principles and guidelines for land use, public facilities and infrastructure investment, and implementation. The project's conformance to the relevant major components of the *'Ewa DP* is examined in this section.

3.2.2.1 *'Ewa's Role in O'ahu's Development Pattern*

The *'Ewa DP* states that *'Ewa* plays a key role in implementing the directed growth policies of the General Plan. The *'Ewa DP* describes the *'Ewa* region as O'ahu's second city. Its role is to provide a secondary employment center, with primary employment activities at industrial and resort areas around the City of Kapolei; provide for significant residential development through *'Ewa* in a variety of housing types; promote diversified agriculture on prime agricultural lands along Kunia Road and surrounding the West Loch Naval Magazine; provide a secondary resort area at Ko Olina; help relieve urban development pressures on rural and urban fringe development plan areas; and provide a focus for directed and concentrated public and private infrastructure investment for growth.

Discussion: The proposed project supports the role and vision described in the *'Ewa DP* by developing residential and recreational uses in areas identified in the plan for future urban growth. The project would also provide new jobs in support of regional economic growth, and enhance existing Ko Olina developments.

3.2.2.2 The Vision For 'Ewa's Future

The Vision to 2020 for the 'Ewa DP area anticipates tremendous growth in support of O'ahu's secondary urban center. Significant increases in residential population and job growth are expected, with projected developments including a series of master-planned communities, a new university campus, the Ko Olina Resort and 'Ewa Marina, and the City of Kapolei's many retail and commercial establishments, and private and government offices. Population growth is projected to increase from 43,000 residents in 1990 to 125,000 in 2020, and job growth is projected to increase from 17,000 jobs in 1990 to over 64,000 in 2020. Nearly 28,000 new housing units are envisioned. Key elements of the vision and the consistency of the proposed project with those elements are discussed below.

Urban Growth Boundary

The 'Ewa DP establishes an Urban Growth Boundary (UGB) to protect 3,000 acres of prime agricultural lands from urbanization, and to preserve open space while providing adequate land for urban development requirements for the foreseeable future. Urban uses are not allowed outside the UGB. The Urban Land Use Map illustrates the vision for land uses within the UGB for the foreseeable future. Figure 5 presents the 'Ewa DP Urban Land Use Map and the project's location within the UGB.

Discussion: The Kapolei West project area (including both the Petition Area and the Urbanized Area) is within the UGB for 'Ewa. These lands are identified for future urban use.

Retention of Agricultural Lands

The 'Ewa DP identifies 3,000 acres of prime agricultural lands located along Kunia Road and within the West Loch Naval Magazine which should be preserved for agricultural use. These lands have unique advantages in weather, soil productivity, infrastructure, water availability and access to both local and export markets.

Discussion: While the Petition Area is comprised of lands formerly used for intensive plantation agriculture, it is not identified as land identified for potential agricultural use in the 'Ewa DP. Use of the Petition Area for intensive agriculture production is limited by its location surrounded by existing and planned urban development, including the City of Kapolei, Ko Olina resort and Kalaeloa Barbers Point Harbor.

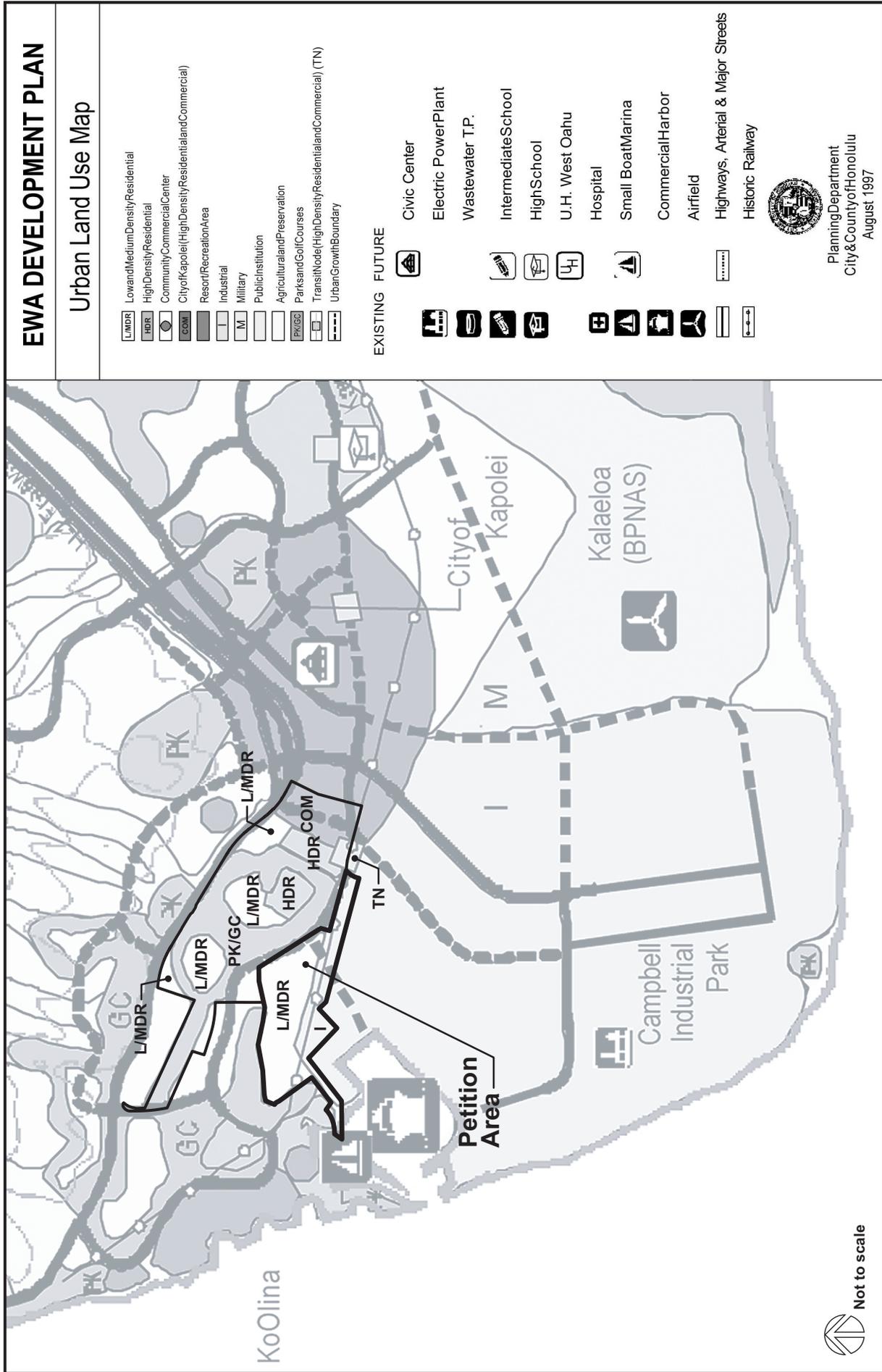


Figure 5

Ewa Development Plan Land Use Map

Kapolei West Expansion Area
O`ahu, Hawai`i

Open Space and Greenways

The 'Ewa DP promotes the development of a regional network of open space and greenways to connect and enhance existing and planned residential communities and activity centers. Major components of the open space network include mountain and agricultural areas, natural gulches and drainageways, shoreline recreational areas, regional and district parks, golf courses, and greenway corridors.

Discussion: Development of the Petition Area would include a neighborhood park, portions of an 18-hole golf course, and pedestrian pathways to link the proposed residential and recreational components. Parks and open space, including the golf course and multi-purpose pathways, account for nearly 50% of the proposed uses. Siting of the parks was an important consideration. The larger park area is at the makai terminus of the proposed pedestrian corridor that extends through Kapolei West up to the makai end of Laaloa Street in the neighboring Honokai Hale community, which should make it easier for residents of nearby communities to enjoy the park facilities. In addition to recreational value, the parks provide an important transitional use between the mauka residential areas and the makai Kalaeloa/JCIP industrial area.

Secondary Urban Center

The secondary urban center will provide a wide range of employment opportunities. Major components of the secondary urban center include major office, retail and residential clusters at the City of Kapolei; resort destinations at Ko Olina; industrial activities surrounding Kalaeloa Barbers Point Harbor and Campbell Industrial Park; civilian reuse of Barbers Point Naval Air Station; and the University of Hawai'i West O'ahu campus.

Discussion: The Petition Area is centrally located between several major components that comprise the secondary urban center. The proposed development would provide homes and recreational facilities in support of the existing and future developments planned for the secondary urban center.

Master Planned Residential Communities

The 'Ewa DP supports a network of master planned communities that provide a wide variety of housing types and accommodate the need for affordable housing. These developments should incorporate planning principles and guidelines that preserve historic and cultural values, establish open space and greenway networks, and create well-designed, livable communities.

Discussion: The proposed residential neighborhoods would include a variety of housing types, with varying styles, densities, and prices to appeal to a range of consumers. Each neighborhood would feature unique architectural designs and streetscapes. A network of pedestrian pathways would reinforce the connectivity between the neighborhoods and the surrounding existing communities.

Communities Designed to Support Non-Automotive Travel

The 'Ewa DP calls for master-planned residential communities that are designed to encourage pedestrian and bicycle use within the community and transit use for trips outside the community.

Transit nodes intended for high-density residential and commercial development are identified on the Public Facilities Map.

Discussion: The proposed residential communities would incorporate measures in the design of their internal circulation systems that support pedestrian, bicycle and transit use. The Kapolei West project master plan includes a site for a transit node adjacent to the City of Kapolei.

Conservation of Natural Resources

Natural resources such as potable water, coastal water quality, and wetlands and other wildlife habitat will be conserved through the development of a dual water distribution system that dedicates potable water for clean water uses and non-potable water for irrigation and industrial use; implementation of a regional drainage and wastewater treatment system that minimizes non-point source pollution; and protection of endangered species habitat.

Discussion: The project would use non-potable water for golf course and landscaping irrigation. Runoff from the proposed development would be directed towards the golf course to minimize non-point source pollution. No threatened or endangered species or valuable habitats would be impacted by the Proposed Action.

Preservation and Enhancement of Historic and Cultural Resources

The 'Ewa DP identifies significant historic and cultural resources that should be preserved and enhanced, including historic features from the plantation era, Native Hawaiian cultural and archaeological sites, visual landmarks and significant vistas.

Discussion: Significant historic and cultural resources within the Petition Area include the OR&L ROW, the Gilbert Trig Station, two existing cultural preserves, and several cultural sites that were identified during the archaeological inventory survey conducted for the proposed development. Significant sites would be preserved and/or managed in accordance with SHPD consultation. The project would result in a change to the visual environment; however, the proposed residential development would not obstruct any significant vistas or viewplanes identified in the 'Ewa DP.

Phased Development

The 'Ewa DP identifies development priorities characterized by:

- Increased land supply
- Moderate growth of commercial centers in urban fringe areas;
- Phasing of residential and commercial development;
- Adequate facilities requirements; and
- Coordinated public-private infrastructure and project development.

Discussion: The 'Ewa DP Phasing Map identifies the phased development of the Petition Area to occur in three separate increments: 1997-2005 (portion south of OR&L ROW), 2006-2015 (western portion north of OR&L ROW) and 2016 and beyond (eastern

portion north of OR&L ROW). These phasing assumptions need to be adjusted due the significant decrease in residential density associated with the Kapolei West Area from when the DP was prepared (3,500 units down to 2,400 units). Development of the Petition Area is expected to begin in 2008 once land use approvals are granted. Assuming an absorption rate of 112 units per year, development of the 1,180 homes planned for the Petition Area would be completed in 2020. As such, the Proposed Action is largely consistent with the phasing schedule described in the *'Ewa DP*.

3.2.2.3 Land Use Policies, Principles, and Guidelines

The vision for the development of 'Ewa is intended to be implemented through the application of the land use policies, principles and guidelines articulated in the *'Ewa DP*. This section describes the land use policies and the proposed project's consistency with those policies.

Open Space Preservation and Development

According to the *'Ewa DP*, open space will be used to:

- Provide long-range protection for diversified agriculture on lands outside the Urban Growth Boundary;
- Protect scenic views and provide recreation;
- Define the boundaries of communities;
- Provide a fire safety buffer where developed areas border wildlands; and
- Create linkages between communities through a network of greenways along transportation and utility corridors and drainageways.

Discussion: The proposed project would not impact significant views identified in the *'Ewa DP*. The proposed golf course would provide open space to define the boundaries of the residential communities and contrast the surrounding urban and industrial activities. The project would include a neighborhood park, portions of an 18-hole golf course, and multi-purpose pathways to link the proposed residential and recreational components. The proposed neighborhood park and golf course account for nearly 50 percent (80 acres) of the approximate 174 acres included in the Petition Area. In addition, the proposed residential communities would include private recreational facilities and open space areas.

The Petition Area is identified as an urban area on the 'Ewa DP Open Space Map. The historic railway/bikeway corridor, which will be incorporated into the project, is also identified. A paved bikeway is being proposed by the State DOT within the OR&L ROW. The two proposed parks within the Petition Area and the proposed pedestrian greenbelt would abut/intersect with the proposed bikeway. These are complementary uses that would enhance local and regional public access and usage of the bikeway. The project proposes a greater share of open space than is identified on the Open Space Map due to the proposed development of the neighborhood park and the extension of the golf course south of the OR&L ROW.

Regional Parks and Recreation Complexes

General policies for regional parks and recreation complexes include development of facilities at Kalaeloa Regional Park and Recreation Complex, Kapolei Regional Park, Pu'u Palailai Park, various beach and shoreline parks, and public and private golf courses. Islandwide and regional parks and golf courses are shown on the Open Space Map and the Public Facilities Map.

Discussion: According to the Open Space Map and the Public Facilities Map, golf course use is limited to the area north of the OR&L ROW. In contrast, the project proposes to extend the golf course and neighborhood park south of the OR&L ROW, using the open space as a buffer between future residential developments. In accordance with the 'Ewa DP guidelines, the golf course would be designed to function as a drainage retention basin and provide view amenities for adjacent urban areas.

Community-Based Parks

General policies for community-based parks and recreation areas include:

- Provision of adequate parks to meet residents' recreational needs;
- Provision of a minimum of two acres of open space and recreation per 1,000 residents by new residential developments; and
- Protection and expansion of access to mountain, shoreline, and ocean recreational resources, and mountain and gulch trails.

Discussion: The project would provide public park and private recreational facilities, including a public neighborhood park, multi-purpose pathways, and open space areas. The neighborhood park is intended to provide recreational opportunities for residents of the Petition Area, as well as residents of existing nearby communities. The 14.3-acre neighborhood park and 2.8-acre mini park planned for the Petition Area, as well as the 23.8 acres planned for the entire Kapolei West project (both Petition Area and Urbanized Area), exceed the City and County Park Dedication Ordinance requirements for this type of development.

Historic and Cultural Resources

General policies for historic and cultural resources include:

- Protection of existing visual landmarks and creation of newly cultural appropriate landmarks;
- Preservation of significant historic features from the plantation era and earlier periods; and
- Retaining significant vistas wherever possible.

Specific guidelines for OR&L ROW address the method of preservation, adaptive reuse and adjacent uses, and public access. Guidelines that relate to Kapolei West project include:

- A parallel paved bikeway along the length of the rail route, either within or adjacent to the ROW;

- A minimum 50-foot setback for new development on either side of the OR&L ROW, unless directly related to the operation of the railroad, or is consistent with the use of the ROW for open space and bikeway purposes in stretches where railroad operations is not feasible, or is otherwise specified in existing land use approvals.
- Landscaping along the adjacent bikeway, with occasional rest stops and seating and other amenities;

Discussion: The *'Ewa DP* identifies significant historic and cultural resources (historic features, Native Hawaiian cultural and archaeological sites, and significant views and vistas) that should be protected and preserved. Significant historic and cultural resources identified in the *'Ewa DP* that are located within the Petition Area include the OR&L Historic Railway; dispersed archaeological sites associated with the Oneula Archaeological District; and distant vistas of the shoreline from the H-1 Freeway above the *'Ewa* plain. SHPD consultation is required to determine the appropriate treatment and management of significant historic and archaeological sites within the project area. The OR&L ROW is recognized as an important cultural feature, and proposed developments adjacent to the OR&L ROW would be designed and constructed to conform to the guidelines of the *'Ewa DP*. A 10-foot wide asphalt-paved bikeway with two-foot graded shoulders is being proposed by the State DOT within the OR&L ROW. Design of the "Leeward Bikeway" may begin within a year and construction may begin in 2007. The two proposed parks within the Petition Area and the proposed pedestrian greenbelt would abut/intersect with the proposed bikeway. These are complementary uses that will enhance local and regional public access and usage of the bikeway.

City of Kapolei

General polices for the City of Kapolei call for:

- Development of an urban core with six distinct districts that accommodate business, commercial, residential, cultural and public uses; and
- Integration of key open space elements to link the districts and unify the city

Discussion: The Petition Area is adjacent to the eastern boundary of the City of Kapolei. Its development would enhance the City's viability by providing homes in close proximity to jobs.

Residential Development

The *'Ewa DP* provides general policies for *'Ewa* Villages, *'Ewa* Marina and existing and planned residential communities. General policies for existing and planned residential communities include:

- Development of low density residential in the range of 5-12 units/acre, medium density residential in the range of 10-30 units/acre; and high density residential in the range of 25-80 units/acre;
- Development of higher density residential use along a major rapid transit corridor;
- Use of street patterns, landscape and natural features and building form and siting to define neighborhoods;

- Provision of a compatible mix of building forms;
- Development of transit-oriented streets;
- Design that encourages pedestrian and bicycle travel;
- Use of physical and visual connections between communities to integrate linear corridors; and
- Provision of land for community facilities.

Discussion: The Petition Area proposes a mixture of low and medium density residential uses with varying building forms and architectural styles to distinguish the neighborhoods. Residential products would vary, including single-family homes and medium density apartment homes with densities ranging from 10 to 15 units per acre. Streetscapes would be designed to encourage pedestrian and bicycle travel. Each residential development would include private recreational facilities and open space areas to provide opportunities for residents to meet and interact.

Non-Residential Development

The *'Ewa DP* provides general policies for non-residential development, including planned commercial retail centers, Ko Olina Resort, industrial centers, Kalaeloa Barbers Point Naval Air Station, West Loch and the University of Hawai'i West O'ahu.

Discussion: The Petition Area is centrally located within close proximity to areas planned for non-residential development, including the Ko Olina Resort, the industrial centers bordering Kalaeloa Barbers Point Harbor, and the commercial retail center of the City of Kapolei. Development of the Petition Area would complement the current and planned urban and economic development in these areas.

Industrial Centers

The *'Ewa DP* identifies the following industrial centers and industrial uses in 'Ewa: the Barbers Point Industrial Area; the Honouliuli Industrial Area; the Hawaiian Electric Company generating plant at Kahe Point; and along the western edge of the 'Ewa Marina. General policies state that, "As an alternative to industrial uses, a commercial, cultural or recreational entertainment attraction may be permitted in the area fronting the OR&L Historic Railway, provided that the use is designed to enhance the viability of the operation of the railway for historic theme rides, strengthen the linkage between the Ko Olina Resort and the City of Kapolei and proceed with a strong community based planning process" (pgs. 3-73 and 74).

Discussion: The Petition Area is situated to the north of the industrial activities centered around Kalaeloa Barbers Point Harbor. According to the Urban Land Use Plan (see Figure 5), the southern and eastern sections of the Petition Area (including a narrow section along the northern edge of the OR&L ROW) are designated for Industrial use. Other uses in the vicinity include low and medium density residential. The proposed golf course and park use, which are planned to border the OR&L ROW and function as a buffer between the industrial and planned residential uses, conflict with the Industrial designation of the Urban Land Use Map. However, in conformance with policy

guidance, the proposed recreational uses would “enhance the viability of the operation of the railway for historic theme rides and strengthen the linkage between the Ko Olina Resort and the City of Kapolei.” Based on the conceptual, schematic nature of the Urban Land Use Plan, the proposed land uses may be considered generally consistent with the *‘Ewa DP*.

3.2.2.4 Public Facilities and Infrastructure Policies and Principles

The *‘Ewa DP* includes policies and principles to guide the planning and construction of proposed public and private public facility projects and infrastructure systems. Information on timing and phasing of both planned and proposed infrastructure and public facility projects is also provided.

The *‘Ewa DP* includes general policies and planning principles for the following infrastructure systems and public facilities. The Public Facilities Conceptual Map illustrates the major infrastructure needed to implement the vision for *‘Ewa*.

Transportation Systems

General policies for transportation systems in *‘Ewa* include:

- Inclusion of conditions as part of zone change approvals, when needed, to assure adequacy of transportation capacity based on the timing of any necessary improvements;
- Provision of adequate access between residences, jobs, shopping and recreation centers in *‘Ewa* and in adjacent areas;
- Provision of adequate capacity for major peak-hour commuting to work in the Primary Urban Center;
- Improved linkages between various parts of the region;
- Reduction in automobile use through provision of circulation systems with separated pedestrian and bicycle paths and convenient routes for public transit service; street layouts that facilitate bus routes and encourage pedestrian travel; facilities and amenities supporting pedestrian, bicycle and public transit use; a dedicated rapid transit right-of-way adjacent to the Kapolei Park; and support for high-density and high-traffic land uses along the rapid-transit corridor.

Discussion: Vehicular access to the Petition Area would be via a new segment of Kapolei Parkway connecting Aliinui Drive to Kalaeloa Boulevard. A new roadway connection to Farrington Highway constructed as part of the larger Kapolei West project (i.e., Urbanized Area) would provide limited highway access for residents. The development of an integrated circulation system that supports alternative modes of transportation is an essential component of the Kapolei West project. Major roadways and internal streets would be designed to accommodate multi-purpose pathways with convenient linkages to public transit routes, thereby encouraging bicycle and pedestrian travel to reduce the number of automobiles on local roadways. The project would provide the necessary roadway improvements to accommodate the traffic impacts of the proposed development as determined by State and City transportation agencies.

Water Allocation and System Development

The 'Ewa DP recommends the following general policies be followed in developing potable and non-potable water systems to meet the projected demand.

- Inclusion of conditions as part of zone change approvals, when needed, to assure adequacy of water capacity based on timing of any necessary improvements;
- Dual transmission lines to allow use of potable and non potable water;
- Development and allocation of potable water sources for urban use in coordination with the Board of Water Supply as authorized the State Commission on Water Resource Management;
- Development of an adequate supply of non potable water for irrigation and other suitable uses;
- Provision of sufficient amount of water for diversified agricultural needs and recharge of the Pearl Harbor aquifer;
- Reclamation and distribution of wastewater effluent, if demand and quality permit; and
- Integration of water resource management.

Discussion: The project would use a dual transmission water system, with non-potable water for golf course and landscaping irrigation supplied by the Honouliuli Wastewater Treatment Plant and/or non potable wells. Based on the sustainable yield of the 'Ewa-Kunia Aquifer System and the present unallocated and unused supply, the available supply of potable water should be sufficient to support the project. A water master plan would be prepared and submitted to the BWS for review and approval. Water use allocations would only be granted when construction plans are approved or building permits are obtained.

Wastewater Treatment

The 'Ewa DP identifies the following general policies for wastewater treatment:

- Connection to a regional or municipal sewer service system of all wastewater produced by new developments;
- Treatment and use of effluent as a source of non-potable water for irrigation and other uses where feasible; and
- Location of new wastewater treatment plans generally in areas planned for industrial use on the Urban Land Use Map.

Discussion: Wastewater from the project would be conveyed to the Ko Olina interceptor sewer for treatment at the Honouliuli Wastewater Treatment Plant. Based on the reduced number of homes and the lower density planned for the Kapolei West project, the capacity of the Ko Olina interceptor sewer should be adequate to accommodate the proposed project. Wastewater system improvements would be completed in accordance with the City's wastewater design standards.

Electrical Power Development

The 'Ewa DP identifies the following general policies for electrical power development:

- Basing the analysis of major system improvements on islandwide studies;
- Consideration of placing new transmission lines underground; and
- Location of new electrical power plants in areas planned for industrial use on the Urban Land Use Map.

Discussion: The project would result in an increased demand for electrical power. Power is anticipated to be provided by HECO via the existing substation at Kapolei and the new Ko Olina substation. The project does not involve the construction of new electrical power plants or overhead new transmission lines. Electrical power requirements and distribution system improvements would be coordinated with HECO.

Solid Waste Handling and Disposal

The 'Ewa DP identifies the following general policies for solid waste handling and disposal:

- Reserving the East Kapolei site identified in the City's Solid Waste Integrated Management Plan for planned residential use; and
- Basing the analysis of siting and/or expansion of sanitary landfills on islandwide studies.

Discussion: The project would not involve any significant modifications to major solid waste handling or disposal facilities, or require siting or expansion of sanitary landfills.

Drainage Systems

The 'Ewa DP identifies the following general policies for drainage systems:

- Emphasis on control and minimization of non-point source pollution and the retention and/or detention of storm water in drainage system design;
- Consideration of stormwater as a potential irregular source of water for aquifer recharge;
- Use of natural and man-made vegetated drainageways and retention basins to promote water recharge, control of non-point source pollutants and provide passive recreation.

Relevant planning principles which guide the development of 'Ewa drainage systems include:

- Use of open space, landscaped areas, parks, golf courses to detain or infiltrate stormwater flows, where feasible;
- Integration of drainage system improvements with the regional open space network;
- Preservation of natural gulches for use as drainageways.

Discussion: Portions of the golf course would serve as a drainage way and detention area to infiltrate stormwater runoff generated by the developed areas, thereby minimizing the volume and enhancing the quality of runoff discharged from the site. Drainage system improvements would be designed in accordance with the City's flood control and drainage standards.

School Facilities

The 'Ewa DP identifies the following general policies for school facilities:

- Review of the adequacy of school facilities by the DOE prior to approval of new residential developments;
- Payment of fair share costs by developers to ensure provision of adequate school facilities for new residents.

Planning principles include:

- Design of school facilities to facilitate community use during non-school hours;
- Co-location of elementary and intermediate schools with neighborhood or community parks;
- Coordination of development and use of athletic facilities between the DOE and the City's Department of Parks and Recreation to maximize use reduce duplication of function; and
- City support of DOE's requests for developer fair share contributions.

Discussion: The Kapolei West concept plan includes a middle school adjacent to the proposed Kapolei Parkway. The proposed middle school is located adjacent to golf course and residential areas; the proposed location is not consistent with 'Ewa DP planning principles that call for co-location with a neighborhood or community park. The middle school, which is intended to serve both residents of the project and the Kapolei region, has been sited to provide convenient access for regional traffic. The Petitioner has initiated discussions with the DOE, and is committed to contributing its proportionate fair-share to the provision of a middle school to serve the Kapolei region.

Public Safety Facilities

Adequate staffing and facilities are needed to ensure public safety. New development should be approved only if staffing and facilities will be adequate to provide fire and police protection when development is completed.

Discussion: The project would increase demand on existing public safety facilities; however, the need for additional staffing and facilities to serve the region is a consequence of the regional population growth, and not the development of the Petition Area. Design and construction of the water system would meet the requirements of the BWS, and fire access roads would be designed and constructed according to the City and County of Honolulu's Fire Department requirements. All construction plans would be submitted to the appropriate agencies for review and approval. The Petitioner is committed to providing its fair proportionate share for essential public safety facilities, including civil defense warning sirens and infrastructure, and emergency hurricane shelters, to serve the Kapolei region.

3.2.3 Land Use Ordinance

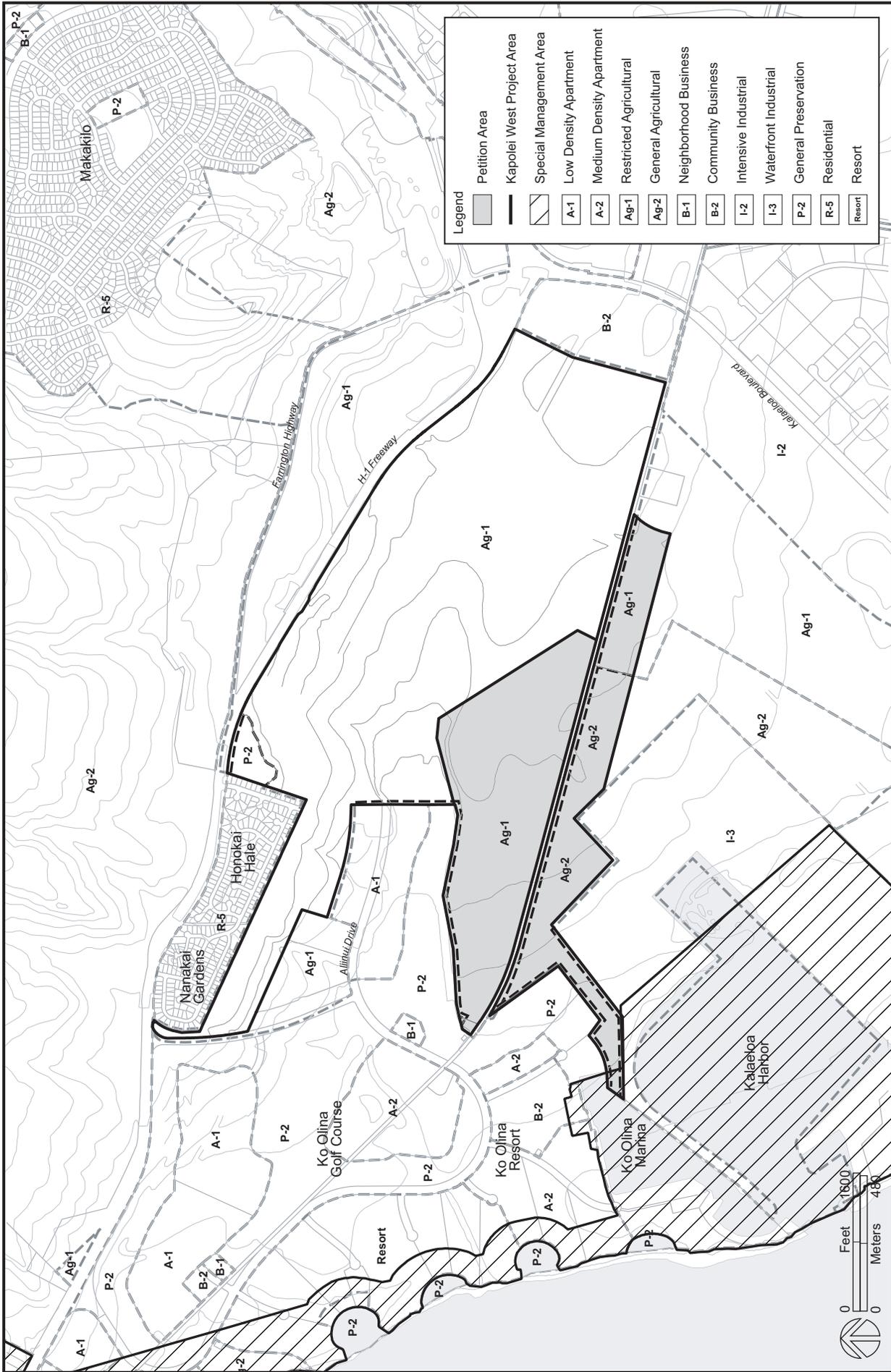
The Land Use Ordinance (LUO) and accompanying maps define the allowable uses of land within the City and County of Honolulu. The LUO describes the various zoning districts throughout the City and County, the uses allowed within each zoning district, and the applicable development standards for each district. Figure 6 presents the current zoning for the Petition Area and the entire Kapolei West project. The Petition Area north of the OR&L ROW is currently zoned AG-1, Restricted Agricultural. The Petition Area south of the OR&L ROW is zoned AG-1, Restricted Agricultural, and AG-2, General Agricultural.

Implementation of the Kapolei West project (including both the Petition Area and the Urbanized Area) would require rezoning of the development area to be consistent with the proposed recreational, commercial, and residential land uses. Proposed zoning may consist of R-5, Residential; A-1, Low Density Apartment; A-2, Medium-Density Apartment; B-1, Neighborhood Business; BMX-3, Community Business Mixed Use; and P-2, General Preservation. The desired zoning designations would be identified when the zone change application is submitted.

Under the *‘Ewa DP*, projects involving “significant” zone changes for projects of 25 acres or more will be required to submit an environmental assessment to the DPP. The *‘Ewa DP* states that “zone change applications for a project already assessed under Chapter 343, HRS... will not require a new environmental assessment so long as the Director... determines that the desired zoning and land use generally conform to that described in the existing environmental assessment/environmental impact statement.” The Urbanized Area was the subject of a City and County of Honolulu Development Plan Land Use Amendment Application and Chapter 343, HRS Environmental Assessment (*Ko Olina Phase II Environmental Assessment*, Wilson Okamoto, 1991). Similarities between the Ko Olina Phase II project and the current Kapolei West project include golf course, commercial, residential and recreational uses; however, Ko Olina Phase II provided an additional 1,130 residential units at a higher density. The DPP has determined that an environmental assessment would not be required to support the rezoning of the Urbanized Area, as long as the proposed zoning and land use generally conform to the uses described in the *Ko Olina Phase II Environmental Assessment* (Wilson Okamoto, 1991). Given that the Kapolei West project proposes to combine the Petition Area with the Urbanized Area, this Draft EIS is intended to satisfy the requirements for the ensuing zone change application.

3.2.4 Special Management Area

The City and County of Honolulu, similar to other counties in Hawai‘i, has adopted: (1) boundaries which identify the Special Management Area (SMA); and (2) rules and regulations which are consistent with Chapter 205A, HRS that control development within the SMA. The purpose of the SMA is to preserve, protect, and where possible, restore the natural resources of the coastal zone of Hawai‘i. Proposed development within the SMA is subject to review in order to ensure adequate access to recreation areas and minimal adverse impacts to water resources, and scenic and recreational amenities. Any development within the SMA with a



City and County of Honolulu Zoning and Special Management Area

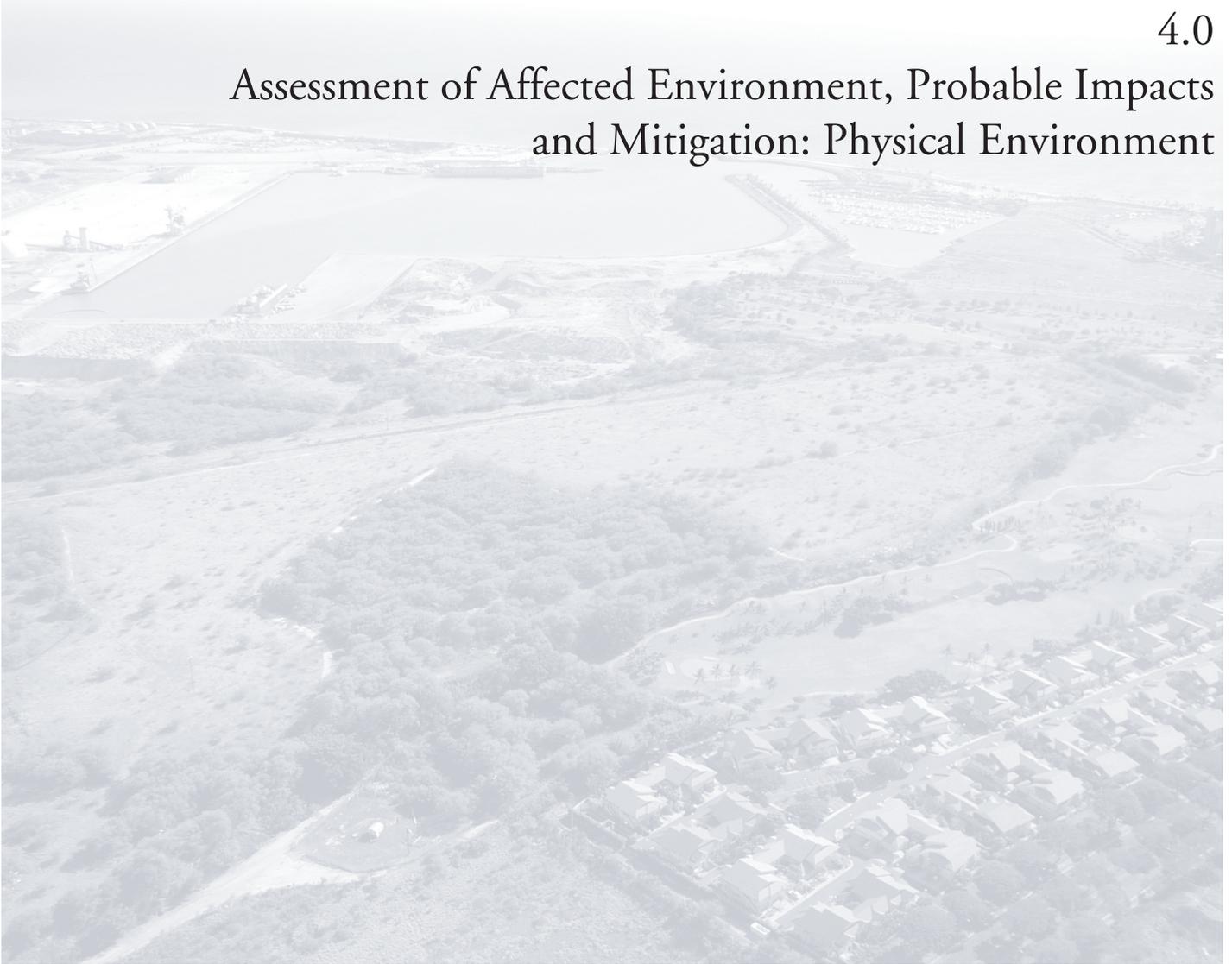
Kapolei West Expansion Area
 O`ahu, Hawai`i

Figure 6

valuation of \$125,000 or which may have a substantial adverse environmental or ecological effect must obtain approval of a Major Special Management Area Use Permit (SMP) from the Honolulu City Council before other permit sand project construction may begin (Section 205A-22, HRS). The SMP for any uses not permitted by zoning must follow the rezoning needed. The southernmost tip of the Petition Area abutting the Ko Olina Marina (approximately 1.1 acres) lies within the SMA (see Figure 6). The area is planned for residential use, and will require review in accordance with Chapter 25, ROH, the City and County of Honolulu's Special Management Area provisions.

4.0

Assessment of Affected Environment, Probable Impacts
and Mitigation: Physical Environment



4.0 ASSESSMENT OF AFFECTED ENVIRONMENT, PROBABLE IMPACTS AND MITIGATION: PHYSICAL ENVIRONMENT

4.1 CLIMATE

The 'Ewa region of O'ahu where the project is located is one of the sunniest areas on the island. It is semi-arid, with a relatively warm and dry climate, and an average daily insolation of 500 calories per square centimeter. Rainfall is light, with an average annual rainfall of approximately 21 inches. Most of the total annual rainfall occurs during the winter rainy season from October to April, while the summer months are hot and dry. Average low temperatures range from about 61 degrees Fahrenheit in the winter to about 70 degrees in the summer. Average high temperature ranges from approximately 80 degrees in the winter to 88 degrees in the summer. The prevailing surface winds are tradewinds blowing from a northeasterly direction, with occasional southerly winds. Low velocity surface winds of less than 10 miles per hour occur frequently. The tradewinds tend to break down during the fall, giving way to lighter, more variable wind conditions through the winter and into the early spring. Storms are infrequent, occurring from the south in the winter months.

The proposed project would not impact climatic conditions. No mitigation is necessary.

4.2 TOPOGRAPHY AND SLOPES

4.2.1 Affected Environment

The entire Kapolei West project area is located along the upper edge of the 'Ewa Plain, at the foot of the Waianae Mountain Range. Major geological features of the 'Ewa region include the Waianae Mountain Range, cinder cones, and the 'Ewa Plain. Overlying flows of the Waianae volcanic series, the 'Ewa Plain is an emerged coral-algae calcareous reef covered by alluvium deposits. At the base of the Waianae Range, five cinder cones form the peaks that define the relatively flat topography of the 'Ewa plain. Two of the cinder cones, Pu'u Palailai and Pu'u Kapolei, are located to the east of the project area.

The topography of the Petition Area is relatively flat to gently sloping. Slopes generally range from 1 to 5 percent, with the steepest slope of approximately 25 percent located along a modest ridgeline that forms the northernmost boundary of the Petition Area. Ground elevation within the Petition Area ranges from 15 feet above mean sea level (msl) at the southernmost tip to 65 feet above msl at the northernmost boundary.

4.2.2 Probable Impacts

Given the relatively minor slope of the Petition Area (generally less than five percent), the project would not require extensive alteration of the existing landforms and the existing topographic profile would be largely maintained. Minimal site preparation and grading would occur to create level building surfaces. Grading would include both excavation and

embankment. Development units within the project site would be graded higher than the golf course to provide positive drainage and freeboard.

Mitigation consists of implementing construction period erosion control best management practices (BMPs) discussed in Section 4.3 below.

4.3 SOILS

4.3.1 Affected Environment

According to the U.S. Department of Agriculture Soil Conservation Service (now known as the Natural Resources Conservation Service [NRCS]), soil series within the Kapolei West project area consist of coral outcrop (CR), 'Ewa silty clay loams (EmA and EmB), Honouliuli clay (HxA), Keaau stony clay (KmaB), Lualualei clay (LuB), Lualualei extremely stony clay (LPE), Lualualei stony clays (LvA and LvB), Mamala stony silty clay loam (MnC), stony steep land (rSY) and Waialua stony silty clay (WIB). Figure 7 presents the soil series found within the project site.

Approximately 78% of the Petition Area is classified as coral outcrop (CR), followed by approximately 14% Mamala stony silty clay loam (MnC), and 8% 'Ewa silty clay loams (EmA and EmB). The soil types found within the Petition Area are described below.

CR: Coral Outcrop. Coral outcrop consists of coral or cemented calcareous sand. Between 80 to 90% of this soil type is comprised of coral outcrop, and the remainder consists of a thin layer of friable, red soil material similar to that of the Mamala series found within the cracks, crevices, and depressions of the coral outcrop. This soil type is suitable for quarries and urban development, and unsuitable for cultivating crops.

EmA: 'Ewa silty clay loam, moderately shallow, 0 to 2 percent slopes. The 'Ewa series consists of well-drained soils in basins and on alluvial fans. The surface layer is dark reddish-brown silty clay loam and about 18 inches thick. The subsoil, about 20 to 50 inches thick, is dark reddish-brown and dark-red silty clay loam that has a subangular blocky structure. The substructure is coral limestone, sand, or gravelly alluvium. The soil is neutral in the surface layer and subsoil. Runoff is very slow, and the erosion hazard is no more than slight.

EmB: 'Ewa silty clay loam, moderately shallow, 2 to 6 percent slopes. This soil is identical to EmA, except that the slope is somewhat steeper.

MnC: Mamala stony silty clay loam, 0 to 12 percent slopes. This series consists of shallow, well-drained soils and is found along the coastal plains. These soils formed in alluvium deposited over coral limestone and consolidated calcareous sand. Coral rock fragments are common in the surface layer, and the soil is neutral to mildly alkaline. Permeability is moderate, runoff is very slow to medium, and the erosion hazard is slight to moderate. The available water capacity is about 2.2 inches per foot in the surface layer and 1.9 inches per foot in the subsoil. Roots are affected by the coral limestone. Consolidated sand and the stones hinder, but do not prevent, cultivation.

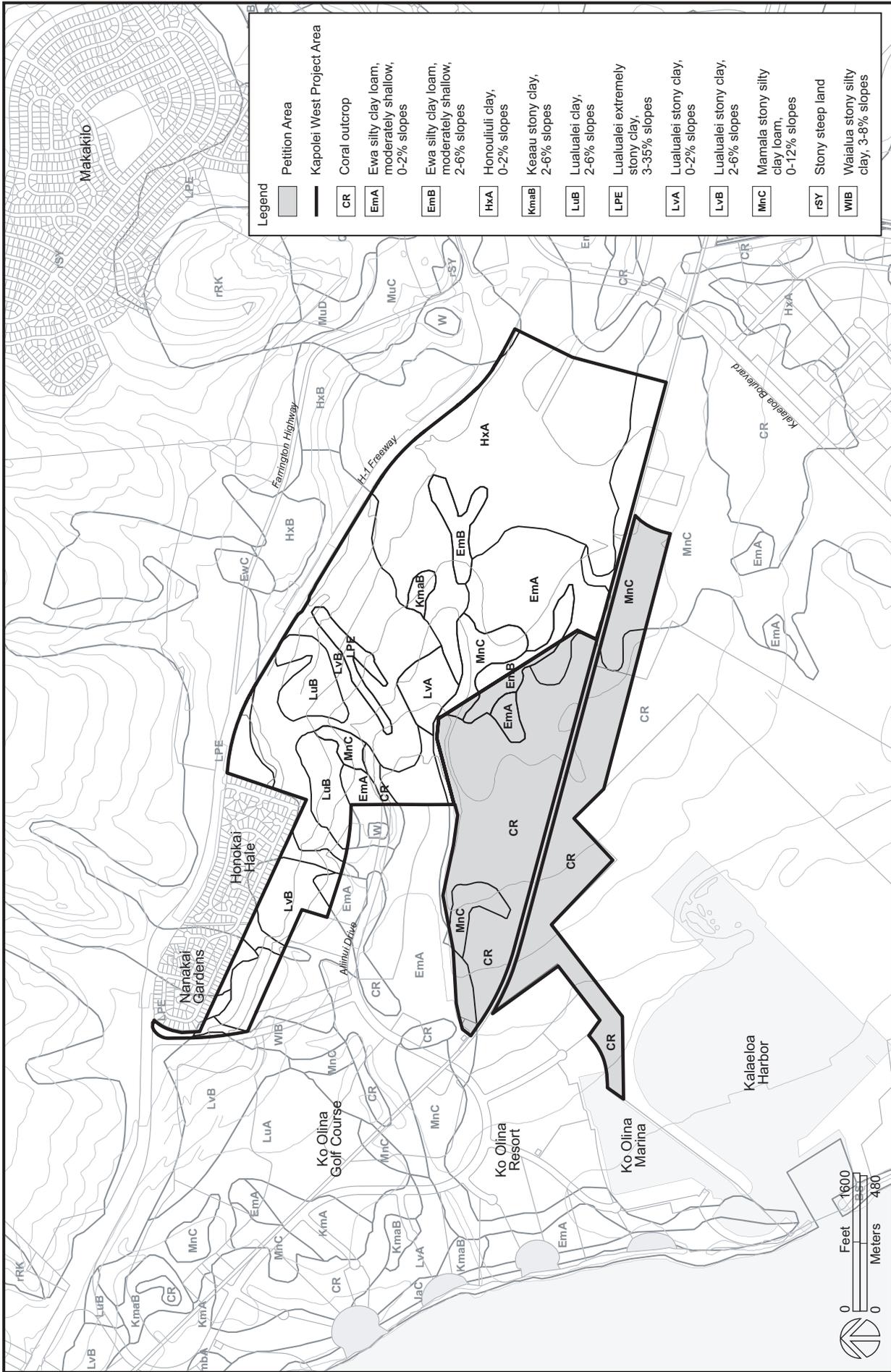


Figure 7--

Soil Conservation Service Soils

Kapolei West Expansion Area
O`ahu, Hawaii

4.3.2 Probable Impacts

The construction of the proposed project would involve land-disturbing activities that result in soil erosion. These land disturbing activities include removal of existing vegetation (clearing and grubbing) and leveling, removing, and replacing soil.

Grading within the Petition Area would include both excavation and embankment. Similar to other developments with the 'Ewa Plains, the development would likely generate fill material through the excavation of the golf course/drainageway. Development units within the project site would be graded higher than the golf course to provide positive drainage and freeboard.

An effort to balance the earthwork quantities of cut and fill is expected to minimize the cost of purchasing offsite borrow material and disposing excess excavated material at an off site location. Grading operations would be in conformance with the applicable ordinances of the City and County of Honolulu.

Soil Erosion Potential. The NRCS utilizes the Universal Soil Loss Equation (USLE) to estimate long term average annual soil losses from sheet and rill erosion. The equation is used to estimate erosion on forestland, farm fields, construction/development sites, and other areas. Soil losses can be estimated for present conditions or for a future condition. The soil loss equation considers rainfall, soil erodibility, ground cover and management, ground slope and length of overland flow. The existing soil erosion potential for the overall Kapolei West project and the Petition Area is estimated to be 500 tons per year and 150 tons per year, respectively using the USLE. After development, the soil erosion potential from the area is estimated to be 150 tons per year and 50 tons per year, respectively.

Based on the USLE, soil erosion potential at the project site should decrease after the development of the proposed Kapolei West project. This decrease in soil erosion is attributed to the reduction of erodible surfaces (increase in buildings and pavement); reduction of length and slope of overland flow due to site grading and construction of a storm drain system; and increase in landscaped area (reduction of bare ground).

4.3.3 Mitigation

Implementing erosion control BMPs would reduce the short-term erosion impacts during construction. These BMPs may include: use of temporary sprinklers in non-active construction areas; stationing water trucks onsite during construction to provide immediate sprinkling in active construction zones; use of temporary berms and cut-off ditches; use of temporary silt fencing and screens; thorough watering of graded areas after construction activity has ceased for the day and on weekends, and; sodding or planting slopes immediately after grading work has been completed.

Additional erosion control BMPs would lessen construction impacts even further. These include:

- Minimize time of construction.
- Retain existing ground cover until the latest date before construction.
- Early construction of drainage control features.
- Use of temporary area sprinklers in nonactive construction areas when ground cover is removed.
- Station water truck on site during construction period to provide for immediate sprinkling, as needed, in active construction zones (weekends and holidays included).
- Use temporary berms and cut-off ditches, where needed, for control of erosion.
- Thorough watering of graded areas after construction activity has ceased for the day and on weekends.
- Sod or plant all cut and fill slopes immediately after grading work has been completed.
- Soddings and plantings shall be established on disturbed areas which are at final grade or will not be worked for longer than 14 days.

More detailed soils analyses would be performed as planning of the project proceeds. Additional BMPs, if required, would be recommended by the project's soils engineers as building types and locations are further defined. Measures may also include removal of unsuitable soils under foundations and/or special foundation designs.

Grading and Erosion Control Plans would be prepared in compliance with Chapter 14, ROH. Further, the contractor would be required to perform all grading and stockpiling operations in conformance with the applicable provisions of Chapter 54 (Water Quality Standards) and Chapter 55 (Water Pollution Control) of Title 11 Administrative Rules of the DOH. In accordance with the Commission's conditions placed on the reclassification of the Ko Olina Phase II project from the Agricultural District to the Urban District (see Appendix A), the developer would implement soil erosion and dust control measures during all phases of the development process in compliance with the applicable rules and regulations of the DOH and the City and County of Honolulu. In addition, the project must obtain a NPDES permit from the DOH.

4.4 AGRICULTURAL CAPABILITY

An agricultural impact study for the proposed project was prepared by Decision Analysts Hawai'i, Inc. The findings of the study are summarized below. The full report is included as Appendix B.

4.4.1 Affected Environment

Existing Agricultural Operations

Currently, none of the land in the Petition Area is in agricultural production.

Past Agricultural Uses

Historically, part of the Petition Area had been cultivated in sugarcane, first by the 'Ewa Plantation Company and then by the O'ahu Sugar Company (OSCO). Because of the generally

unsuitable soils, less than 40% of the 174-acre Petition Area was used to grow sugarcane. In the late 1960s, some of the land unsuitable for crop farming was used for livestock operations. Sugarcane cultivation on the Petition Area ceased in 1995, when OSCO closed its operations. After the closure of OSCO, some of the former sugarcane land was used for limited horse grazing.

Agricultural Conditions

Three classification systems are commonly used to rate Hawai'i soils: (1) Land Capability Grouping; (2) Agricultural Lands of Importance to the State of Hawai'i, and (3) Overall Productivity Rating. Each classification is described in the following section.

Land Capability Grouping (NRCS Rating). The 1972 Land Capability Grouping by the U.S. Department of Agriculture, the NRCS rates soils according to eight levels, ranging from the highest classification level of I, to the lowest level of VIII. The NRCS soil types are described in Section 4.3 and shown in Figure 7. As shown in Table 6, about 14 acres (8%) of the Petition Area have soils that are rated IIs. Class II soils have moderate limitations that reduce the choice of plants or require moderate conservation practices. The subclassification "s" indicates that the limitation is due to stoniness, unfavorable texture, shallowness, or low water-holding capacity. About 24 acres (14%) of the Petition Area have soils rated IIIs. Class III soils have severe limitations that reduce the choice of plants, require special conservation practices, or both. Most of the soils (about 137 acres or 78%) in the Petition Area are rated VIIIs. Class VIII soils have severe limitations that preclude their use for commercial plant production.

Table 6
Petition Area Soil Types and NRCS Ratings

Soil Types	Acres	% of Petition Area	NRSC Ratings
Higher-Quality Soils			
EmA	10.8	6%	IIs
EmB	3.0	2%	Ile
Moderate-Quality Soil			
MnC	23.7	14%	IIIs
Low-Quality Outcrop			
CR	136.6	78%	VII
Total	174.0	100%	

Agricultural Lands of Importance to the State of Hawai'i (ALISH). ALISH ratings were developed in 1977 by the NRCS, the University of Hawai'i (UH) College of Tropical Agriculture and Human Resources, and the State of Hawai'i, Department of Agriculture. This system classifies land into three broad categories: (a) "Prime" agricultural land which is land that is best suited for the production of crops because of its ability to sustain high yields with relatively little input and with the least damage to the environment; (b) "Unique" agricultural land which is non-Prime agricultural land used for the production of specific high-value crops; and (c) "Other" agricultural land which is non-Prime and non-Unique agricultural land that is important to the production of crops.

As indicated in Figure 8, the majority of the soils in the Petition Area (142 acres or 82%) are unrated, while about 10 acres (or about 6%) are rated Prime, and 22 acres (or about 12%) are rated Other. None of the soils are rated Unique.

Overall Productivity Rating (LSB Rating). In 1972, the UH Land Study Bureau (LSB) developed the Overall Productivity Rating, which classifies soils according to five levels, with “A” representing the class of highest productivity and “E” the lowest. Figure 9 shows the LSB soil classifications. In the Petition Area, about 20 acres (11%) are rated B; 45 acres (26%) are C, 92 acres (53%) are E, and 18 acres (10%) are unrated.

Summary Evaluation of Soil Quality. According to the three classification systems commonly used to rate Hawai'i soils, only about 15 acres (+5 acres) of the Petition Area are good for cultivating crops (i.e., II or better under the SCS rating, B or better under the LSB rating, and Prime under the ALISH rating). Another 33 acres (+12 acres) are suitable for crop production (III under the SCS rating, C under the LSB rating, and Other under the ALISH rating). The remaining 126 acres (+17 acres) within the Petition Area are poorly suited for farming, largely because most of the land is coral outcrop.

The small area within the Petition Area that is suitable for farming exhibits several characteristics favorable for agricultural production: soil depth greater than 30 inches; finely textured, though stony soils; moderate tillability; well drained soils; gentle slopes; slight erosion hazard; neutral soil pH. Based on its agronomic conditions, this area is suitable for low-elevation crops commercially grown in Hawai'i, including but not limited to: asparagus, beans (green, bush, and snap), bell peppers, bittermelon, cantaloupe, Chinese peas, cucumbers, daikon, dry onions, eggplant, flowers/nursery products, ginger root, green onions, green peppers, head and semi-head lettuces, herbs, honeydew melons, limes, lotus root, lychee, Manoa lettuce, mango, mustard cabbage, Oriental squash, parsley, pumpkins, seed crops, sweet corn, sweet potatoes, tangerines, and watermelons.

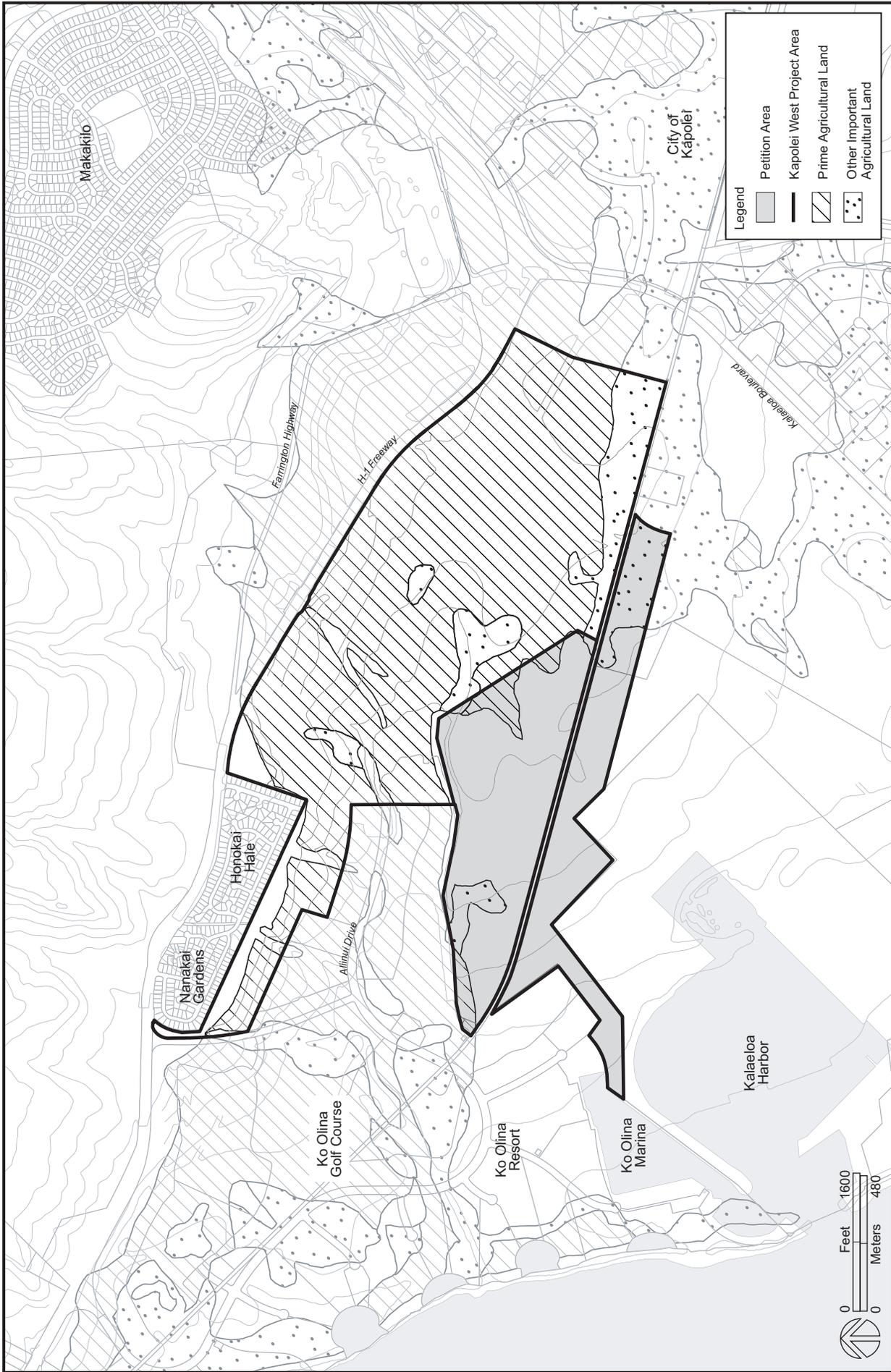
Locational Advantages and Disadvantages

The Petition Area is well located for serving the Honolulu consumer market and export markets due to its short trucking distance to the Honolulu markets, Honolulu International Airport and Honolulu Harbor. However, most crops grown in Hawai'i are not as competitive in the U.S. mainland market because of the generally lower production and delivery costs enjoyed by growers on the mainland and in Mexico, Central and South America, the Caribbean, Australia, New Zealand, Southeast Asia, etc. In particular, competition with Mexico is especially difficult given the North America Free Trade Agreement and Mexico's proximity to major U.S. markets.

4.4.2 Probable Impacts

Existing Agricultural Operations

The project would not impact existing agricultural operations because none exist within or near the Petition Area.



Agricultural Lands of Importance to the State of Hawai'i

Kapolei West Expansion Area
 O'ahu, Hawai'i

Figure 8

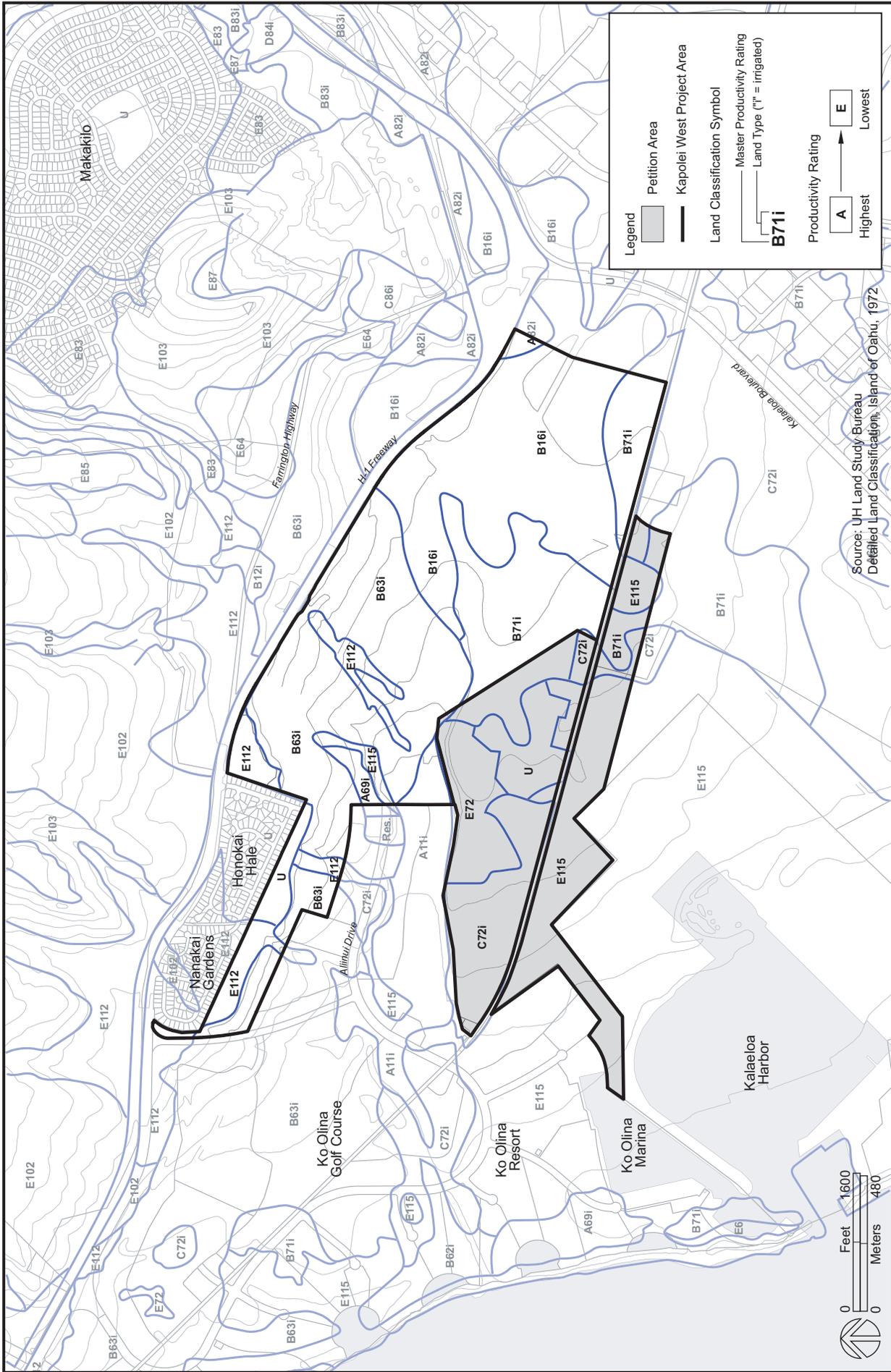


Figure 9

Land Study Bureau Soils Classifications

Kapolei West Expansion Area
O`ahu, Hawai`i

Growth of Diversified Crops

The project would commit approximately 15 acres (+5 acres) of good agricultural land to non-agricultural uses.

However, the conversion of this agricultural land into urban uses, when considered with other planned developments in Hawai'i, involves the loss of too little good agricultural land to significantly impact: (1) the availability of land to farmers in Hawai'i, (2) agricultural land rents, (3) the growth of diversified agriculture, or (4) potential agricultural employment. This conclusion is based on the following:

- **Ample land is available for diversified agriculture.** Statewide, a vast amount of land has been released from plantation agriculture (about 239,300 acres since 1968), and this release of land has far outpaced the demand for land for diversified crops, which increased only by about 25,100 acres over the same period. Land requirements for all diversified crops (i.e., all crops other than sugarcane and pineapple) have grown by an average of less than 200 acres per year since the mid-1980s, or less than 2,000 per decade. The net decrease in cropland amounted to 214,200 acres. While some of the released land has been converted or is scheduled to be converted to non-agricultural uses, most of it remains available for diversified crops.

On O'ahu, the situation is similar. Since 1968, the closures of three sugar plantations, along with the contractions of two pineapple plantations, released about 47,500 acres. Most of the 28,300 acres released since 1990 remains available. Fields in Kunia and 'Ewa are regarded as among the best farmland in Hawai'i. Markets for crops being grown on these lands are still being developed. On O'ahu's North Shore, various crops are being explored, but most of the former sugarcane and pineapple land remains fallow.

- **Per-acre agricultural rents decreasing.** Because of the increased availability of agricultural land, a number of landowners report a decrease in per-acre land rents on O'ahu and the Neighbor Islands compared to rents that were charged before the major contraction in plantation agriculture.
- **Land is not the limiting factor to the growth of diversified agriculture.** Although many crops can be grown in Hawai'i's year-round climate, the modest growth in land requirements for diversified crops reflects the fact that few of them can be grown profitably on a large scale for a variety of reasons. Some of these factors include:
 - Hawai'i's climate is not well suited to the commercial production of major crops that grow better in temperate mainland climates.
 - Crop pests are more prevalent and expensive to control in Hawai'i.
 - Fruit-fly infestations prevent exports of many crops or require expensive treatment.
 - Most soils in Hawai'i require high expenditures for fertilizer.
 - Hawai'i has high farm-labor costs, due to competition with the visitor industry for labor.

- High overseas transportation costs increase the cost of (1) importing agricultural supplies and equipment and (2) shipping export produce to market.
- Consumption volumes in Hawai'i for many crops are too small to support large, efficient farms (i.e., farmers cannot realize economies of scale).
- Hawai'i farmers must compete against highly efficient mainland and foreign farms, which, in many cases, can deliver produce to Hawai'i more cheaply than it can be produced locally.

In short, the limiting factor to the growth of diversified crops is not the land supply, but rather, the size of the market for crops that can be grown profitably in Hawai'i.

- **Limited Potential for On-site Agricultural Employment.** The amount of good agricultural land that would be converted into non-agricultural uses has the potential to support only about two farm jobs, based on an assumption of about 12.5 jobs per 100 acres.

Offsetting Benefits

The loss of 15 acres (+5 acres) of good agricultural land would be offset by the following benefits of the project:

- about 1,180 new homes
- 17.1 acres of new parks
- approximately 5,800 full-time jobs supported by development activity (including both direct, indirect and induced jobs)
- tax revenues (including excise taxes, personal income taxes, corporate income taxes, property taxes, etc.)

No mitigation is necessary.

4.5 GROUNDWATER RESOURCES

A water resources study for the Kapolei West project was prepared by Mink and Yuen, Inc. The report is included in Appendix C. Findings from the report are summarized below and in Section 6.2 Potable Water.

4.5.1 Affected Environment

The Kapolei West project area overlies two groundwater aquifers in the region: the Waianae Basalt Aquifer and the caprock limestone aquifer. The Waianae Basalt Aquifer is included in the 'Ewa-Kunia Aquifer System that comprises the Pearl Harbor Groundwater Management Area regulated by the State Commission on Water Resource Management (CWRM). The CWRM establishes a sustainable yield amount for each aquifer system. The difference between the sum of supply allocated to existing water use permits and the sustainable yield determines

whether a permit for a new use can be granted. The BWS has the authority to allocate the use of water from their system within the limits approved by the CWRM for municipal purposes. The source of potable water for the project would be coordinated with the BWS and the CWRM, and the availability of water for the project would be confirmed by the BWS when building permits are approved.

At present, the sustainable yield for the 'Ewa-Kunia Aquifer System is 16.0 million gallons per day (mgd). Current allocations total 15.547 mgd, leaving a total unallocated share of 0.543 mgd.

The Koolau Basalt Aquifer in the Waipahu-Waiawa Aquifer System also serves the Kapolei-'Ewa Plain region. The sustainable yield for the Waipahu-Waiawa Aquifer System is 104 mgd, of which 82.91 mgd have been allocated, resulting in an unallocated share of 22 mgd.

Pump 10 (State well nos. 2006-01 to 12), a former 'Ewa Plantation-O'ahu Sugar Company primary pumping station historically used for irrigation purposes, is directly adjacent to the northern boundary of the Petition Area. The station consists of a battery of wells drilled into the Waianae Basalt Aquifer. Ground surface is at elevation 40 feet, and well depth is approximately 60 feet. During its period of maximum production between 1975 and 1983, Pump 10 yielded an average of 15 mgd with a chloride content of 500 to 750 mg/l (milligrams per liter). Pump 10 is currently permitted for diversified agricultural use only.

4.5.2 Probable Impacts

The Petition Area has an estimated potable water demand of 0.46 mgd and an estimated non-potable water demand of 0.33 mgd. The total water demand (potable and non-potable use) for the Petition Area is estimated to total 0.80 mgd. In comparison, the aggregate potable water demand for the Kapolei West project (Petition Area and Urbanized Area) is estimated to be 1.24 mgd and the aggregate non-potable water demand is 1.00 mgd, resulting in a total aggregate water demand (potable and non-potable) for the Kapolei West project of 2.24 mgd.

The 'Ewa-Kunia Aquifer System has a sustainable yield of 16.0, including 0.957 mgd allocated to Aina Nui Corporation. Of the total sustainable yield, 15.457 mgd have been allocated to existing or proposed uses, leaving 0.543 mgd of unallocated supply. Of the 15.457 mgd total allocated share, only about 11.6 mgd are presently being used based on average pumpage over the last five years, leaving an estimated 3.9 mgd unused. The BWS has an allocation of 9.72 mgd, and has pumped an average of 7.85 mgd over the last five years, resulting in an unused balance of 1.87 mgd. Based on the available allocation (0.543 mgd) and the presumptive BWS unused surplus (1.87 mgd), a total of 2.41 mgd would appear to be available from the 'Ewa-Kunia Aquifer System, resulting in an adequate supply of potable water to support the Petition Area and the larger Kapolei West project. When the available supply from the 'Ewa-Kunia Aquifer System is considered in conjunction with the 21 mgd available for allocation from the Waipahu-Waiawa Aquifer System, the islandwide supply of potable water is sufficient to support the Petition Area.

Non-potable water would be used for landscaping and golf course irrigation. The source for non-potable water may be brackish groundwater derived from Pump 10 or reclaimed wastewater supplied by BWS. The Petitioner has an allocation of 0.957 mgd for Pump 10, considered sufficient for a 100 to 200 acre golf course. Pump 10 is currently permitted for diversified agricultural use only. Use of Pump 10 for non-agricultural irrigation use would require modification of the water use permit. In the event that Pump 10 is not used as an irrigation source, the Petitioner would develop future plans for the well, which could possibly include properly sealing the source to prevent possible contamination of the underlying aquifer. The construction of new non-potable groundwater sources would require CWRM approval for well construction, pump installation and water use permits.

Nowhere in the project area would surface activity have an impact on the potable water supply. Caprock at the 100-foot ground elevation serves as a barrier between surface activity and the potable water in the Waianae Basalt Aquifer, limiting the movement or downward percolation of contaminants into the underlying groundwater. As a result, the proposed development would not be a potential source of contamination to the underlying groundwater and would not cause significant degradation of the potable water supply (Wilson Okamoto & Associates, 1989).

Impervious surfaces may affect the hydrology in two ways: 1) by reducing infiltration into the underlying aquifer; and 2) by increasing overland flow to the coast. Denying natural drainage into the limestone caprock by replacing the natural surface with impervious surfaces may have an effect on coastal waters because seepage of groundwater at the coast may decrease. However, the effects are likely to be too small to be measurable. Increasing overland runoff will add fresh water and potential contaminants that may diminish the quality of the coastal waters. However, runoff from the impervious surfaces is expected to be relatively minor. The Petition Area has an average annual rainfall of about 20 inches. Of the 174.2 acres, a golf course will account for 60 acres and another 28 acres will be devoted to parks and open spaces, leaving about 86 acres for the residential area. The annual average rainfall of 20 inches on 86 acres amounts to 47 million gallons per year (128,000 gallons per day), but of this amount only a fraction would reach the coast as runoff.

4.5.3 Mitigation

The golf course would be operated in compliance with Conditions No. 13 (The Eight Conditions Applicable to this Golf Course Development prepared by the State Department of Health dated April, 1990) and No. 14 (employment of a qualified golf course manager to oversee golf course irrigation and maintenance) established by the Land Use Commission Docket No. A90-655/ West Beach Estates Decision and Order.

4.6 NATURAL HAZARDS

4.6.1 Affected Environment

The Flood Insurance Rate Map (FIRM) (November 2000) published by the Federal Emergency Management Agency (FEMA) identifies the project area within Zone D, which denotes areas in which flood hazards are undetermined (Map Number 15003C0305 E). The 100-year tsunami inundation line is based on the FIRM, where areas designated “AE” and “VE” are subject to inundation. The project area is outside the tsunami inundation zone.

Hurricane shelters within the Kapolei area are currently located at Kapolei High School or Kapolei Elementary School. Other shelters within the region are located at ‘Ewa Beach, Makakilo or Nanakuli.

4.6.2 Probable Impacts

Due to its location, the Petition Area is not subject to a disproportionately greater likelihood of natural hazards such as flooding or tsunami.

Existing hurricane shelters within the Kapolei region are not adequate to handle the current population, and would not have capacity to accommodate the additional residents of the proposed Kapolei West community.

The City and County of Honolulu O‘ahu Civil Defense Agency identified the need for a minimum of two civil defense outdoor warning systems (warning sirens) to serve the Petition Area. Construction of hurricane resistant facilities (i.e., commercial, school, recreational and/or meeting facilities) at appropriate locations to provide emergency shelter for Kapolei West residents was also recommended. As the development plans for the community are finalized, the Petitioner would coordinate the specifications of the warning sirens and hurricane shelters with the O‘ahu Civil Defense Agency and the State of Hawai‘i Department of Defense, Office of Civil Defense. No mitigation is necessary.

4.7 FLORA

Char and Associates conducted a botanical survey for the Petition Area north of the OR&L ROW in November 2003, including a reconnaissance-level survey for the endangered red ilima or *ko‘oloa‘ula* (*Abutilon menziesii*). A survey of the Petition Area south of the OR&L ROW was completed in April 2004. Both reports are included as Appendix D. Survey findings are summarized below.

4.7.1 Affected Environment

Since the endangered 'Ewa Plains 'akoko (*chamaesyce skottsbergii* var. *skottsbergii*, formerly var. *kalaeloana*) was recorded in the area surrounding Kalaeloa Barbers Point Harbor during construction of the deep draft harbor, the recent surveys included an intensive search for any remnant akoko plants, especially in the area of the kiawe forest.

No 'akoko plants or any other threatened, rare or endangered species or species of concern were found during recent field surveys. Vegetation within the Petition Area is dominated by introduced or alien species. The vegetation types recognized on the project site include the following: (1) ruderal, (2) kiawe forest; (3) buffelgrass/koa haole scrub; (4) koa haole scrub; and (5) quarry vegetation (largely barren areas with only scattered clumps of vegetation). Except for the kiawe forest, the other vegetation types have been disturbed somewhat recently in the past by sugar cane cultivation, quarrying, bulldozing, or other human activity. In general, the existing plant communities and vegetation types surveyed were not dominated by endemic (native only to Hawai'i) or indigenous (native to Hawai'i and other places) plant species. The few native species found within the Petition Area are those that are common to the coastal lowlands along most of the Hawaiian Islands and that do well in open, disturbed habitats. Indigenous plants found on site consist of 'akulikuli (*Sesuvium portulacastrum*), kipukai (*Heliotropium curassavicum*), hoary abutilon or ma'o (*Abutilon incanum*), 'ilima (*Sida fallax*), popolo (*Solanum americanum*), and 'uhaloa (*Waltheria indica*). Endemic species are limited to kupala (*Sicyos pachycarpus*) and kauna'oa (*Cuscuta sandwicensis*).

4.7.2 Probable Impacts

The proposed development would not impact threatened or endangered species of flora. No candidate, proposed, or listed threatened or endangered species as set forth in the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1543), were found; therefore, no mitigation is necessary.

Native Hawaiian plants would be used for landscaping where it is ecologically appropriate, readily available and fits the theme and character of the surroundings.

4.8 FAUNA

4.8.1 Affected Environment

Phillip L. Bruner conducted an avifaunal and feral mammal survey in August 1989 for the *Kapolei Business-Industrial Park Final Environmental Impact Statement* (April 1990), including all of the Petition Area south of the OR&L ROW. No endemic, rare or endangered species of wildlife were identified, and no unusual or distinctive habitats were found. Species identified during the survey include feral cat, mongoose (*Herpestes auropunctatus*), black-crowned night heron (*Nycticorax nycticorax*), pacific golden plover or Kolea (*Pluvialis fulva*), and seventeen species of introduced birds.

Fauna in the Petition Area consists of introduced species common in other areas of O'ahu. Based on the Bruner survey and previous faunal surveys conducted for areas adjacent to the project area, no endemic, rare or endangered species of wildlife and no suitable feeding or breeding for such species exist within the Petition Area (Wilson Okamoto & Associates, 1989). The project area has very little value as a native bird habitat due to the extensive modification from its original state. Avifauna and feral mammals in the general vicinity of the Petition Area documented by previous faunal surveys in addition to those mentioned above include the following: feral dog, mice, brown rat, black rat, wandering tattler (*Heteroscelus incanum*), cattle egret (*Bubulcus ibis*), spotted or chinese dove (*Streptopelia chinensis*), zebra dove (*Geopelia striata*), common myna (*Acridotheres t. tristis*), Japanese white-eye (*Zosterops j. japonicus*), orange cheeked waxbill (*Estrilda mepoda*), red-eared waxbill (*Estrilda troglodytes*), strawberry finch (*Amandava amandava*), ricebird or spotted munia (*Lonchura punctulata*), black-headed manikin (*Lonchura Malacca atricapilla*), house sparrow (*Passer domesticus*), red crested cardinals (*Paroaria coronata*), cardinal (*Cardinalis cardinalis*), and house finch (*Carpodacus mexicanus frontalis*).

Mr. Bruner updated his findings in a May 16, 2005 letter report included in Appendix E. He points out that a faunal survey today would likely record a similar array of alien species. Mr. Bruner also noted that the Hawaiian Owl or Pueo (*Asio flammeus sandwichensis*) has been sighted in the other areas of Kapolei and may forage in the project area. This bird is endemic to Hawai'i and is listed as endangered on O'ahu by the State of Hawai'i.

4.8.2 Probable Impacts

No candidate, proposed, or listed threatened or endangered species as set forth in the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1543), are known to exist in the Petition Area. Development of the Petition Area as envisioned in either the Proposed Action or the 'Ewa DP land use alternative described in Chapter 8.0 could result in loss of potential foraging habitat for the Hawaiian Owl. No mitigation is proposed.

4.9 HISTORIC, CULTURAL AND ARCHAEOLOGICAL RESOURCES

Two archaeological inventory surveys of the Petition Area were conducted by CSH. One survey was conducted for a small portion of the Petition Area north of the OR&L ROW; the other was conducted for the Petition Area south of the OR&L ROW. The findings of the studies are below. The full reports, along with an archaeological assessment and a field inspection report completed before the archaeological inventory surveys were conducted, and correspondence from the SHPD, are included as Appendix E.

4.9.1 Affected Environment

The project area lies within the ahupua'a of Honouliuli, the largest traditional land unit on the island of O'ahu. The ahupua'a stretches across the vast 'Ewa Plain, with West Loch at the eastern boundary and Kahe Point to the west. Historical research, including review of settlement patterns of pre-contact Native Hawaiians, indicates that early settlement would have

been concentrated nearer the coast as O'ahu's western shoreline was noted for an abundance of marine resources. Inland coastal plain areas such as the Petition Area would not have been permanently occupied, but instead would have been used for bird hunting, sinkhole agriculture and temporary habitation for parties crossing from the uplands to the sea.

Following the Mahele of 1848, 99 individual land claims in the ahupua'a of Honouliuli were awarded. The Petition Area was part of a 43,250-acre grant awarded to Mirian Ke'ahi-Kuni Kekau'onohi on January 1848 (Royal Patent 6071, LCA 11216, Apana 8). Upon Kekau'onohi's death in 1851, her property was passed on to her husband, Chief Levi Ha'alelea, and his heirs. In 1871, when Chief Ha'alelea died, the property was leased to James Dowsett and John Meek for stock running and grazing, and in 1877, James Campbell purchased most of Honouliuli Ahupua'a (including the Petition Area) for cattle ranching. Campbell's cattle ranching operation prospered until 1889, when he leased his property to Benjamin Dillingham. Dillingham opened the OR&L Railway in 1889 and subleased his lands to the 'Ewa Plantation Company for sugar cane cultivation. The 'Ewa Plantation Company grew quickly and continued in full operation until 1970 when the O'ahu Sugar Company took over operations. Sugar cane cultivation was continued until 1995 when O'ahu Sugar Company closed.

Historical settlement patterns, in combination with use of the property for ranching and the construction of the OR&L ROW, long-term commercial sugar cane cultivation, and stockpiling associated with the nearby quarry, accounts for the limited number of archaeological sites within the Petition Area.

An archaeological assessment conducted by CSH for the Petition Area north of the OR&L ROW identified two sites of interest: the first included two limestone sinkholes near the center of the Petition Area; and the second included two limestone sinkholes in the central portion of the Petition Area north of the OR&L ROW. With concurrence from the SHPD, CSH conducted an archaeological inventory survey for the two centrally located sinkholes. The excavation yielded no evidence of pre-twentieth century cultural materials, human remains, or prehistoric faunal remains. All recovered materials pertained to twentieth century activities, including animal bones, glass, ceramic and metal objects dating to the mid-twentieth century. Due to the high number of datable artifacts older than fifty years, the sinkhole was assigned to the State Inventory of Historic Places (SIHP) as site number 50-80-12-6674, a disposal site that dates to the WWII era. SHPD concurred that the site is not significant, and would not require any further work or preservation.

The following significant historic sites are located within the Petition Area. Figure 10 shows the general location of the sites.

Site 50-80-12-4896 (Features A and B): This site is comprised of two large sinkholes. Test unit excavation of Feature A by Hammatt in 1994 yielded cultural materials, including midden, bird bone and charcoal, indicating its use for temporary habitation and agricultural use.

Site 50-8-12-6687: This site consists of an upright stone structure and wall enclosure that may have been used as a shrine. It is associated with the pre-contact Hawaiian era. Test unit

excavation of the site by CSH yielded metal cans and glass fragments, charcoal remnants, two basalt coffee bean sinkers used for octopus lure (*lu he'e*), and marine shell fragments. Radiocarbon dating of the charcoal remnants resulted in a date range spanning from late pre-contact period (1720 AD) to modern times (1960 AD).

Site 50-80-12-6688: The Gilbert Trig Station is a historic geographic marker located along the OR&L ROW. Significant for its association with the OR&L ROW, the Gilbert Trig Station denoted a train stop for a small plantation camp located near the marker in the early twentieth century.

Site 50-80-12-9545: This site abuts the eastern edge of Site 50-80-12-9633. This site is a large sinkhole that was used as a traditional Hawaiian habitation site. It is a protected, fenced-in preserve and has been recognized by SHPD for archaeological preservation.

Site 50-8-12-9617: This site is a temporary habitation site located near SIHP site -9545. Test unit excavation of the site by CSH yielded marine shell fragments, charcoal deposits, avifaunal remains, and a basalt hammer stone.

Site 50-80-12-9633: This site is a burial cave containing human-created rock piles and wall, a burial, and part of a wooden canoe. This site has not been excavated and remains in the state in which it was discovered. It is a protected, fenced-in burial preserve and has been recognized by SHPD for archaeological preservation.

Site 50-80-12-9714: The O'ahu Railroad and Land Company Railroad was opened in 1889 to transport raw sugar, other goods and passengers. The OR&L ROW was placed on the National Register of Historic Places in 1975 for its significance in the expansion of O'ahu's sugar cane industry. The ROW is owned by the State of Hawai'i Department of Transportation and is currently used by the Hawaiian Railway Society for educational and cultural purposes.

4.9.2 Probable Impacts

The archaeological assessment and subsequent archaeological inventory survey of the two sinkholes in the Petition Area north of the OR&L ROW were submitted to the SHPD. The SHPD determined that the surveys were performed acceptably and that development of these lands would have "no effect" on significant historic sites.

The archaeological inventory survey of the Petition Area south of the OR&L ROW was submitted to SHPD in December 2004. The survey is currently pending SHPD review and determination.

Table 7 summarizes the significant historic sites in the Petition Area, with recommendations for further archaeological work or preservation.

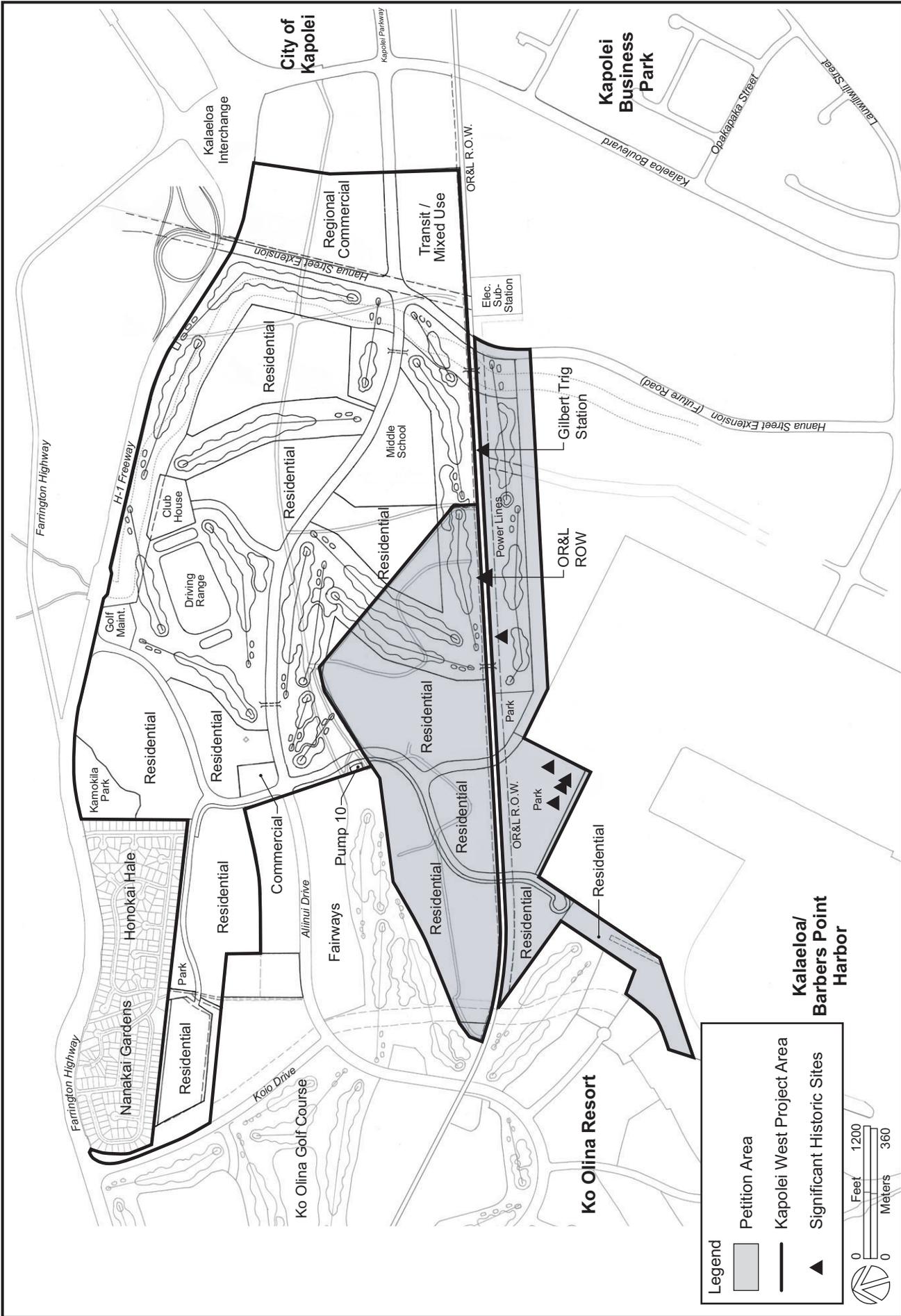


Figure 10

Significant Historic Sites

Kapolei West Expansion Area
O`ahu, Hawai`i

**Table 7
Significant Historic Sites**

SIHP Site	Function	Recommendation
50-80-12-4896	temporary habitation, agriculture	Data recovery/preservation
50-80-12-6687	possible shrine	Consultation with SHPD
50-80-12-6688	geographic marker	Preservation
50-80-12-9545	permanent habitation	Preservation
50-80-12-9617	temporary habitation	Preservation
50-80-12-9633	burial	Preservation
50-80-12-9714	transportation	Preservation

The proposed development would not impact significant historic sites. The project would comply with SHPD requirements to preserve significant historic sites identified for preservation and would consult with SHPD on significant historic sites requiring further archaeological work or documentation prior to future development. With the exception of the OR&L ROW (SIHP site no. 50-80-12-9714) and the Gilbert Trig Station (SIHP site no. 50-80-12-6688), significant historic sites are located south of the OR&L ROW, along the periphery of the proposed golf course and parklands. The OR&L ROW runs through the Petition Area. The project would maintain the existing 40-foot setback on either side of the ROW, with roadway and golf cart crossings planned. These crossings would require review and approval by the SDOT. The proposed residential, recreational and golf course uses bordering the OR&L ROW would be distanced from the OR&L ROW, thereby minimizing impacts to current use of the railroad. Following resolution of mitigation measures in consultation with the SHPD and the Hawaiian Railway Society, it is anticipated that the proposed development of crossings of the OR&L would have “no effect” on this National Register site.

In the event that any significant archaeological resources such as artifacts, shell, bones or charcoal deposits, human burial, or rock or coral alignments, paving or walls of historic or prehistoric significance are encountered during the development of the property, construction would be halted and immediate archaeological consultation would be sought with the SHPD in accordance with applicable regulations.

4.9.3 Mitigation

Six historic sites will be preserved (including the State-owned OR&L ROW). OR&L ROW building setbacks will be observed. All surface and subsurface work impacting the OR&L ROW will be closely coordinated with the Hawaiian Railway Society (HRA), SHPD, and SDOT. Proposed mitigation measures, including the scheduling of construction activities and the construction of automated crossing guards at major road crossings of the OR&L ROW, will be discussed with SDOT, SHPD and HRA.

4.10 SCENIC AND VISUAL RESOURCES

4.10.1 Affected Environment

The Kapolei West project area is visible from Farrington Highway and the H-1 Freeway. Comprised of abandoned agricultural lands historically used for sugarcane cultivation, the Petition Area appears fallow and vacant between the lush residential and golf course developments of Ko Olina and the City of Kapolei. Looking makai (south) from Farrington Highway and the H-1 Freeway above the Petition Area, the idle agricultural areas of the Kapolei West project area are visible in the foreground. The industrial facilities surrounding Kalaeloa Barbers Point Harbor and Campbell Industrial Park and the panoramic view of the expansive 'Ewa Plain are visible in the southwest. The Ko 'Olina resort, including the hotels, golf course and residential areas, are visible to the southeast. Views of the shoreline and Pacific Ocean extend to the horizon in both directions. The Honokai Hale/Nanakai Gardens subdivision adjacent to Farrington Highway partially obscures makai views of the 'Ewa Plain from Farrington Highway.

The 'Ewa Development Plan identifies several significant views and vistas in the vicinity of the project area. These include:

- Distant vistas of the shoreline from the H-1 Freeway above the 'Ewa Plain; and
- Mauka and makai view corridors.

4.10.2 Probable Impacts

The proposed development would alter the existing views from the H-1 Freeway and neighboring residential areas from abandoned agricultural lands to a manicured, urban landscape.

The proposed development would not obstruct significant views identified in the 'Ewa Development Plan. The proposed development would be visible from the H-1 Freeway; however, views of the expansive 'Ewa Plain, panoramic Pacific Ocean and distant views of downtown Honolulu from these areas would not be obstructed. The residential developments would be predominately low-rise and limited in height (one to five stories), and would not significantly impede viewplanes from the neighboring residential communities of Honokai Hale, and Nanakai Gardens due to the lower elevation of the Petition Area and its distance from these communities. Petition Area homes would be constructed across the several of the Ko Olina golf course fairways from the Ko Olina Fairways community – approximately 300 to 700 feet to the south. These homes would be visible to golf-course-fronting Fairways homes, but separated by several golf fairways which would minimize visual intrusion. Appropriate building colors and roofing materials would be used to minimize visual impact looking towards the shoreline. Golf course and park areas would preserve existing views, and would provide a pleasant visual contrast the surrounding industrial uses at Kalaeloa Barbers Point Harbor. No mitigation is necessary.

4.11 AIR QUALITY

An air quality study for the proposed project was prepared by B.D. Neal and Associates. The findings of the study are summarized below. The full report is presented in Appendix F.

4.11.1 Affected Environment

Present air quality in the Petition Area is mostly affected by air pollutants from motor vehicles, industrial sources, and agricultural operations and to a lesser extent by natural sources. Sources of industrial air pollution include industries located at Campbell Industrial Park about 1.5 miles south of the Petition Area and Hawaiian Electric Company's Kahe Generating Station located about 3 miles to the northwest at Kahe Point. Prevailing winds from the east or northeast carry these emissions away from the site most of the time.

The present air quality of the Petition Area is reasonably good based on nearby air quality monitoring data. Air quality data from the nearest monitoring stations operated by the DOH suggest that all national air quality standards are currently being met, although occasional exceedances of the more stringent state standards for carbon monoxide may occur near congested roadway intersections.

4.11.2 Probable Impacts

Short-Term Impacts

Short-term direct and indirect impacts on air quality could potentially occur due to project construction. Short-term impacts would include: (1) fugitive dust from vehicle movement and soil excavation; and (2) exhaust emissions from on-site construction equipment. Short-term indirect impacts could result from slow-moving construction equipment traveling to and from the project site, from a temporary increase in local traffic caused by commuting construction workers, and from the disruption of normal traffic flow caused by lane closures of adjacent roadways.

Operational Period Impacts

Potential operational period impacts of the proposed project on the surrounding area include increased air pollution from vehicular emissions and indirect impacts associated with electrical power generation and solid waste disposal (H-POWER combustion emissions) requirements. Potential occasional and temporary impacts to the project from industrial sources at Campbell Industrial Park may occur due to the relatively close proximity of the Petition Area to the industrial activity.

An air quality modeling study analyzed the impact of emissions from vehicles at several intersections in the vicinity of the project along Kalaeloa Boulevard, Kapolei Parkway and Aliinui Drive. The modeling study estimated the current ambient concentrations of carbon monoxide, and predicted future levels both with and without the project, using existing and projected traffic volumes. During worst-case conditions, results indicated that present (2004) 1-hour and 8-hour

carbon monoxide concentrations are within both the national and State ambient air quality standards.

In the year 2020 without the project, carbon monoxide concentrations were predicted to remain largely unchanged despite an expected increase in traffic. This is because average motor vehicle emissions are expected to continue to decrease over time as older, more-polluting vehicles are retired. The location with the highest worst-case 1-hour and 8-hour concentrations was the intersection of Kapolei Parkway and Hanua Street. Peak-hour worst-case concentrations at other locations decreased somewhat or remained the same as present level concentrations. All projected worst-case 1-hour and 8-hour concentrations remained within national and State ambient air quality standards.

With the project in the year 2020, predicted 1-hour worst-case concentration levels were estimated to increase slightly at the intersection of Kapolei Parkway and Kalaeloa Boulevard compared to the 2020 without project scenario, while other locations would remain nearly unchanged. Predicted 8-hour worst-case concentration levels were projected to remain nearly unchanged compared to the 2020 without project scenario, indicating minimal project impact. All predicted 1-hour and 8-hour worst-case concentration levels for the with project scenario were within both the national and state ambient air quality standards.

Off-site impacts from project-related electrical power and solid waste disposal requirements would be insignificant based on estimated demand levels and emission rates compared to current island-wide emissions.

Occasional impacts to the Petition Area from emissions emanating from industrial sources at Campbell Industrial Park may occur in conjunction with coincidental occurrences of industry malfunctions and southerly winds, both of which are relatively infrequent events. Prevailing tradewinds typically carry industrial emissions away from the Petition Area more than 70 percent of the time. Winds from the south, which could carry emissions towards the Petition Area, occur less than 5 percent of the time. Industrial operators are regulated by DOH standards and are required to comply with national and State air quality standards emissions; therefore industrial sources would not be expected to exceed air quality standards during normal operations. Air quality impacts to the project resulting from the occasional operational and facility malfunctions would be intensified by southerly winds.

Depending on the demand levels, long-term impacts on air quality are also possible due to indirect emissions associated with a development's electrical power and solid waste disposal requirements. Quantitative estimates of these potential impacts were not made, but based on the estimated demand levels and emission rates involved, any significant impacts are unlikely. Nevertheless, incorporating energy conservation design features and promoting conservation and recycling programs within the proposed development could serve to further reduce any associated impacts.

Potential occasional impacts to the project from emissions emanating from industrial sources at Campbell Industrial Park may occur in conjunction with coincidental occurrences of industry

malfunctions and southerly winds, both of which are relatively infrequent events. Increased scrutiny by the DOH, monitoring by an air quality task force mandated by the Hawai'i State Legislature to assess emissions in the area, and the modernization by some industrial park tenants should help to mitigate future impacts on areas adjacent to Campbell Industrial Park.

4.11.3 Mitigation

Appropriate dust control measures would be employed during construction activities to minimize potential for fugitive dust emissions. This could be accomplished by:

- watering active work areas and disturbed dust sources frequently;
- planning the different phases of construction to limit the area that can be disturbed at any given time;
- applying mulching, chemical soil stabilizers, or wind screens to control wind erosion;
- covering open-bodied, dirt-hauling trucks;
- adopting a road cleaning and/or tire washing program; and
- paving parking areas and/or establishing landscaping early in the construction schedule.

Increased vehicular emissions due to traffic disruption by construction equipment and/or commuting construction workers can be minimized by moving equipment and workers to and from the project area during off-peak traffic hours. Construction activities would comply with the provisions of HAR, Chapter 11-60.1, "Air Pollution Control," Section 11-60.1-33, Fugitive Dust.

In view of the fact that the predicted worst-case 1-hour and 8-hour concentrations with the project are well within both national and State ambient air quality standards, implementing air quality mitigation measures for long-term traffic-related impacts from the project is probably unnecessary and unwarranted.

Appropriate landscape screening would be constructed along the south and eastern perimeter of Parcel K to minimize noise, odor, dust and security lighting impacts from the nearby deep draft harbor. The Petitioner would provide proper disclosure to prospective occupants and users of the possible odor, air, noise, dust and light pollution resulting from surrounding harbor activities, industrial uses and aircraft overflights. Ownership, use or lease agreements would incorporate permanent covenants indemnifying the State of Hawai'i and the U.S. Government of impacts on the project, with evidence of the indemnification provided to the SDOT.

4.12 NOISE

An environmental noise assessment for the proposed project was prepared by D.L. Adams Associates, Ltd. The findings of the study are summarized below. The full report is presented in Appendix G.

4.12.1 Affected Environment

The project area is currently exposed to daytime ambient noise levels ranging from 55 to 72 A-weighted decibels (dBA), depending on the time of day and traffic volume on the H-1 freeway. The dominant noise source is vehicular traffic on H-1 freeway, with secondary noise sources including occasional aircraft flyovers, the OR&L railroad operations, wind, birds and crickets, and industrial activities at Campbell Industrial Park located approximately 1.5 miles south of the Petition Area.

4.12.2 Probable Impacts

Construction Noise

The dominant noise sources during project construction would probably be earth-moving equipment, such as bulldozers and diesel-powered trucks. The noise level of typical construction equipment (e.g., trucks, backhoes, tractors) ranges from approximately 70 dBA to 95 dBA at a distance of 50 feet. Surrounding residences may be impacted by the construction noise due to their proximity to the project. The actual noise levels produced, which would be a function of the methods employed during each stage of the construction process, would be short-term and temporary in nature.

During construction, DOH's noise regulations and conditions for construction activities would be followed. Construction equipment, on-site vehicles and other diesel and gasoline engine machines would be equipped with mufflers and be maintained and properly tuned to minimize noise impacts. Construction activities that emit noise in excess of the maximum permissible sound levels established by the DOH would be scheduled appropriately.

Traffic Noise

The noise assessment estimated increases in peak hour traffic noise as a result of the project by measuring existing traffic noise levels along key roadways adjacent to and in the vicinity of the project. The data were used with the Federal Highway Administration (FHWA) Traffic Noise Model, FHWA-RD-77-108 to estimate future traffic noise levels.

The predicted maximum traffic noise level increase along the H-1 Freeway due to the project is less than 1 decibel (dB) and less than 2dB for all major connecting roadways surrounding the project area (i.e., Aliinui Drive and Hanua Street). The increase in traffic noise due to the project would not be significant and should not impact noise sensitive areas.

Residences within 300 feet of the H-1 Freeway in the year 2020 could be exposed to noise levels that exceed the FHWA maximum noise limit of 67 dBA for peak hour traffic volumes. Both FHWA and the U.S. Department of Housing and Urban Development environmental noise

criteria ratings would be satisfied for all residences 300 feet or more from the H-1 Freeway. The Petition Area would not experience any significant noise impact from the H-1 Freeway because of its distance from the freeway.

Aircraft

The Petition Area is outside of the 55 Ldn noise contours for the Honolulu International Airport and the Kalaheo Airport. Although aircraft noise from occasional aircraft flyovers may be audible, the project meets HUD's "acceptable" rating for aircraft noise and is compatible with the Federal Aviation Administration and State of Hawai'i Department of Transportation, Airports Division land use compatibility guidelines for residential uses.

Impacts of Proposed Land Uses

Land uses proposed within the Petition Area are limited to residential and recreational uses and would not generate any long term noise impacts to existing surrounding uses and uses proposed for the Urbanized Area. Typical residential noise levels, including noise from stationary mechanical equipment typical of residential housing and commercial buildings such as air handling equipment and condensing units, are anticipated.

OR&L Railroad Operations

The OR&L Railroad ROW, which is used by the Hawaiian Railway Society for railroad tours, runs through the Petition Area. Railroad operations are generally limited to weekend afternoons and special charter weekday rides. Noise generated by the railroad operation, which includes engine and whistle noises, would be audible to surrounding residential uses. In accordance with Federal law, train operators are required to blow the train whistle four times upon approaching a road crossing. Two new road crossings are proposed to serve the Petition Area. Development would comply with a 40-foot building setback along either side of the OR&L ROW. Landscaping would be constructed to shield the residential areas from the OR&L ROW.

Based on the foregoing assessment, no mitigation is required. All project activities would comply with the Administrative Rules of the DOH, Chapter 11-46, on "Community Noise Control."

4.12.3 Mitigation

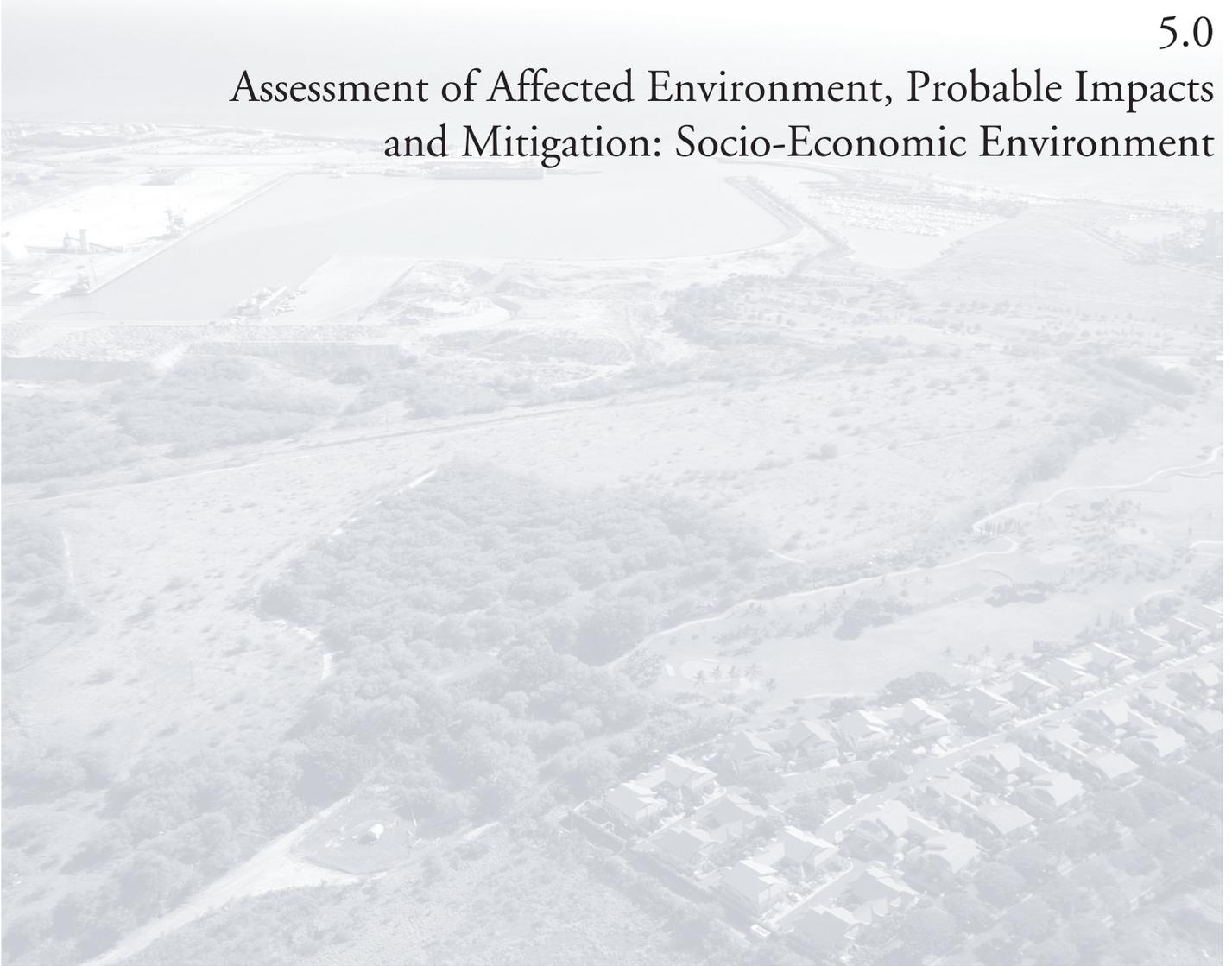
Noise from stationary mechanical equipment such as air handling equipment and condensing units would be required to meet the State noise rules, which stipulate maximum permissible noise limits of 55 dBA during the daytime hours and 45 dBA during nighttime hours for residential areas. Typical noise mitigation for stationary equipment includes mufflers, silencers, acoustical enclosures, and noise barrier walls. Design strategies that locate noise generating equipment away from neighbors and residential units would be incorporated where practical to control the noise emanating from stationary mechanical equipment to comply with the State noise rules.

Appropriate landscape screening would be constructed along the south and eastern perimeter of Parcel K to minimize noise, odor, dust and security lighting impacts from the nearby deep

draft harbor. The Petitioner would provide proper disclosure to prospective occupants and users of the possible odor, air, noise, dust and light pollution resulting from surrounding harbor activities, industrial uses and aircraft overflights. Ownership, use or lease agreements would incorporate permanent covenants indemnifying the State of Hawai'i and the U.S. Government of impacts on the project, with evidence of the indemnification provided to the SDOT.

5.0

Assessment of Affected Environment, Probable Impacts
and Mitigation: Socio-Economic Environment



5.0 ASSESSMENT OF AFFECTED ENVIRONMENT, PROBABLE IMPACTS AND MITIGATION: SOCIO-ECONOMIC ENVIRONMENT

5.1 POPULATION

5.1.1 Affected Environment

A market assessment for the residential uses of the Kapolei West project was conducted by Mikiko Corporation in 2004. This section includes this assessment's population and demographic findings. The full report is attached as Appendix H.

In 2000, the U.S. Census recorded O'ahu's resident population at 876,156. Within the Makakilo/Kapolei/Honokai Hale Neighborhood Board #34 area, which encompasses the area from Kalaeloa (former Barbers Point Naval Air Station) on the east, to Waimanalo Gulch on the west, total population decreased by 2%. This is likely due to the closure of Barbers Point Naval Air Station in 1999. This decrease occurred during the same period the 'Ewa DP area experienced a 60% increase and O'ahu as a whole experienced slightly less than 5% population growth. The sharp increase in population in the 'Ewa DP area relative to the island as a whole reflects the implementation of the City and County of Honolulu's policy of directing growth to O'ahu's Secondary Urban Center. Table 8 provides demographic information for 1990 and 2000 for the Neighborhood Board #34 area, 'Ewa DP area and island of O'ahu.

As seen in the table, median age in each of the areas increased, along with homeownership rates. In each area, households with children under 18 years decreased, while households with individuals age 65 and older increased.

**Table 8
Population Trends**

Year	NB #34		'Ewa DP		O'ahu	
	2000	1990	2000	1990	2000	1990
Population	15,545	15,863	68,718	42,931	876,156	836,231
Race						
White	23.8%	52.5%	18.4%	40.1%	21.3%	31.6%
Black/African American	2.4%	5.4%	2.3%	3.7%	2.4%	3.1%
American/Alaskan Native	0.2%	0.6%	0.2%	0.5%	0.2%	0.4%
Asian	33.5%	27.4%	46.0%	40.5%	46.0%	49.4%
Native Hawaiian/other Pacific Islander	10.0%	11.5%	7.5%	12.6%	8.9%	13.5%
Other	1.4%	2.6%	1.3%	2.6%	1.3%	1.9%
Two or more races	28.6%	n/a	24.2%	n/a	19.9%	n/a
Sex and age						
Male	50.3%	53.8%	50.3%	52.0%	50.3%	50.9%
Female	49.7%	46.2%	49.7%	48.0%	49.7%	49.1%
Median Age (years)	32.7	27.2	31.2	27.5	35.7	32.2
Total households	4,589	4,623	18,932	11,422	286,450	265,304
Households with individuals under 18 years	50.6%	51.8%	56.8%	57.8%	37.8%	40.1%
Households with individuals 65 years and older	15.6%	6.5%	17.6%	13.6%	28.1%	24.3%
Average persons per household	3.38	3.22	3.61	3.66	2.95	3.02
Average persons per family	3.77	3.54	4.01	3.92	3.59	3.50
Median age of householder	44.5	36.6	42.4	39.8	48.7	45.2
Median age of owner	47.9	44.1	44.8	46.8	54.6	53.0
Median age of renter	37.1	31.0	36.2	33.1	40.9	38.3
Total housing units	4,937	4,720	20,804	11,722	315,988	281,683
Occupied units	93.0%	97.9%	91.0%	97.4%	90.7%	94.2%
By owner	66.9%	51.3%	63.7%	52.1%	49.5%	49.0%
By renter	26.1%	46.7%	27.3%	45.3%	41.2%	45.2%
Home ownership rate	71.9%	52.3%	70.0%	53.5%	54.6%	52.0%

Source: City and County of Honolulu Department of Planning & Permitting, Planning Division, January 2002.

As stated above, the U.S. Census recorded O'ahu's resident population at 876,156 in 2000. The State of Hawai'i, Department of Business, Economic Development and Tourism projected the resident population of O'ahu to grow to about 1,029,800 residents in 2025.

The average O'ahu household size was 2.94 persons in 2000¹, with a total of 286,450 households islandwide. Of that number, about 79,000, or 28%, of O'ahu's households were located in the 'Ewa Judicial District (in which the Petition Area is located). Continuing an existing trend, average household size is projected to decline to 2.83 persons per household in 2024². By 2009, the latest year for which detailed population projections by area are available, the number of households on O'ahu is projected to grow to 318,700, according to Claritis, Inc. In 2009, Claritis, Inc. also estimates that the number of households in the 'Ewa District would increase to about 94,500, or almost 30% of the island total.

O'ahu's population between the ages of 25 to 44 and 45 to 59 included nearly 450,000 persons in 2004. These age groups are both considered prime markets for home buying. The most rapidly increasing group between 2004 and 2009 is expected to be the 45- to 59-year olds, followed by the 60- to 74-year olds, reflecting the baby boomer generation moving into and through their 50s and 60s. By contrast, the 25 to 44 age group on O'ahu is anticipated to see almost no increase between 2004 and 2009.

5.1.2 Probable Impacts

An economic and fiscal impact assessment for the Kapolei West project was conducted by Mikiko Corporation in 2004. The following conclusions are based on this assessment as well as the Mikiko Corporation market study.

Because the Petition Area development includes residential units likely to attract second home, part-time residents or retirement homebuyers from off-island, the Proposed Action is expected to have a direct impact on population. The majority of the in-migrants (i.e., residents new to the area) would likely come from outside Hawai'i, but a few may move from elsewhere in the State. In comparison, the Proposed Action primary residence homebuyers are highly likely to be residing in existing households in the County and/or State. The Proposed Action may also result in in-migration of workers and their family members for construction and operational employment.

The analysis of in-migrant population growth factored in the part-time status of some of the Petition Area's future residents to calculate FTE population. One full-time resident represents 365 days of presence in the community. This could consist, for example, of four part-time residents each staying three months.

The Petition Area's net impact on the City and County's population is projected at 420 FTE in-migrants by 2020. Of this, 380 FTE residents would also be new to the State (i.e., 40 are presumed to relocate from elsewhere in the State).

In 2020, the average daily population, including both primary home and secondary home residents, projected for the Petition Area is estimated at 1,900 persons. This is based on

¹ SMS, Research & Marketing Services, Inc., *Hawai'i Housing Policy Study*, 2003. August 28, 2003.

² Ibid.

assumptions that the 510 primary resident units would be occupied 95% of the time, with an average of 3.0 persons per household, while 640 second home units would be occupied an average of 30% of the year, by an average of 2.3 persons per unit. In 2020, the average daily population of 1,900 would constitute 1.5% of the 'Ewa DP area population (projected by the 'Ewa DP to be about 125,000) and about 0.2% of the island's population (projected by DBEDT at 999,400).

Within the context of changes in population, housing employment and with regard to traditional customs and practices, the proposed action would have a mixed effect on social welfare. The range of attitudes and opinions of Kapolei Area residents towards the Kapolei West project and development in general have recently been characterized in a vote to endorse the Kapolei West project by the Makakilo/Kapolei/Honokai Hale Neighborhood Board. Discussion presented during the Board's deliberations indicate a range of opinions from general support of public policy objectives to push growth to Kapolei, to concern over the consequences of that growth such as school overcrowding, traffic congestion, and loss of open space. The community is well aware that the 'Ewa district is designated as one of Honolulu's two "Development" Plan areas (the second is the Primary Urban Center), designated to receive the lion's share of projected growth within the County. The fulfillment of Kapolei as the second city will provide new employment and housing opportunities for Honolulu residents. Investments in schools and other civic facilities will increase quality of life in the region. Traffic congestion will always be present but will subside as the regional roadway network is constructed and choices for jobs and housing in the region are made available. Campbell Estate and its affiliates have played a leading role in developing the regional roadway plan and implementing key segments of the system. Attaining the long range vision will result in a transformation of the 'Ewa Plain from a rural, plantation-based agricultural economy to an urban/suburban setting centered around the economic center of the City of Kapolei.

5.2 HOUSING

A market assessment for the residential uses of the Kapolei West project was conducted by Mikiko Corporation in 2004. This analysis in this section is based on this assessment. The full report is attached as Appendix H. The market assessment considered 1) economic and demographic trends, 2) housing supply and demand indicators, and 3) sales in comparative developments to project the demand and sales absorption rate for the overall Kapolei West project (including both the Petition Area and Urbanized Area). In short, the assessment projects full absorption of the Kapolei West housing units, including the Petition Area products, by 2020.

5.2.1 *Affected Environment*

5.2.1.1 Economic and Demographic Trends

Section 5.1 Population summarizes population and demographic trends for the Island of O'ahu and the vicinity of the Petition Area. In short, O'ahu's resident population is expected to grow to over 1,000,000 residents by 2025, with the 'Ewa Judicial District (in which the Petition Area is located) supporting a growing percentage of the island's households. O'ahu's household size is

expected to continue to decrease in the future, leading to a greater number of households needing housing. O'ahu's population in its prime primary and secondary homebuying age groups (45 to 74) would continue to grow faster than the 25 to 44 age group.

5.2.1.2 Housing Supply and Demand Indicators

Historical Supply Conditions. In 2004, O'ahu had some 331,200 housing units, of which 91% were estimated to be occupied. Among the occupied units, 55% were owner-occupied and 45% renter-occupied. About 34%, or about 113,700 units, of the island's housing supply are located in Central and West O'ahu, which includes the 'Ewa, Waianae and Wahiawa Judicial Districts. Of these, 93% are believed to be occupied, with 63% of the occupied units owner-occupied and 36% renter-occupied.

New residential building permits on O'ahu are at low levels compared to ten years ago. In 2003, some 2,670 new residential building permits were obtained compared to more than 4,500 per year in 1994 and 1995.

Housing Supply Outlook. Excluding the proposed Kapolei West development, approximately 20,000 units of State-entitled future development were identified within the 'Ewa DP area. (These units do not include developments of less than 100 units.) This figure is slightly lower than what the City identified in its draft documents for the 'Ewa DP 5-Year Review because in several cases, developer plans are less than their entitlements. The 20,000 inventory represents about 19,000 resident units (i.e., primary homes) and about 900 non-resident housing units (i.e., targeted at the resort, second home and offshore retirement home markets).

There are currently some 38,500 resident housing units in the City and County of Honolulu (including the 'Ewa DP Area) that have Commission approval. The majority of projected units are in the 'Ewa and Central O'ahu Development Plan Areas (31,800), with the highest level of buildout (15,100) projected for the 2006-2010 timeframe.

The market study cited data from a 2003 SMS Research & Marketing Services, Inc. report prepared for a consortium of Hawai'i State and County housing departments, which estimated a pent-up demand of some 15,700 homes in 2000 and 16,300 in 2005.

In addition, the number of O'ahu households could increase to about 387,400 in 2025, using the 2.83 person household size projected for 2024. These projections suggest a need to house some 73,800 households over the 20-year period from 2005 to 2025, in addition to the 2005 pent-up demand of 16,300. Combining this future need with projected residential developments and making allowance for vacancies, it appears that without further State entitlement of major housing developments, O'ahu's shortage of primary resident housing units could increase to about 37,400 by 2020 or about 56,600 by 2025.

Market Trends. Rapidly rising home prices reflect the relatively limited production of new housing, combined with strong labor market conditions and highly favorable financing conditions. Both single-family home and condominium resales have shown nearly consistent

increases every year since 1995. In Leeward O'ahu, which includes much of the 'Ewa District, median re-sale prices for both single-family homes and condominiums increased by 22% from the first four months of 2003 to the corresponding period in 2004. New home sales in the 'Ewa DP Area (in which the Petition Area is located) reached 1,147 in 2003, representing 55% of new homes sold on O'ahu that year. In the 'Ewa DP Area, most developer sales were single-family units, reflecting a preference at the entry level of the market for small-lot, detached single-family homes in lieu of townhomes.

Summary of Supply and Demand Factors. As described in Section 5.2.1 above, a 2003 SMS Research & Marketing Services, Inc. report estimated a pent-up demand of some 15,700 homes in 2000 and 16,300 in 2005. With the expected increase in the number of O'ahu households, without further State entitlement of major housing developments, O'ahu could have a shortage of primary resident housing units of about 37,400 by 2020 or about 56,600 by 2025.

5.2.1.3 Comparison Developments

The market assessment included an analysis of 16 recently developed single- and multi-family projects in order to evaluate their development characteristics, product types and market performance. These projects shared one or more of the following characteristics with the proposed Kapolei West project: location in 'Ewa DP area; location in a master-planned golf community; golf-frontage, golf-view, distant ocean views, or other amenity-frontage; location in primary residential community or golf resort community; and first sales within the last ten years.

The analysis found that prices in the comparable single- and multi-family products studied escalated rapidly between 2000 and 2004. Resort multi-family products commanded significantly higher prices than primary residential multi-family products.

At the single-family primary residential community projects sampled, the majority of units appear to be owner-occupied or owned by other Hawai'i residents (over 90%). At the multi-family primary residential community projects sampled, 73% to 90% of the units were owner-occupied.

Within single-family golf resort communities sampled, 16% to 36% of the newest projects were owner-occupied, while 4% to 29% of the neighbor island projects sampled were owner-occupied.

At the primary residential communities, the balance of owners was typically other Hawai'i residents, some of whom may actually be owner-occupants receiving tax bills elsewhere in Hawai'i and some investors. Up to 14% of multi-family primary residential project owners were U.S. mainland residents.

At golf resort communities, the majority of owners typically resided on the U.S. mainland. These represented between 43% and 72%, except for the oldest project (which indicated 30% U.S. mainland ownership). Foreign residents represented only 2% to 9% of owners at multi-family golf resort projects.

5.2.2 Probable Impacts

The Petition Area would increase O'ahu's housing inventory by about 1,180 new homes in a mix of primary and secondary residences. The Proposed Action would provide a benefit by slightly offsetting the large projected shortfall of primary housing units. A detailed discussion is provided below. The development would provide affordable housing opportunities in accordance with applicable City and County of Honolulu affordable housing requirements.

Of Kapolei West's 2,370 total residential units, about 1,180 would be in the Petition Area. Of these, about 520 might be generally oriented toward primary residents and about 660 units generally oriented toward resort/second home buyers. The market study projected that both the primary resident and non-resident housing products of the overall Kapolei West development, including the Petition Area products, would be fully absorbed within 13 years of its first sales (i.e., by 2020, assuming first sales closings in 2008).

The market study projected that the overall Kapolei West development (including products in both the Petition Area and Urbanized Area) is likely to attract a buyer market mix comprised of about 61% primary residents (generally from Hawai'i) and 39% non-residents (resort, second home and/or retiree markets likely to come from the West Coast or other mainland U.S. locations). Because the Petition Area is located at the western end of the overall Kapolei West development, adjacent to the Ko Olina Resort and Golf Course, it can be considered an area of transition between the vacation and second home environment to the west and the primary residential uses to the east. Therefore, the Petition Area is projected to have a greater percentage of second home products (56%) than in the overall Kapolei West development.

O'ahu currently exhibits a strong pent-up demand for primary resident housing. As described in Section 5.5.1.2 above, if no more lands were granted Commission approval on O'ahu, the primary resident housing shortfall could reach about 56,600 by 2025. Considering the 'Ewa DP area's historical 55% share of the O'ahu new housing market, the 'Ewa DP area deficit is projected at 9,520 units in 2010 or 20,570 by 2020. The Petition Area's 520 primary resident housing units would provide 2% to 3% of the demand over the 2005 to 2020 period. Based on sales closings in other 'Ewa District communities, primary resident home sales in Kapolei West (including the Petition Area) are projected to average 112 units per year during its marketing period.

There is an untapped demand and emerging market for resort, second and retirement homes at O'ahu golf resorts outside of Waikiki due to greater publicity and availability of golf residential products (e.g., Ko Olina), the rising population of persons in prime home-buying years, and renewed focus of investors on real estate in stable locations like Hawai'i. These factors indicate a potential increase of 20% to 30% in the non-resident housing market over the next 15 to 20 years. After the build-out of prime sites at the nearby Ko Olina Resort and Marina project, Kapolei West's non-resident products are projected to capture the majority of the potential area demand. For the overall Kapolei West development (including the Petition Area), the market study projected an average sales velocity of 71 units of secondary homes per year during the 13-year development and marketing period (starting in 2008), with full absorption by 2020.

5.2.3 Mitigation

In developing the Petition Area, the Petitioner agrees to provide affordable housing opportunities for low and moderate income residents of the State of Hawai'i to the satisfaction of the City and County of Honolulu. The location and distribution of the affordable housing or other provisions for affordable housing shall be under such terms as are mutually agreeable between Petitioner and the City and County of Honolulu.

5.3 EMPLOYMENT

An economic and fiscal impact assessment for the Kapolei West project was conducted by Mikiko Corporation in 2004. The findings of the assessment are summarized in this section and Section 5.4 Fiscal Impacts. All monetary amounts are in 2004 dollars unless otherwise stated.

5.3.1 Affected Environment

Existing employment in the Petition Area consists of a small number of jobs associated with the quarrying and farming activities partially located within the Petition Area boundaries.

5.3.2 Probable Impacts

The project involves development-related jobs and jobs associated with continuing operations. Employment for both the development and operational periods falls into three general categories:

- Direct jobs; attributable to persons or activities directly resulting from the proposed development;
- Indirect jobs; created as businesses directly involved with a project make expenditures for additional supplies or services in the local economy; and
- Induced jobs; created as workers or businesses that derived income from the project's direct or indirect impacts spend their associated earnings on consumer goods and services.

During its 15-year development phase (from 2006-2020), the Petition Area could support a total of about 5,800 FTE development-related jobs, or an annual average of about 390 direct, indirect and induced FTE jobs per year. The direct jobs would primarily consist of on-site construction employment, but some professional services and administrative positions would likely be located elsewhere on O'ahu. Total development-related earnings from the Petition Area are estimated at \$258 million, or average annual personal earnings of \$17.2 million.

By its completion in about 2020, the Petition Area could support some 260 FTE operational period jobs per year, with total annual average earnings of about \$13.1 million. The direct operational jobs could include a variety of types and levels of work, including real estate brokerage, management, sales and marketing, and maintenance. Average annual FTE earnings supported by all Petition Area employment (i.e., direct, indirect and induced) could

average about \$45,000 for development-related employment and \$50,000 for operations-related employment.

5.4 FISCAL IMPACTS

The Proposed Action's fiscal impacts were estimated by comparing its anticipated impacts on government revenues to the government service costs associated with the additional population the Proposed Action could attract to the State and County. All monetary amounts are in 2004 dollars unless otherwise stated.

5.4.1 Affected Environment

City and County real property tax revenues that would be paid for the Petition Area if it were to continue in its current land use and zoning designations were estimated at some \$100,000 per year³.

5.4.2 Probable Impacts

The development of the Petition Area would generate significant on-going economic and fiscal benefits for Hawai'i residents, as well as for the County and State governments. Development of facilities would generate employment and consequent income and taxes. In addition, by attracting new residents to O'ahu and generating additional real estate sales activity, the Proposed Action is expected to support long-term economic impacts, including additional consumer expenditures, employment opportunities (described in Section 5.3 above), personal income (described in Section 5.3 above) and government revenue enhancement.

5.4.2.1 Revenues

For the City and County, the Proposed Action's most significant fiscal impact would be the higher real property taxes it would generate compared to those currently paid. If the proposed Commission approval and subsequent rezoning were obtained, the Petition Area would generate an additional \$1.8 million in annual real property tax revenue (over the amount currently paid) for the City and County after its completion. This is based on higher assessed values associated with the Petition Area's proposed residential zoning (versus Agricultural zoning).

In addition to real property taxes, another approximately \$100,000 in other revenues would be generated annually for the City and County. These revenue sources include, among others, fees for liquid fuel, utility franchise, motor vehicle weight, and miscellaneous licenses, fees and fines.

³ Current real property tax revenue is \$72,000 based on information provided by City and County of Honolulu Department of Budget and Fiscal Services, Real Property Assessment Division, October 2004.

For the State, the Proposed Action would generate the following additional operating revenues: general excise taxes on development costs, real estate sales and marketing, and new spending by Petition Area residents; individual income taxes on development and operational period employment income; and other miscellaneous payments to the State by new residents originating from outside Hawai'i. By 2020, annual State revenues attributable to the development of the Petition Area and its associated in-migration of residents are estimated at \$5.4 million.

5.4.2.2 Costs

Both the State and County governments can be expected to incur additional operating expenses in supporting the Petition Area's in-migrants (i.e., residents or workers new to the City and County). According to an analysis of the City and County's 2004-2005 operating budget (net of federal and State sources), Honolulu City and County spends some \$1,100 per FTE resident per year. The expenditures support a range of services, such as public safety, public roads and transportation, affordable housing, and the sewer system. Based on this, by 2020 when the project's resident population stabilizes, the City and County would incur additional operating expenditures of about \$0.5 million annually to serve the Petition Area's in-migrant population.

A similar analysis of State government operating appropriations for FY 2002-2003 indicates that the State spends about \$4,000 per year per FTE resident. By 2020, the State could expend an additional \$1.5 million per year to support the Petition Area's residents who are new to Hawai'i.

5.4.2.3 Net Fiscal Benefits

The fiscal analysis evaluated four benchmark periods throughout the development period of the Proposed Action: 2010, 2015, 2020 and beyond 2020. In each of these years, the analysis indicated that Honolulu County government operating revenues attributable to the Petition Area would exceed operating expenses. By 2020, when the Petition Area's population has stabilized, net additional operating revenues attributable to the Petition Area could reach \$1.4 million per year, or a revenue/expenditure ratio of 4.0.

The State government's operating revenues are also anticipated to exceed its additional operating expenses attributable to the Petition Area. Net additional revenues due to the Petition Area are estimated to reach \$3.9 million annually in 2020, for a revenue/expenditure ratio of 3.6.

Beyond the construction period (i.e., beyond 2020), net operating revenue to expenditure ratios for the Petition Area only are anticipated as 4.1 for Honolulu County and 0.9 for State government. The slight potential "loss" for the State within the Petition Area is nominal and corresponds with State fiscal policy which generally does not seek to "profit" from primary residences. For the project as a whole, net operating revenue to expenditure ratios are anticipated to remain breakeven or better, representing 8.2 for Honolulu County (some \$5.2 million per year in additional operating revenues, largely real property taxes compared to some \$0.6 million per year in additional operating costs) and 1.0 for State government (some \$2.1

million in additional operating revenues against an equivalent \$2.1 million in additional operating costs).

5.5 TRADITIONAL CUSTOMS AND PRACTICES

In order to address the effects the proposed development activity may have on Native Hawaiian practices, culture and traditions, CSH prepared a *Cultural Impact Assessment* for the Kapolei West project. The study findings are summarized below. The full report is included as Appendix I.

During the cultural impact assessment, efforts were made to contact Hawaiian cultural organizations, government agencies and individuals who might have knowledge of or concerns about traditional cultural practices specifically related to the overall Kapolei West development area (including the Petition Area). In the conduct of the assessment, 23 individuals were contacted as possible leads, leading to interviews with two knowledgeable informants. A list of individuals consulted and their affiliations is found in Appendix I.

5.5.1 *Affected Environment*

Based on personal consultations and examination of historic documents and existing archaeological information, the cultural impact assessment concluded that the Petition Area is not associated with traditional cultural practices for subsistence and religious purposes and does not provide access to other areas in order to exercise those practices (i.e., gathering of plant and marine resources; presence of burials, historic properties and storied places; documentation of trails). There is no specific documentation of plant gathering within the Petition Area during traditional Hawaiian times and no ongoing practices related to traditional gathering were identified during the assessment. In traditional Hawaiian times, Hawaiians may have crossed the Petition Area from more upland areas to access marine resources, but intermittent development for commercial and military uses throughout the twentieth century would have eliminated much of the surface sites related to traditional Hawaiian culture that may have been formerly present. These activities would have also restricted access to the Petition Area for any ongoing cultural practices.

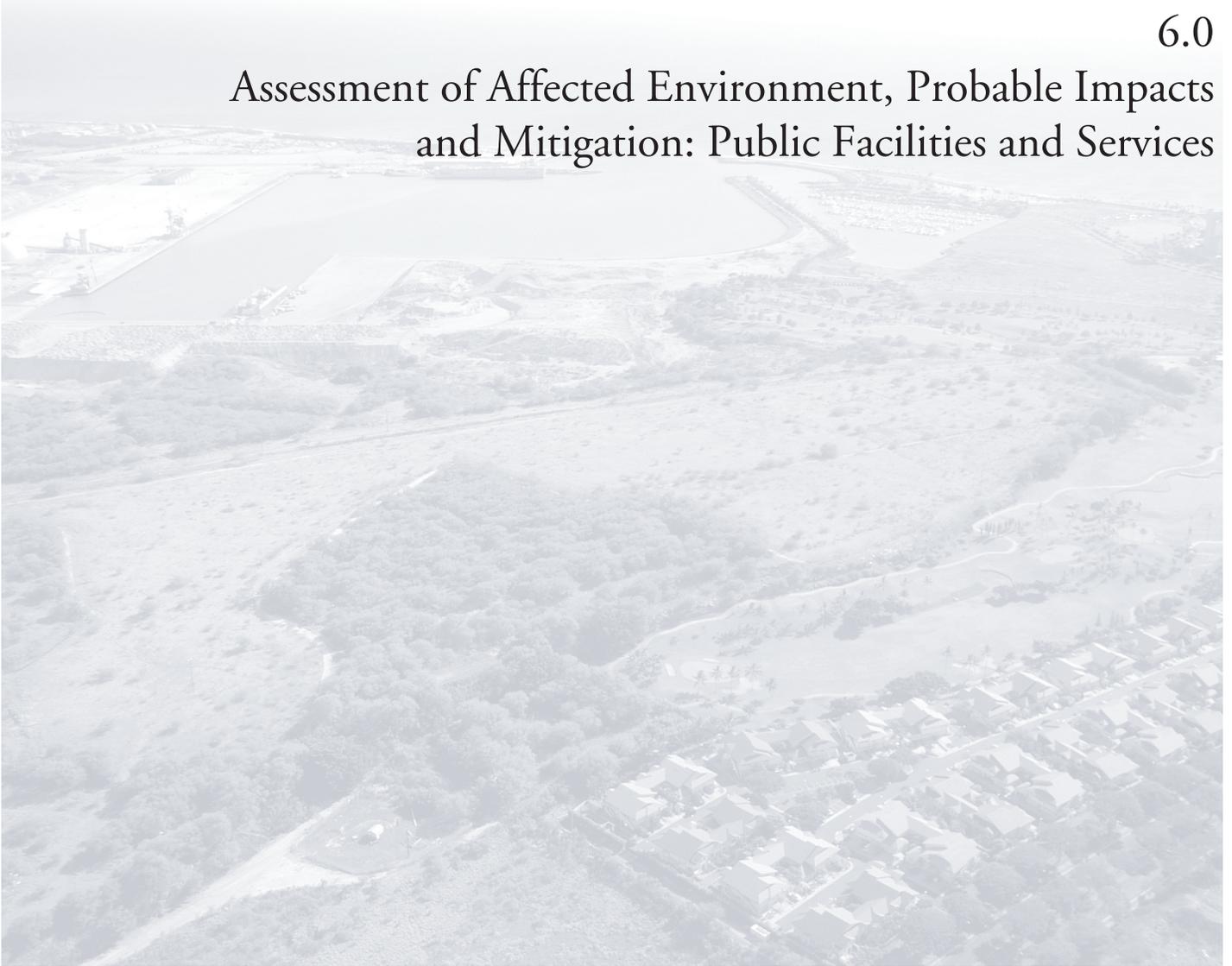
Historic documentation and archaeological studies indicate that the Petition Area was probably never permanently inhabited during traditional Hawaiian times due to its location in a relatively barren and waterless area. However, bird catchers, gatherers, and fisherman traveling to the coast could have used the area for temporary shelter. A large sinkhole (SIHP Site 50-80-12-9545) and a burial cave (SIHP Site 50-80-12-9633) located within the Petition Area have been identified as archaeological preserves and are restricted to the public by fencing. The sinkhole may have served as habitation during traditional Hawaiian times.

5.5.2 Probable Impacts

According to the cultural impact assessment, the Proposed Action would not adversely affect rights customarily and traditionally exercised for subsistence, cultural and religious purposes due to the lack of former, contemporary or continuing cultural practices within the Petition Area. The Proposed Action would have minimal or no impact on Hawaiian culture, its practices and traditions. Under the Proposed Action, the two historic sites (sinkhole and burial cave) would continue to be preserved and restricted. Therefore, no mitigation is necessary.

6.0

Assessment of Affected Environment, Probable Impacts
and Mitigation: Public Facilities and Services



6.0 ASSESSMENT OF AFFECTED ENVIRONMENT, PROBABLE IMPACTS AND MITIGATION: PUBLIC FACILITIES AND SERVICES

6.1 TRANSPORTATION

Wilbur Smith Associates prepared the project Traffic Impact Assessment attached as Appendix J. The following section summarizes the report findings.

6.1.1 *Affected Environment*

6.1.1.1 Existing Roadway System

The major roadway system near the Petition Area is depicted in Figure 11. The major roadways within the area are discussed in the following paragraphs.

- **H-1 Freeway** - This six-lane freeway, with three travel lanes in each direction is the major east-west roadway in the 'Ewa District and connects the 'Ewa area to central Honolulu and other areas of O'ahu.
- **Farrington Highway** - This State highway serves east-west travel through the 'Ewa District, and serves as the major regional route westward from the terminus of the H-1 Freeway near Kalaeloa Boulevard. It is a four-lane highway, with separate left-turn lanes, from the Kapolei Golf Course Road westward into the City of Kapolei to Kamokila Boulevard.
- **Kapolei Parkway** - This major roadway is planned to be a major traffic artery connecting the City of Kapolei to the Ko Olina area to the west and to the Villages of Kapolei and other communities to the east. Within the Kapolei area, the only completed portions of the roadway are the one-block segment between Kalaeloa and Kamokila Boulevards and a short section on the Honolulu side of Fort Barrette Road that provides access to the Kapolei Middle and High Schools, as well as the Villages of Kapolei. These segments have a median-divided roadway with two or more traffic lanes and a bicycle lane in each direction.
- **Aliinui Drive** – This four-lane highway with landscaped median provides access to the Ko Olina area from Farrington Highway. The junction with Farrington Highway is a trumpet-type interchange. The cross street approaches to Aliinui Drive are controlled by STOP signs. At present, a guard booth is located near Farrington Highway to monitor access into Ko Olina. STOP signs are posted along Aliinui Drive at the two OR&L rail crossings as the means of crossing protection.

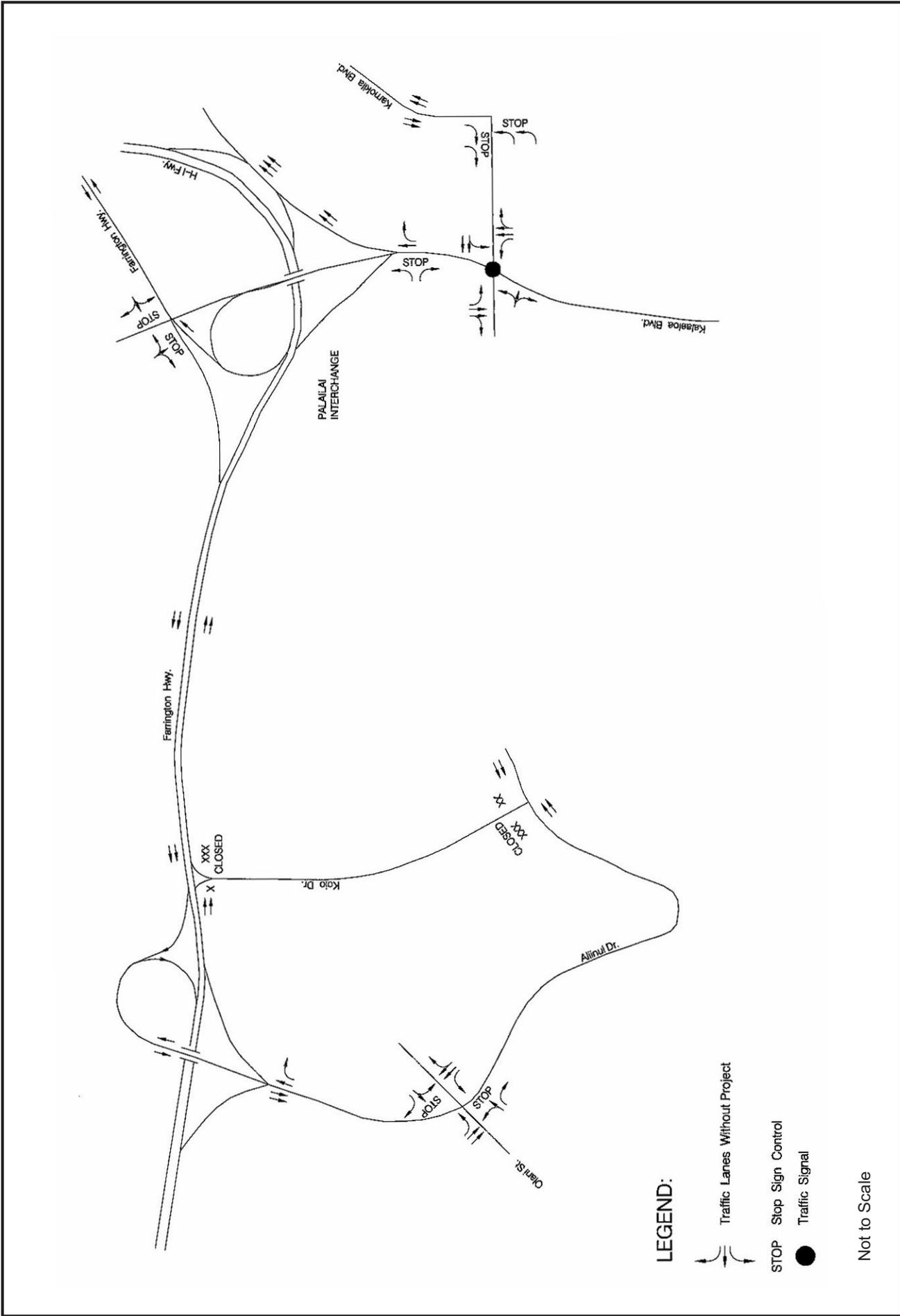


Figure 11

Existing Roadway Network

Kapolei West Expansion Area
Oahu, Hawaii

- **Kalaeloa Boulevard** – This major roadway provides access from the H-1 Freeway at the Palailai Interchange to the Kapolei Business Park, Campbell Industrial Park, and Barbers Point Harbor. The roadway also provides access to the City of Kapolei area via the Kapolei Parkway connection to Kamokila Boulevard. Kalaeloa Boulevard is a four-lane divided roadway from the H-1 Freeway to Malakole Road. Traffic signal controls are provided at its intersection with the Kapolei Parkway.
- **Kamokila Boulevard** - This major roadway connects Farrington Highway to the Kapolei Parkway and Kalaeloa Boulevard and provides access to the center of the City of Kapolei. Kamokila Boulevard provides two through lanes in each direction. The roadway has a landscaped median area for most of its length and has left-turn lanes at the intersections with cross streets and driveways. At present, the only traffic signal control is located at its intersection with Farrington Highway. West of the intersection with Farrington Highway, the cross street intersections are presently controlled by STOP signs on the side-street approaches. The speed limit is 25 mph.
- **Makakilo Drive-Fort Barrette Road** – Makakilo Drive provides the only access to the Makakilo community with the roadway connecting Makakilo to the Farrington Highway - H-1 Freeway corridor. The roadway continues makai as Fort Barrette Road to provide access to the Villages of Kapolei and the Kalaeloa Redevelopment Area (former Barbers Point Naval Air Station). The Makakilo Drive portion of the corridor is a four-lane roadway plus turn lanes in the section near the freeway. The Fort Barrette Road segment of the roadway has one traffic lane in each direction, plus turn lanes, from the Kalaeloa Redevelopment Area to south of Farrington Highway.
- **Koio Drive** – This four-lane roadway with a landscape median is intended to connect Aliinui Drive to Farrington Highway. The roadway has been barricaded and unused since its construction.
- **Olani Street** – This two-lane street provides access to the Ihilani Resort and Spa on the makai side of Aliinui Drive and to several existing and planned residential developments along the mauka side of Aliinui Drive. The approaches to Aliinui Drive are controlled by STOP signs.

6.1.1.3 Existing Traffic Conditions

Traffic conditions were analyzed for the weekday morning and afternoon peak one-hour traffic volumes. The analyses were made for the key intersections near the Petition Area, and for the H-1 Freeway travel lanes east of the Makakilo Interchange.

Levels of Service: The main effects of additional project-related traffic would occur at roadway intersections. The results of traffic analyses are presented using the “level of service” concept. The analyses estimated average delays based on intersection configuration, traffic volumes, traffic characteristics, and other factors.

These delays are related to the levels of service. Six levels of service, ranging from “A” to “F” are used; Level of Service (LOS) A describes free flow with no congestion or delay while LOS F

describes congested conditions and excessive delays. LOS B describes a condition that is not free flow, but delays or restrictions to maneuvering are minimal. Some restriction to flow and reasonable delays at intersections are described by LOS C. LOS D describes conditions in which long delays occur at intersections and travel on roadway segments appear congested, but flow is stable. LOS E describes near-capacity conditions, with very long delays at intersections and flow on roadways are heavy and approach instability. LOS F represents excessive delays at intersections.

LOS D or better conditions are considered acceptable in urban areas. The roadways analyzed as part of the traffic study are within the urbanized area of O’ahu.

Existing Intersection Conditions

The overall traffic conditions at each of the key intersections are summarized in Table 9 for the weekday morning and afternoon peak traffic hours.

**Table 9
EXISTING TRAFFIC CONDITIONS AT KEY INTERSECTIONS**

Intersections	Weekday Morning Peak Hour			Weekday Afternoon Peak Hour		
	V/C	ADPV	LOS	V/C	ADPV	LOS
Farrington Hwy.-Makakilo Dr.-Fort Barrette Rd.	0.80	74.3	E	0.86	68.0	E
Farrington Hwy.-Kamokila Blvd.	0.68	21.7	C	0.59	16.9	B
Kalaeloa Blvd.-Kapolei Pkwy.	0.63	34.6	C	0.73	28.8	C
Kalaeloa Blvd.-Farrington Hwy Mauka-bound Left Turn	0.44	25.7	D	1.97	476.8	F
Aliinui Dr.-Olani St. Mauka-bound Left Turn	0.10	11.5	B	0.13	14.0	B
Makai-bound Left Turn	0.01	11.5	B	0.01	13.5	B
V/C = Ratio of the traffic volume to the theoretical capacity of the intersection. ADPV = Average delay per vehicle, in seconds. LOS = Level of service. * = Not calculated since conditions outside normal range and represent highly unstable traffic flow.						
Wilbur Smith Associates; June 16, 2004.						

The signal-controlled Kalaeloa Boulevard intersection with Kapolei Parkway operated at very acceptable conditions in both peak hours with the existing traffic volumes. The morning peak hour traffic approximated 63% of intersection capacity while the afternoon peak hour traffic amounted to 73% of capacity. Average delay per vehicle was a very acceptable LOS C in both peak hours.

The traffic turning left from the STOP sign-controlled Kalaeloa Boulevard approach onto the Westbound On-Ramp at the Farrington Highway intersection experienced long delays in the afternoon peak hour. The HCS analysis indicates an average delay of about 6 minutes per

vehicle. Field observations noted the formation of queues of 5 to 10 vehicles at times in the peak hour.

Peak hour traffic entering the Aliinui Drive intersection from Olani Street experiences very little delay in waiting for gaps at these STOP sign-controlled approaches. The left turns experience average delays equivalent to LOS B in both peak hours.

The most congested intersection in the area — the Farrington Highway intersection with Makakilo Drive/Fort Barrette Road — is located at some distance from the Kapolei West project site. Traffic volumes at this intersection approximated 80% of the estimated intersection capacity in the morning peak hour and 86% in the afternoon peak hour. However, the intersection operations resulted in comparatively long average delay times with Level of Service (LOS) E conditions due to the number of signal phases and long cycle lengths.

H-1 Freeway Conditions

Existing traffic conditions were assessed for the section of the H-1 Freeway east of the Makakilo Interchange. The analysis indicates that the traffic traveling this section should operate at LOS B or C in each peak hour and travel direction.

Public Transportation

The City and County of Honolulu provides public transportation services to the areas adjacent to the Kapolei West development area. These include a number of TheBus fixed route bus service that pass near the project site. TheHandiVan provides curb-to-curb service for persons who have difficulty in accessing the fixed route service.

TheBus Routes – The existing bus routes that provide service near the Kapolei West project site include the following:

Route C Country Express – Route C provides an express/limited stop service through the City of Kapolei area, with the route extending to the Honolulu Downtown area and Ala Moana Center to the east and along the Waianae Coast to Makaha to the west. The service operates seven days a week from about 4:30 AM to 11:00 PM. Route C uses Kalaeloa Boulevard between the H-1 Freeway and the Kapolei Parkway.

Route 40 Honolulu-Makaha – This trunk route provides regular bus service along the same general route as Route C. Within the City of Kapolei, it provides service along surface streets between the Makakilo and Palailai Interchanges, with the route using Makakilo Drive, Farrington Highway, Kamokila Boulevard, Kapolei Parkway, and Kalaeloa Boulevard. Service is provided seven days a week from about 5:00 AM to 9:30 PM.

Route 413 Campbell Industrial Park – This local route provides service from the Kapolei Transit Center to the Campbell Industrial Park and Barbers Point Harbor areas, with the route using the Kapolei Parkway and Kalaeloa Boulevard. The route operates from 5:30 AM to 8:00 AM and from 3:00 PM to 6:00 PM.

Kapolei Transit Center – The City and County of Honolulu has recently completed development of a Transit Center on the alignment of the future extension of Wakea Street mauka of Kamokila Boulevard. The Transit Center provides a transfer site for all of TheBus local and regional routes that serve the City of Kapolei and the surrounding communities.

6.1.2 Probable Impacts

6.1.2.1 Future Conditions Without the Proposed Action

Future travel on the area roadways without the Petition Area were forecast by estimating traffic to/from new developments in the City of Kapolei-Ko Olina area, and then adding these new trips to the existing travel volumes. Traffic was also forecast to/from new development anticipated in the other areas near the City of Kapolei that would travel through the project area. Traffic conditions were then analyzed for the key intersections and roadways that would be affected by traffic generated by the Kapolei West project.

Most of the lands within the City of Kapolei are expected to be developed by 2014, with development of several parcels at the perimeter anticipated to extend from 2014 to 2020. Substantial additional development is also expected to occur in the areas near the City of Kapolei.

GROWTH OF H-1 FREEWAY THROUGH TRAFFIC

A growth factor was applied to existing traffic volumes on the H-1 Freeway to reflect increased travel to/from the Waianae Coast areas west of Ko Olina. The growth factor was determined from the traffic counts for the State DOT count station located on the H-1 Freeway west of Makakilo Drive (count station #H10-A). The historic counts indicated an average annual growth rate of 0.8% per year between January 1999 and January 2002.

The 0.8% annual growth rate was assumed to continue through the study period. With this rate, the 2002 freeway volumes are estimated to increase 10% by 2014 and 15.4% by 2020. These volumes are further increased by the forecast trips to/from the new development within and near the City of Kapolei as identified in the preceding sections of this chapter.

PLANNED ROADWAYS

A number of transportation projects have been planned for the 'Ewa District that would affect travel to and within the Kapolei area. Most of these projects have been identified and/or confirmed through the O'ahu Metropolitan Planning Organization (OMPO) transportation planning process⁴, as well as the 'Ewa Highway Impact Fee Program studies and plans⁵. The OMPO process assesses the long-range transportation needs to serve forecast travel over the next 20 or more years, but also selects a high-priority short list of projects and programs for

⁴ *Transportation for O'ahu Plan, TOP 2025*, prepared for OMPO by Carter-Burgess, April 6, 2001.

⁵ *Ewa Highway Impact Fee Program*, prepared for State of Hawai'i Department of Transportation by Kaku Associates, Inc. July, 2002.

funding within the next three years as covered by the its adopted Transportation Improvement Program (TIP). The 'Ewa Highway Impact Fee Program ('Ewa HIFP) addresses the travel needs through 2010 and establishes a developer-funded source to pay for 20% of the regional roadways needed in the 'Ewa District.

A number of roadway improvements are anticipated by the year 2014 and 2020 analyses years, either as regional highway improvements or as part of area developments. The roadway improvements assumed to be in place *without* the Kapolei West development are discussed in the following sections.

2014 Roadway Improvements

The new Kapolei Interchange, the widening of Kalaeloa Boulevard to a six-lane roadway, and the connection of the Kapolei Parkway between Fort Barrette Road and Kalaeloa Boulevard are the key area roadway improvements anticipated near the Kapolei West area during the 2004-2014 period. Figure 12 presents the 2014 roadway network in the vicinity of the project site. For the purposes of the Kapolei West traffic analyses, it is assumed that the Kapolei Parkway would not be extended from Kalaeloa Boulevard to connect to Aliinui Drive by 2014 unless the Kapolei West project is developed within this time frame.

2020 Roadway Improvements

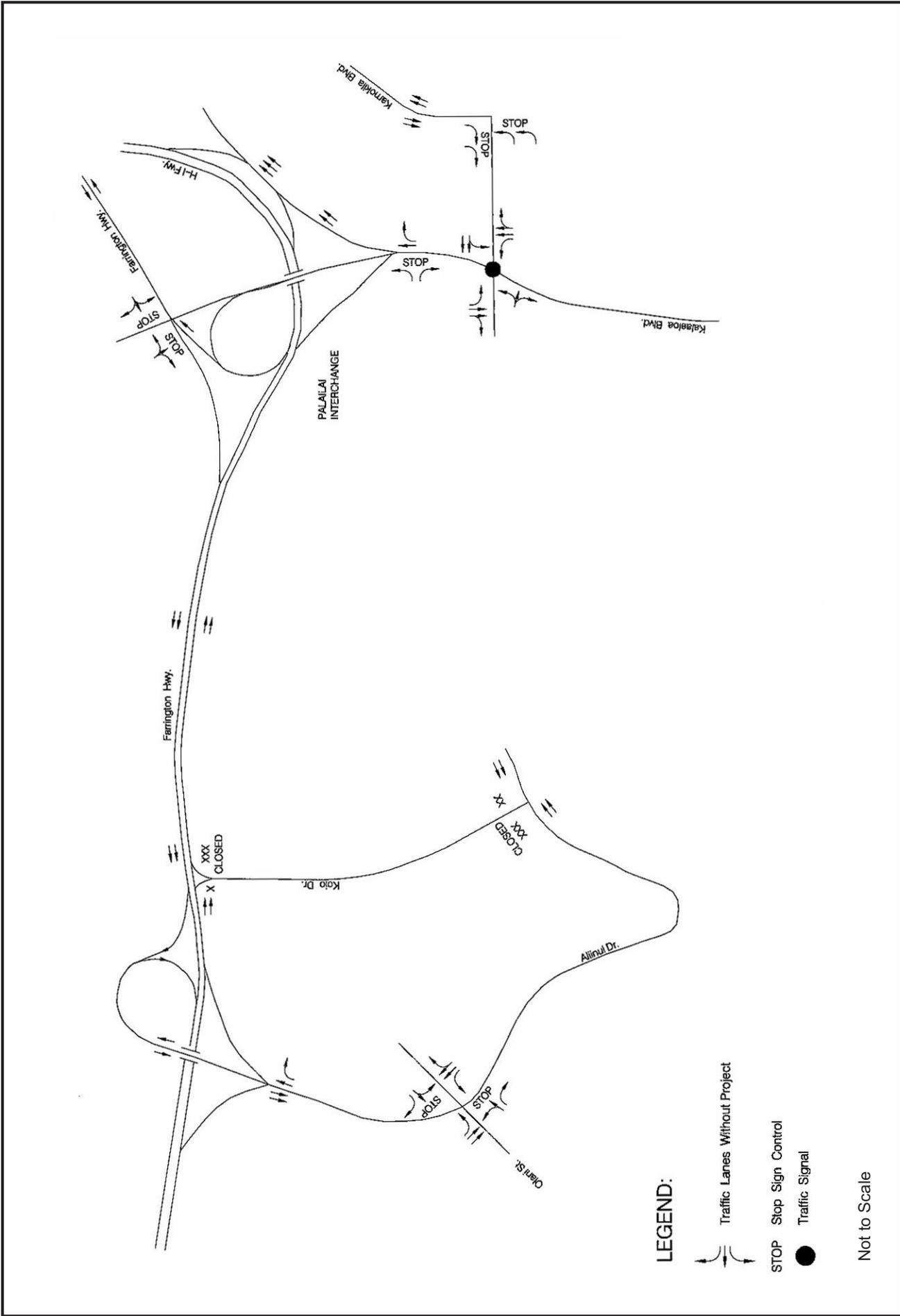
The key new roadway improvements near the Kapolei West project site between 2015 and 2020 are expected to include the extension of the Kapolei Parkway between Kalaeloa Boulevard and Ko Olina, a new Makaiwa Hills interchange with Farrington Highway to serve the Makaiwa Hills development, connecting to Road "D" within the Kapolei West project, and the construction of the Hanua Street extension. Figure 13 presents the resultant roadway network and numbers of traffic lanes near the project site in 2020. Descriptions of the roadway improvements that most directly affect the Kapolei West area are included in the following paragraphs.

Roadway Improvements Not Included by 2020

Several of the roadways included in the area roadway plans were not included within the roadway network used as the initial baseline system for the traffic analyses including the Makakilo Interchange Eastbound Off-Ramp and the Makakilo Drive Extension. The former could potentially worsen traffic operations at that intersection while the latter is identified as a long-range OMPO plan to construct of a new roadway to provide a second access for the Makakilo community.

PUBLIC TRANSPORTATION

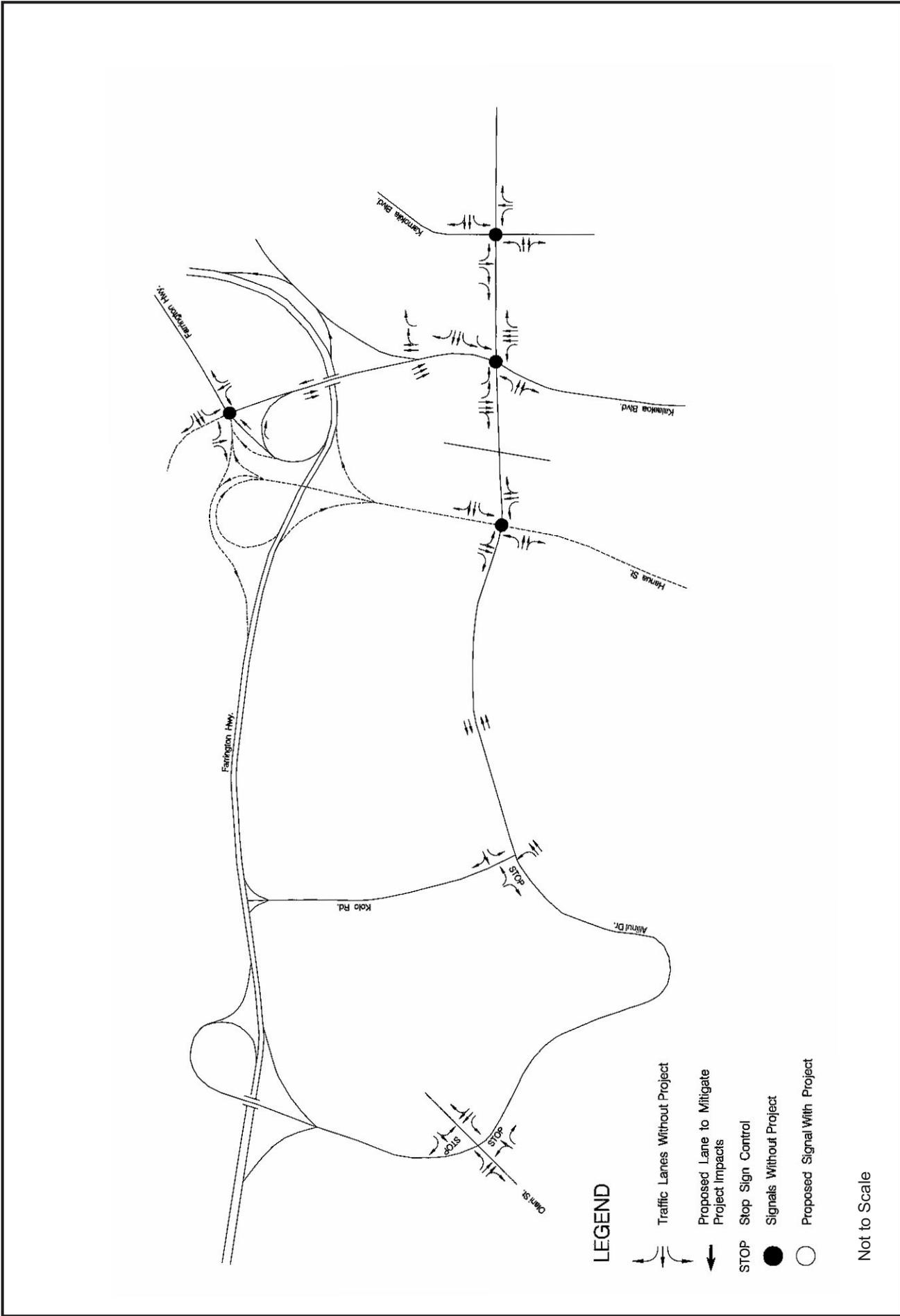
Bus routes for the area are expected to be modified to increase coverage of the Kapolei area as development occurs in new areas, and service increased as the employment and number of residents increase. It is expected that TheBus service would be provided along the Kapolei Parkway between Kalaeloa Boulevard and Ko Olina once this extension has been completed. The City & County's Transit Center would be relocated when the Kapolei Interchange is constructed, as the extension of Wakea Street would be used to connect the City of Kapolei to the new interchange. The new Transit Center is planned for a site along Kapolei Parkway near Kamaaha Avenue.



2014 Roadway Network Without Kapolei West Project

Kapolei West Expansion Area
O`ahu, Hawai`i

Figure 12



2020 Roadway Network Without Kapolei West Project

Kapolei West Expansion Area
O`ahu, Hawai`i

Figure 13

2014 PEAK HOUR TRAFFIC CONDITIONS (WITHOUT PROJECT)

The weekday peak hour traffic volumes were forecast for 2014 without the Kapolei West development (and the Proposed Action) based on the new developments and roadways described in the preceding sections. The peak hour traffic conditions were analyzed for the key locations that would be affected by traffic traveling to/from Kapolei West development.

Trip Generation

The numbers of vehicle trips generated by the new development within and near the City of Kapolei were based on standard trip rates compiled by the Institute of Transportation Engineers (ITE).⁶

The anticipated growth within the City of Kapolei by 2014 would increase the morning peak hour trips by about 4,000 trips, and the afternoon peak hour by about 6,000 new trips on area roadways. With the predominantly commercial uses, the majority of the trips in the morning peak hour are traveling to the City of Kapolei land uses, and in the afternoon the majority of trips are departing these uses.

By 2014, other new development near the Kapolei West project area (Ko Olina, Kapolei Business Park, Villages of Kapolei, etc.) is estimated to generate an increase of about 5,000 and 6,600 new vehicle trips in the morning and afternoon peak hours, respectively.

2014 Peak Hour Traffic Conditions

Traffic conditions for the year 2014 weekday traffic peak hours without Kapolei West project traffic are summarized for the key intersections in Table 10. Traffic conditions are given only for those key intersections that would be most directly affected by the Kapolei West (and Petition Area) development traffic.

⁶ *Trip Generation, Sixth Edition*, Institute of Transportation Engineers, 1997.

**Table 10
2014 TRAFFIC CONDITIONS AT KEY INTERSECTIONS
(WITHOUT KAPOLEI WEST)**

Intersections	Weekday Morning Peak Hour			Weekday Afternoon Peak Hour		
	V/C	ADPV	LOS	V/C	ADPV	LOS
Kalaeloa Blvd.-Farrington Hwy	0.77	43.0	D	1.23	150.3	F
Kalaeloa Blvd.-Kapolei Pkwy.	1.11	86.3	F	0.96	60.8	E
Kapolei Pkwy.-Kamokila Blvd.	0.53	25.1	C	0.75	30.0	C
Aliinui Dr.-Koio Dr. Makai-bound Left Turn	0.01	10.9	B	0.02	12.3	B
Aliinui Dr.-Olani St. Mauka-bound Left Turn Makai-bound Left Turn	0.46	38.7	E	1.46	318.3	F
	0.18	19.9	C	0.27	36.9	E

V/C = Ratio of the traffic volume to the theoretical capacity of the intersection.
ADPV = Average delay per vehicle, in seconds.
LOS = Level of service.

Wilbur Smith Associates; November 17, 2004.

Kalaeloa Boulevard-Kapolei Parkway – The forecast 2014 traffic would exceed capacity of this intersection in the morning peak hour by 11% with average vehicle delay at LOS F. In the afternoon peak hour, the forecast traffic would approximate 96% of capacity, with overall intersection delays at LOS E. The potential problem in both peak hours would result from the high volumes of ‘Ewa-bound traffic on turning left and right from westbound Kapolei Parkway. The intersection could be improved by the construction of a second (double) left-turn lane and a right-turn lane to accommodate the high volumes of vehicles turning left from westbound Kapolei Parkway. The intersection would provide acceptable conditions with these lanes as shown below.

Peak Hour	Volume-to-Capacity Ratio	Ave. Delay Per Vehicle (sec.)	Level of Service
Morning	0.91	53.4	D
Afternoon	0.86	44/6	D

Farrington Highway-Kalaeloa Boulevard – The proposed Makaiwa Hills development would add a mauka leg to this intersection, which the developer plans to use as its only access through 2015. The combination of the additional intersection leg and the Makaiwa Hills traffic with the high volume of traffic turning left from the present makai leg of Kalaeloa Boulevard onto the westbound on-ramp would result in traffic volumes that exceed the intersection capacity by an estimated 23% in the afternoon peak hour.

Neither the construction of either a second (double) left-turn lane on the mauka-bound approach of Kalaeloa Boulevard, nor the provision of a second westbound through lane on Farrington

Highway, would individually improve intersection conditions to acceptable levels with the forecast afternoon peak hour traffic. The combination of both the northbound second left-turn lane and the two westbound through lanes on Farrington Highway would be needed to provide acceptable conditions for 2014 traffic without the project as shown below:

Peak Hour	Volume-to-Capacity Ratio	Ave. Delay Per Vehicle (sec.)	Level of Service
Morning	0.49	37.6	D
Afternoon	0.70	35.8	D

Aliinui Drive-Olani Street – With the continuation of the present STOP sign control, the forecast 2014 afternoon peak hour traffic would result in very long delays for vehicles turning left from the mauka-bound approach of Olani Street that could be addressed by the installation of a traffic signal. With the installation of a traffic signal, the existing lanes would accommodate the forecast 2014 traffic at acceptable levels as summarized below:

Peak Hour	Volume-to-Capacity Ratio	Ave. Delay Per Vehicle (sec.)	Level of Service
Morning	0.42	16.7	B
Afternoon	0.59	20.8	C

H-1 Freeway – The planned development between 2003 and 2014 is estimated to increase the total two-way peak hour traffic on the H-1 Freeway east of the Makakilo Interchange by about 38% in the morning peak hour and 44% in the afternoon peak hour. Planned development is also projected to result in a substantial shift in travel direction. At present, about 55% of the traffic in each peak hour travels in the peak direction – Honolulu-bound in the morning and Waianae-bound in the afternoon. The planned new development would result in more-Kapolei-bound trips in the morning and Honolulu-bound trips in the afternoon, with the change resulting in a nearly even split in travel direction on the H-1 Freeway in each peak hour.

With the changes in directional flow, the peak hour traffic conditions are estimated at LOS C in both travel directions on the H-1 Freeway east of the Makakilo Interchange, with the estimated average travel speeds (62 mph) very near free-flow speeds. Traffic volumes would be at 65% or less of the estimated freeway capacity.

2020 TRAFFIC CONDITIONS (WITHOUT PROJECT)

The weekday peak hour traffic volumes were forecast for 2020 without the Kapolei West development based on the new developments and roadways described in the preceding sections (Table 11). The peak hour traffic conditions were analyzed for the key locations that would be affected by traffic traveling to/from the Kapolei West project, which is planned for full development by 2020.

**Table 11
2020 TRAFFIC CONDITIONS AT KEY INTERSECTIONS
(WITHOUT KAPOLEI WEST)**

Intersections	Weekday Morning Peak Hour			Weekday Afternoon Peak Hour		
	V/C	ADPV	LOS	V/C	ADPV	LOS
Kalaeloa Blvd.-Farrington Hwy	0.74	43.8	D	1.04	67.4	E
Kapolei Pkwy.-Kamokila Blvd.	0.72	32.4	C	1.01	80.2	F
Kapolei Pkwy.-Kalaeloa Blvd.	0.90	53.2	D	0.91	48.6	D
Kapolei Pkwy.-Hanua St. Ext.	0.89	70.6	E	1.04	88.2	F
Aliinui Dr.-Koio Dr. Makai-bound Left Turn	0.03	14.5	B	0.05	23.1	C
Aliinui Dr.-Olani St. Mauka-bound Left Turn	0.46	38.7	E	1.24	220.5	F
Aliinui Dr.-Olani St. Makai-bound Left Turn	0.17	19.6	C	0.24	32.8	D
V/C = Ratio of the traffic volume to the theoretical capacity of the intersection. ADPV = Average delay per vehicle, in seconds. LOS = Level of service.						
Wilbur Smith Associates; November 22, 2004.						

6.1.2.2 Future Conditions with and without the Petition Area

TRIP GENERATION

The planned development for the Urbanized Area of the Kapolei West by 2014 would generate an estimated 1,424 vehicle trips to or from the planned land uses in the morning peak hour and 2,309 vehicle trip ends in the afternoon peak hour, as summarized in Table 12. In the afternoon peak hour, approximately one-half of the trips would be to or from the residential uses and one-half to or from the commercial uses. In the morning peak hour, the planned middle school would generate about 20% of the project trips. Note that some trips between land uses within the project area are counted twice, once at the origin and a second time at the destination.

With the inclusion of the Petition Area, some of the development by 2014 would likely occur in the Petition Area parcels since these would likely be more marketable to part-time residents. A similar total number of residential units is assumed to be developed by 2014. Since units occupied by part-time residents generate fewer trips than full-time residents, as well as the delay to develop the Parcel L Mixed Use area, the scenario with development in both the Urbanized and Petition Areas by 2014 is estimated to generate fewer total trips to/from the project development by 2014. About 10% fewer trips are estimated for the morning peak hour and 16% fewer in the afternoon peak hour.

**Table 12
VEHICLE TRIP GENERATION
FOR PROJECT SCENARIOS**

Item	Morning Peak Hour			Afternoon Peak Hour		
	Total	Enter	Exit	Total	Enter	Exit
Year 2014						
Urbanized Area Scenario	1,424	592	832	2,309	1,233	1,076
Petition Area Scenario	1,290	550	740	1,939	1,028	910
Year 2020						
With Project Build-Out	1,881	745	1,136	2,835	1,522	1,313

Wilbur Smith Associates; November 29, 2004

Full build-out of the Kapolei West project, including the Petition Area, expected by 2020, is estimated to generate 1,881 and 2,835 vehicle trips to or from the project area in the morning and afternoon peak hours, respectively. The Petition Area would contribute approximately 24% of the total trips generated by the Kapolei West project (Petition Area and Urbanized Area) in the morning peak hour and 18.5% of the total Kapolei West trips in the afternoon peak hour. After allowance of pass-by trips, the project would result in an estimated total increase of 1,801 and 2,404 additional vehicle trips on the area roadways in the morning and afternoon peak hours, respectively. The Petition Area would comprise 25% of the additional trips in the morning peak hour and 22% in the afternoon peak hour. With full development, the commercial uses are estimated to generate about 43% of the total afternoon peak hour trips and residential uses most of the remainder.

2014 TRAFFIC CONDITIONS WITH URBANIZED AREA ONLY

The development of the urbanized area is estimated to increase the traffic passing through the Kapolei Parkway intersection with Kalaeloa Boulevard by about 26.7% over 2014 volumes without the project in the morning peak hour, and by 36.1% in the afternoon peak hour. Traffic volumes along the Kapolei Parkway just west of Kalaeloa Boulevard are estimated at about 1,625 vehicles in the morning peak hour and about 2,260 vehicles in the afternoon peak hour. Traffic volumes along the Kapolei Parkway at the Waianae end of the project near Koio Drive are estimated at approximately 960 and 1,070 vehicles in the morning and afternoon peak hours, respectively. If Road D were to be connected to Farrington Highway without construction of the Makaiwa Hills Interchange, this connection would primarily divert traffic from the Koio Drive connection to Farrington Highway and, to a lesser extent, from the Hanua Street Extension connection.

The peak hour traffic conditions at key intersections in the vicinity of the project, as well as the Kapolei Parkway intersections with the project access roadways and driveways, are summarized in Table 13. The Without (No) Project conditions in the table reflect the planned roadway projects by 2014 as well as any additional intersection improvements needed to provide acceptable service conditions for the 2014 Without project traffic. The conditions reflect the use of STOP sign control on all of the project access road connections to the Kapolei Parkway.

Table 13
2014 CONDITIONS AT KEY INTERSECTION (URBANIZED AREA ONLY)

Intersection	Scenario	Morning Peak Hour			Afternoon Peak Hour		
		V/C	ADPV	LOS	V/C	ADPV	LOS
Kalaeloa Blvd.- Farrington Hwy.	Existing	0.44	25.7	E	1.97	476.8	F
	No Project	0.49	37.6	D	0.70	35.8	D
	Urbanized Area	0.62	35.9	D	0.97	57.0	E
Kapolei Pkwy.- Kamokila Blvd.	Existing	0.68	21.7	C	0.59	16.9	B
	No Project	0.53	25.1	C	0.75	30.0	C
	Urbanized Area	0.59	26.4	C	0.86	33.0	C
Kapolei Pkwy.- Kalaeloa Blvd.	Existing	0.63	34.6	C	0.73	28.8	C
	No Project	0.91	53.4	D	0.86	44.6	D
	Urbanized Area	1.08	100.2	F	1.10	73.4	E
Kapolei Pkwy.- Commercial Dwy.	Urbanized Area	0.41	30.5	D	4.53	1690	F
Kapolei Pkwy.- Parcels A/B Rd.	Urbanized Area	0.43	34.2	D	0.42	47.2	E
Kapolei Pkwy.- Rd. H	Urbanized Area	0.15	13.7	B	0.21	20.0	C
Kapolei Pkwy.- Rd D/F	Urbanized Area	0.13	13.8	B	0.15	18.8	C
Aliinui Dr.- Koio Dr.	Existing	NA	NA	NA	NA	NA	NA
	No Project	0.01	10.9	B	0.02	12.3	B
	Urbanized Area	0.04	14.4	B	0.13	18.9	C
Aliinui Dr.- Olani St.	Existing	0.10	11.5	B	0.13	14.0	B
	No Project	0.46	38.7	E	1.46	318.3	F
	Urbanized Area	0.35	26.4	D	0.95	108.7	F

V/C = Ratio of the traffic volume to the theoretical capacity of the intersection.
 ADPV = Average delay per vehicle, in seconds.
 LOS = Level of service.
 NA = Not Analyzed

Wilbur Smith Associates; November 29, 2004.

- With STOP sign control, the traffic exiting the Regional Commercial Center Driveway onto the Kapolei Parkway would experience long delays in the afternoon peak period. The long delays would satisfy MUTCD Warrant #3 criteria to allow consideration of a traffic signal for the intersection to address the cross street delays.
- The other project access road connections to the Kapolei Parkway would operate at acceptable conditions with STOP sign controls.
- Within the Ko Olina area, the extension of the Kapolei Parkway would allow some Ko Olina traffic to use the Kapolei Parkway to access areas east of Ko Olina such as the employment areas and services in the Kapolei Business Park, Campbell Industrial Park, and City of Kapolei. This would likely reduce delays at the Olani Street intersection and other intersections near the western end of the project. The increased traffic would worsen conditions in the eastern end of the Ko Olina, such as Koio Drive, which is expected to operate at acceptable traffic conditions.

2014 TRAFFIC CONDITIONS WITH PETITION AREA

The development of the urbanized area is estimated to increase the traffic passing through the Kapolei Parkway intersection with Kalaeloa Boulevard by about 23.8% over 2014 volumes without the project in the morning peak hour, and by 31% in the afternoon peak hour. Traffic volumes along the Kapolei Parkway just west of Kalaeloa Boulevard are estimated at about 1,850 vehicles in the morning peak hour and about 2,500 vehicles in the afternoon peak hour. Traffic volumes along the Kapolei Parkway at the Waianae end of the project near Koio Drive are estimated at approximately 950 and 1,050 vehicles in the morning and afternoon peak hours, respectively.

The 2014 development spread through both the Urbanized and Petition Areas would have a similar impact on intersection conditions and mitigative needs. The proposed roadway improvements would be the same as those identified for the Urbanized Area scenario.

2020 TRAFFIC CONDITIONS WITH PROJECT BUILD-OUT

The full development of the project (both the Urbanized and Petition areas) is estimated to increase the traffic passing through the Kapolei Parkway intersection with Kalaeloa Boulevard by about 6.5% over 2020 volumes without the project in the morning peak hour, and by 21.9% in the afternoon peak hour. Traffic volumes along the Kapolei Parkway just west of Kalaeloa Boulevard are estimated at about 2,600 vehicles in the morning peak hour and about 2,940 vehicles in the afternoon peak hour. Traffic volumes along the Kapolei Parkway at the Waianae end of the project near Koio Drive are estimated at approximately 1,330 and 1,600 vehicles in the morning and afternoon peak hours, respectively.

The peak hour traffic conditions at key intersections in the vicinity of the project, as well as the Kapolei Parkway intersections with the project access roadways and driveways, are summarized in Table 14. The Without Project conditions in the table reflect the planned roadway projects by 2020 as well as any additional intersection improvements needed to provide acceptable service conditions for the 2020 Without Project traffic. The conditions reflect the use of STOP sign control on all of the project residential area access road connections to the Kapolei Parkway.

Table 14
2020 CONDITIONS AT KEY INTERSECTIONS (URBANIZED AREA ONLY)

Intersection	Scenario	Morning Peak Hour			Afternoon Peak Hour		
		V/C	ADPV	LOS	V/C	ADPV	LOS
Kalaeloa Blvd.- Farrington Hwy.	Existing	0.44	25.7	D	1.97	476.8	F
	No Project	0.59	37.6	D	0.79	40.5	D
	Build-out	0.59	37.6	D	0.79	40.5	D
Kapolei Pkwy.- Kamokila Blvd.	Existing	0.68	21.7	C	0.59	16.9	B
	No Project	0.72	29.2	C	0.93	44.8	D
	Build-out	0.78	28.5	C	1.06	100.6	F
Kapolei Pkwy.- Kalaeloa Blvd.	Existing	0.63	34.6	C	0.73	28.8	C
	No Project	0.90	53.2	D	0.91	48.6	D
	Build-out	1.08	107.2	F	0.98	54.7	D
Kapolei Pkwy.- Commercial Dwy.	Build-out	0.53	20.8	C	0.87	40.7	D
Kapolei Pkwy.- Hanua St. Ext.	Build-out	0.97	60.0	E	1.10	83.9	F
Kapolei Pkwy.- Parcels A/B Rd.	Build-out	1.80	541.4	F	1.18	294.6	F
Kapolei Pkwy.- Rd. H	Build-out	0.27	20.9	C	0.51	53.3	F
Kapolei Pkwy.- Rd D/F	Build-out	0.76	68.5	F	1.87	516.6	F
Aliinui Dr.- Koio Dr.	Existing	NA	NA	NA	NA	NA	NA
	No Project	0.03	14.5	B	0.05	23.1	C
	Urbanized Area	0.23	20.1	C	0.60	53.8	F
Aliinui Dr.- Olani St.	Existing	0.10	11.5	B	0.13	14.0	B
	No Project	0.46	38.7	E	1.24	220.5	F
	Urbanized Area	0.47	40.6	E	1.32	255.1	F

V/C = Ratio of the traffic volume to the theoretical capacity of the intersection.
ADPV = Average delay per vehicle, in seconds.
LOS = Level of service.
NA = Not Analyzed.

Wilbur Smith Associates; November 30, 2004.

The addition of the project traffic, with the Urbanized Area development scenario, indicates the following impacts on area intersections:

- The project traffic would substantially worsen peak hour conditions at the Kapolei Parkway intersection with Kalaeloa Boulevard, with the traffic exceeding intersection capacity by 8% in the morning peak hour with average traffic delays at LOS F. In the afternoon peak hour, the traffic would approximate the intersection capacity with average delay per vehicle at LOS D.
- The increased project traffic would result in congested traffic conditions at the Kapolei Parkway intersection with Kamokila Boulevard in the afternoon peak hour.
- With traffic signal control, the Kapolei Parkway intersection with the Regional Commercial Center Driveway/Parcel L Driveway would operate at acceptable conditions.

- The forecast Build-out traffic would exceed the capacity of the Kapolei Parkway intersection with the Hanua Street Extension by about 10% in the afternoon peak hour, with average delay per vehicle at LOS F.
- With STOP sign control, the traffic exiting the Parcel A Access Road onto the Kapolei Parkway would experience long delays in both the morning and afternoon peak periods. The long delays would satisfy MUTCD Warrant #3 criteria to allow consideration of a traffic signal for the intersection to address the cross street delays.
- With STOP sign control, the traffic exiting Road F onto the Kapolei Parkway would experience long delays in both the morning and afternoon peak periods. The long delays would satisfy MUTCD Warrant #3 criteria to allow consideration of a traffic signal for the intersection to address the cross street delays.
- The increased project traffic would worsen delays for vehicles turning left from Koio Drive onto the Kapolei Parkway. However, the estimated delays would not be sufficient to satisfy warrants to allow consideration of a traffic signal.
- The increased project traffic would worsen delays for vehicles turning left from the Olani Street approaches onto the Kapolei Parkway. The estimated delays would be sufficient to satisfy warrants to allow consideration of a traffic signal both without and with the project. With a traffic signal and the existing roadway lanes, the intersection would operate at LOS C or better with or without the project. Therefore, no mitigative action is proposed as a result of the project traffic increases.

H-1 FREEWAY INCREASES

Traffic conditions were assessed for the section of the H-1 Freeway east of the Makakilo Interchange. The H-1 Freeway has three travel lanes in each direction with paved shoulders in this section. For the purpose of this assessment, the free flow speed is assumed to be 65 miles per hour (mph) in this section although field observations indicate that a substantial portion of the drivers exceed this speed. This section of freeway would have an estimated capacity of about 7,050 vehicles per hour in each direction, with this maximum capacity occurring at speeds around 52 mph.

This section of the H-1 Freeway should accommodate the existing peak hour traffic volumes at very acceptable conditions. The analysis indicates that the traffic traveling this section should operate at LOS B or C in each peak hour and travel direction, with the estimated average speeds of 62 mph near the free flow speed of 65 mph.

In 2014, the project would increase the freeway traffic by about 4% to 8% with full development of the Urbanized Area. The additional project traffic would result in LOS D conditions versus LOS C without the project. The project traffic would have minimal effect on average freeway speeds, with the speeds estimated at about 61 to 62 mph with the project versus 62 mph without the project.

In 2020, the project would increase freeway traffic east of Kapolei by 6% to 9% with full build-out of the entire Kapolei West project.

The addition of the project traffic is estimated to result in the 2020 afternoon peak hour conditions for Waianae-direction traffic worsening to LOS E from LOS D without the project. The Waianae-bound traffic would just exceed the LOS D criteria by about 30 vehicles, i.e. a 30-vehicle reduction in the forecast volumes would have resulted in LOS D conditions estimated for the afternoon peak hour. The project is forecast to decrease the average traffic speeds by more than 2 mph, from about 60.7 mph without the project, to 58.4 mph with the project. The Waianae-bound traffic in the afternoon peak hour would approximate 84% of the estimated freeway capacity.

6.1.3 Mitigation

Mitigation is required to improve LOS to non-project baseline levels. The following section describes mitigating measures recommended for the 2014 and 2020 timeframes. Existing conditions, projected conditions with and without the project, and conditions with mitigation measures are summarized in tabular form followed by a description and illustration of recommended improvements to mitigate adverse impacts are presented below.

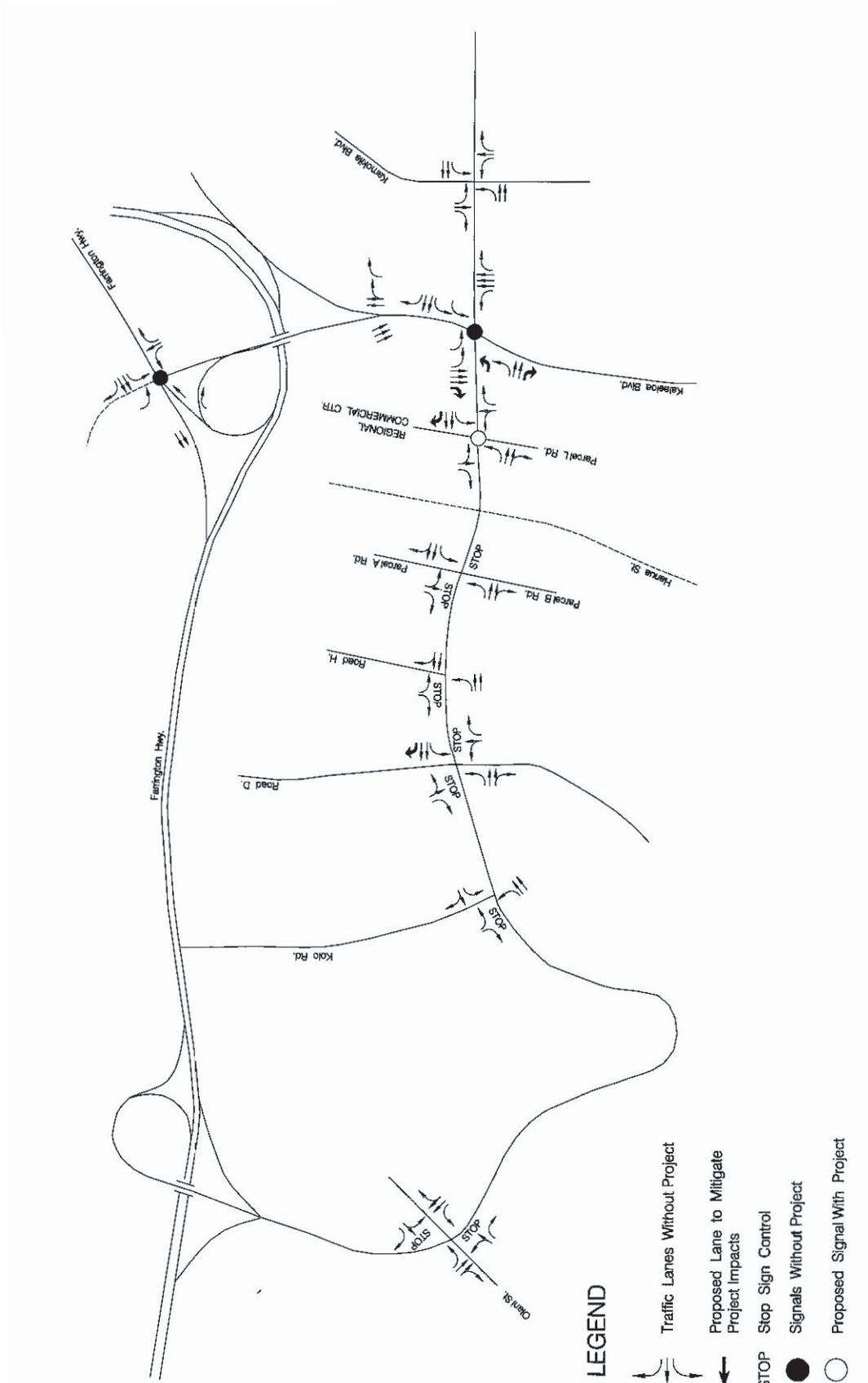
2014. Existing conditions, projected 2014 conditions with and without the project, and conditions with mitigation measures are summarized in Table 15. Figure 14 presents the traffic lanes needed to accommodate the forecast 2014 peak hour traffic volumes with the development of the Urbanized Area. The figure identifies those that are proposed to mitigate project impacts on the key intersections, which include:

Kapolei Parkway-Kalaeloa Boulevard

- Provide right-turn lane on makai-bound Kalaeloa Boulevard to accommodate increased volume of right turns.
- Provide a second (double) left-turn lane and a right-turn lane on the Honolulu-bound approach of the Kapolei Parkway to offset the increase in project traffic along the Parkway.
- These improvements would reduce AM and PM Peak Hour V/C ratios from 1.08 to 0.87 and 1.10 and 0.92, respectively, and increase AM and PM Peak Hour LOS from F to D and E to D, respectively.

Kapolei Parkway-Regional Commercial Center Driveway

- Provide right-turn lane for high volume of traffic entering from Waianae-bound Kapolei Parkway.
- Provide traffic signal control for the intersection when warranted by traffic conditions.
- These improvements would reduce AM and PM Peak Hour V/C ratios from 0.41 to 0.36 and 4.53 and 0.84 respectively, and increase AM and PM Peak Hour LOS from D to C and F to D, respectively.



LEGEND

- Traffic Lanes Without Project
- Proposed Lane to Mitigate Project Impacts
- STOP Sign Control
- Signals Without Project
- Proposed Signal With Project

Not to Scale

2014 Roadway Network With Kapolei West Project

Kapolei West Expansion Area
O`ahu, Hawai`i

Figure 14

Kapolei Parkway-Road D

- Provide right-turn lane for high volume of traffic entering from Waianae-bound Kapolei Parkway.

Table 15
2014 CONDITIONS AT KEY INTERSECTION (WITH MITIGATION)

Intersection	Scenario	Morning Peak Hour			Afternoon Peak Hour		
		V/C	ADPV	LOS	V/C	ADPV	LOS
Kalaeloa Blvd.- Farrington Hwy.	Existing	0.44	25.7	D	1.97	476.8	F
	No Project	0.49	37.6	D	0.70	35.8	D
	Urbanized Area	0.62	35.9	D	0.97	57.0	E
Kapolei Pkwy.- Kamokila Blvd.	Existing	0.68	21.7	C	0.59	16.9	B
	No Project	0.53	25.1	C	0.75	30.0	C
	Urbanized Area	0.59	26.4	C	0.86	33.0	C
Kapolei Pkwy.- Kalaeloa Blvd.	Existing	0.63	34.6	C	0.73	28.8	C
	No Project	0.91	53.4	D	0.86	44.6	D
	Urbanized Area	1.08	100.2	F	1.10	73.4	E
	With Mitigation	0.87		D	0.92		D
Kapolei Pkwy.- Commercial Dwy.	Urbanized Area	0.41	30.5	D	4.53	1690	F
	With Mitigation	0.36		C	0.84		D
Kapolei Pkwy.- Parcels A/B Rd.	Urbanized Area	0.43	34.2	D	0.42	47.2	E
Kapolei Pkwy.- Rd. H	Urbanized Area	0.15	13.7	B	0.21	20.0	C
Kapolei Pkwy.- Rd D/F	Urbanized Area	0.13	13.8	B	0.15	18.8	C
Ali'i Nui Dr.- Koio Dr.	Existing	NA	NA	NA	NA	NA	NA
	No Project	0.01	10.9	B	0.02	12.3	B
	Urbanized Area	0.04	14.4	B	0.13	18.9	C
Aliinui Dr.- Olani St.	Existing	0.10	11.5	B	0.13	14.0	B
	No Project	0.46	38.7	E	1.46	318.3	F
	Urbanized Area	0.35	26.4	D	0.95	108.7	F

V/C = Ratio of the traffic volume to the theoretical capacity of the intersection.
 ADPV = Average delay per vehicle, in seconds.
 LOS = Level of service.
 NA = Not Analyzed

Wilbur Smith Associates; November 29, 2004.

2020. Existing conditions, projected 2020 conditions with and without the project, and conditions with mitigation measures are summarized in Table 16. Figure 15 shows the traffic lanes needed to accommodate the forecast 2020 peak hour traffic volumes with the development of the Urbanized Area. The figure identifies those that are proposed to mitigate project impacts on the key intersections, which include:

Kapolei Parkway-Kamokila Boulevard

- Provide a second (double) left-turn lane on Honolulu-bound Kapolei Parkway to allow more signal green time for the Waianae-bound through traffic.
- These improvements would reduce AM and PM Peak Hour V/C ratios from 0.78 to 0.62 and 1.06 and 0.88, respectively, and increase PM Peak Hour LOS from F to D (AM Peak Hour remains unchanged at LOS C).

Kapolei Parkway-Kalaeloa Boulevard

- Provide right-turn lane on makai-bound Kalaeloa Boulevard to accommodate increased volume of right turns.
- Provide a second (double) left-turn lane and a right-turn lane on the Honolulu-bound approach of the Kapolei Parkway to offset the increase in project traffic along the Parkway.
- These improvements would reduce AM and PM Peak Hour V/C ratios from 1.08 to 0.92 and 0.98 and 0.93, respectively, and increase AM Peak Hour LOS from F to D (PM peak hour remains unchanged at LOS D).

Kapolei Parkway-Regional Commercial Center Driveway

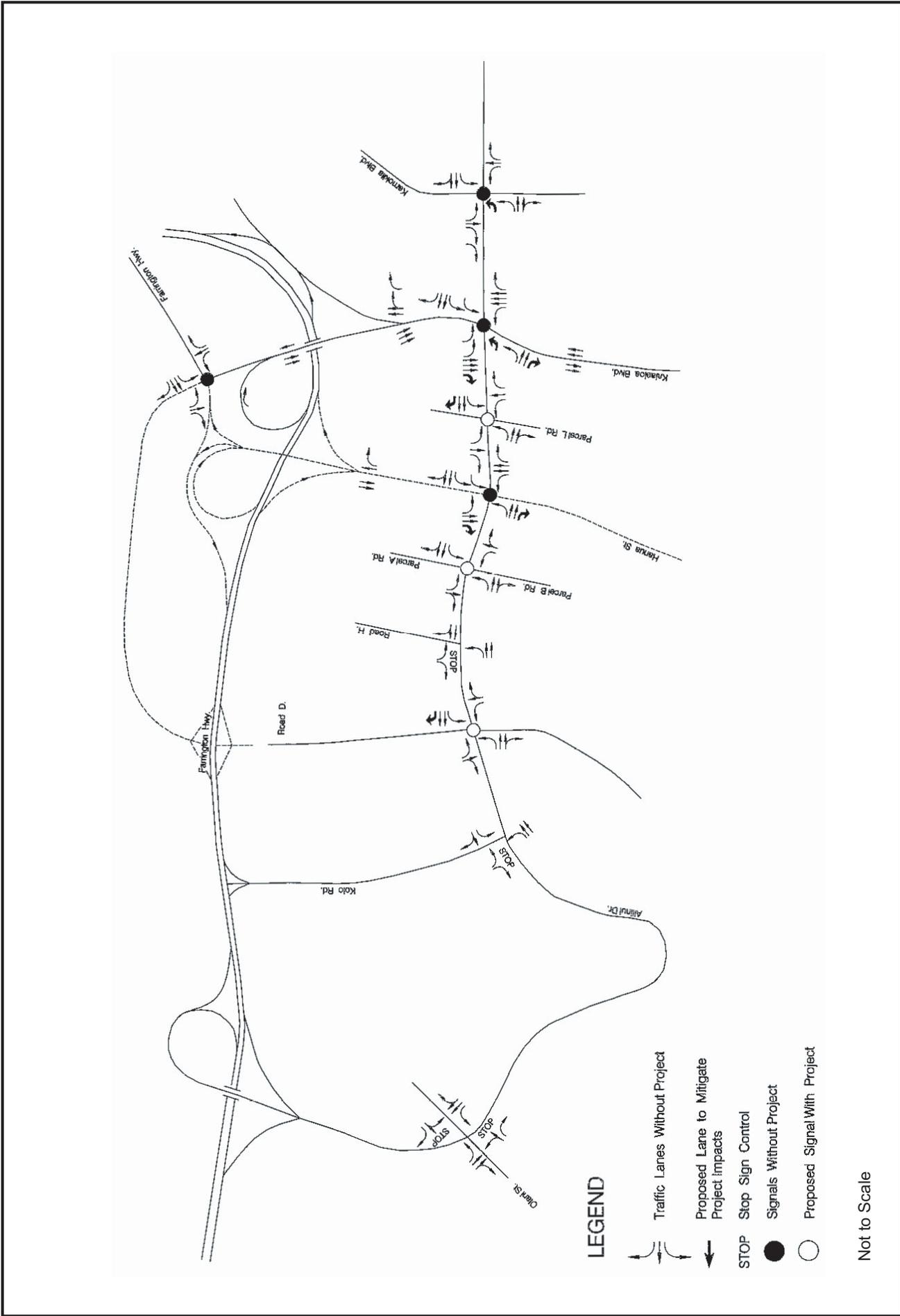
- Provide right-turn lane for high volume of traffic entering from Waianae-bound Kapolei Parkway.
- Provide traffic signal control for the intersection when warranted by traffic conditions.

Kapolei Parkway-Hanua Street Extension

- Provide right-turn lane on makai-bound Hanua Street to accommodate increased volume of right turns.
- Provide right-turn lane on the Honolulu-bound approach of the Kapolei Parkway to offset the increase in project traffic along the Parkway.
- These improvements would reduce AM and PM Peak Hour V/C ratios from 0.97 to 0.79 and 1.10 and 0.93, respectively, and increase AM and PM Peak Hour LOS from E to D and F to D, respectively.

Kapolei Parkway-Parcel A/B Access Roads

- Provide traffic signal control for the intersection when warranted by traffic conditions.
- These improvements would reduce AM and PM Peak Hour V/C ratios from 1.80 to 0.52 and 1.18 and 0.66, respectively, and increase AM and PM Peak Hour LOS from F to C and F to B, respectively.



2020 Roadway Network with Kapolei West Project

Kapolei West Expansion Area
 O`ahu, Hawai`i

Figure 15

Kapolei Parkway-Road D

- Provide right-turn lane for high volume of traffic entering from Waianae-bound Kapolei Parkway.
- Provide traffic signal control for the intersection when warranted by traffic conditions.
- These improvements would reduce AM and PM Peak Hour V/C ratios from 0.76 to 0.44 and 1.87 and 0.57, respectively, and increase AM and PM Peak Hour LOS from F to C and F to C, respectively.

Table 16
2020 CONDITIONS AT KEY INTERSECTIONS (WITH MITIGATION)

Intersection	Scenario	Morning Peak Hour			Afternoon Peak Hour		
		V/C	ADPV	LOS	V/C	ADPV	LOS
Kalaeloa Blvd.- Farrington Hwy.	Existing	0.44	25.7	D	1.97	476.8	F
	No Project	0.59	37.6	D	0.79	40.5	D
	Build-out	0.59	37.6	D	0.79	40.5	D
Kapolei Pkwy.- Kamokila Blvd.	Existing	0.68	21.7	C	0.59	16.9	B
	No Project	0.72	29.2	C	0.93	44.8	D
	Build-out	0.78	28.5	C	1.06	100.6	F
	With Mitigation	0.62	27.7	C	0.88	37.3	D
Kapolei Pkwy.- Kalaeloa Blvd.	Existing	0.63	34.6	C	0.73	28.8	C
	No Project	0.90	53.2	D	0.91	48.6	D
	Build-out	1.08	107.2	F	0.98	54.7	D
	With Mitigation	0.92	52.0	D	0.93	52.6	D
Kapolei Pkwy.- Commercial Dwy.	Build-out	0.53	20.8	C	0.87	40.7	D
Kapolei Pkwy.- Hanua St. Ext.	Build-out	0.97	60.0	E	1.10	83.9	F
	With Mitigation	0.79	44.2	D	0.93	45.7	D
Kapolei Pkwy.- Parcels A/B Rd.	Build-out	1.80	541.4	F	1.18	294.6	F
	With Mitigation	0.52	22.9	C	0.66	19.4	B
Kapolei Pkwy.- Rd. H	Build-out	0.27	20.9	C	0.51	53.3	F
Kapolei Pkwy.- Rd D/F	Build-out	0.76	68.5	F	1.87	516.6	F
	With Mitigation	0.44	27.5	C	0.57	29.3	C
Aliinui Dr.- Koio Dr.	Existing	NA	NA	NA	NA	NA	NA
	No Project	0.03	14.5	B	0.05	23.1	C
	Urbanized Area	0.23	20.1	C	0.60	53.8	F
Aliinui Dr.- Olani St.	Existing	0.10	11.5	B	0.13	14.0	B
	No Project	0.46	38.7	E	1.24	220.5	F
	Urbanized Area	0.47	40.6	E	1.32	255.1	F

V/C = Ratio of the traffic volume to the theoretical capacity of the intersection.

ADPV = Average delay per vehicle, in seconds.

LOS = Level of service.

NA = Not Analyzed.

Wilbur Smith Associates; November 30, 2004.

PUBLIC TRANSIT AND BICYCLE TRAVEL

The project would provide a transit center within the Parcel L mixed-use development to facilitate public transit operations and usage.

The numbers of person trips to/from the project made via TheBus were estimated by Wilbur Smith Associates. The trip rates were developed from data presented in the 1993 Comprehensive Operations Analysis Study.⁷ The average trip-making rates for the Mililani area were used to develop a low estimate of the number of bus boardings or alightings each weekday by persons traveling to or from the Project land uses, while the average trip rate for the Waipahu area was used to provide a high estimate of trips using TheBus.

Based on these trip rates, the project area is estimated to generate between approximately 500 and 800 transit trip ends each weekday in 2014, with about half this number boarding TheBus in the Project area and half alighting from TheBus in the area. At full build-out in 2020, the Kapolei West project is estimated to generate between 900 and 1500 transit trip ends each weekday (Appendix F to Appendix K).

Other actions that could encourage use of public transit include the following:

- Coordinate the potential location of bus stops with the City DTS and TheBus staffs and provide bus shelters at the stop locations.
- Each residential parcel should be designed to provide convenient pedestrian linkages to the bus stop locations through the layout of the internal street system and/or greenways.
- The middle school should be sited and laid out to allow convenient and safe access to public transit stops.

The Kapolei Parkway is planned to include bicycle lanes to encourage use of bicycles for transportation purposes as well as for recreation. Actions that could encourage use of bicycles include the following:

- A network of bicycle lanes and greenways would link the residential areas to the middle school. Access to the nearby elementary school within the Ko Olina Resort would involve use of the Resort's bicycle and pedestrian facilities.
- The internal local streets should be designed to maintain low speeds of about 20 miles per hour to provide a safe environment for shared use by bicycles.

⁷ *Comprehensive Operations Analysis of TheBus System*, prepared for the City and County of Honolulu by Barton-Aschman Associates, August 1993.

6.2 WATER SUPPLY

6.2.1 *Affected Environment*

Potable Water. The BWS system provides potable water service to the 'Ewa/Kapolei region. Wells located in Waipahu, in the vicinity of the Kunia Interchange, are the water source for the system. These wells include the Hoaeae Wells, Kunia Wells I, and Waipahu Wells. EP 15 and 16 are also being improved by the Board as an additional source of water. Transmission of water from the wells to 'Ewa/Kapolei is via 30-inch and 36-inch transmission main along Farrington Highway. Storage for the area is handled by the Kapolei 215 reservoir located mauka of the freeway below the Makakilo City development and the 3.0 MG, 4.0 MG and 5.0 MG Barbers Point 215 Reservoirs, located above the project site in the southeastern corner of the proposed Makaiwa Hills development. Transmission of potable water continues west along Farrington Highway to Nanakuli via 24-inch transmission main and booster pumps located at the Barbers Point Reservoirs site. 24-inch and 20-inch mains are located in Kalaeloa Boulevard east of the site. A 16-inch main extends from Kalaeloa Boulevard westward towards the project site. In addition, a 12-inch water line is located in Aliinui Drive west of the project site. The BWS water system does not currently serve the project site or Petition Area.

Groundwater in the Waianae Aquifer in the vicinity of the project site does not meet potability standards, although its salinity is less than 1,000 mg/l chlorides. Groundwater in the caprock limestone aquifer is likely to exceed 1,000 mg/l chlorides, which is at the margin of utility for irrigation of grasses.

Non-potable Water. The existing Ko Olina golf course is currently served by a non-potable water system for irrigation purposes. Wells within the golf course pump brackish water up to a non-potable reservoir located above Farrington Highway.

The BWS is currently in the process of providing non-potable water for the Kapolei area through the use of recycled effluent from the Honouliuli Wastewater Treatment Plant. A 16-inch R1 water line runs along the railroad right-of-way from the treatment plant to the City of Kapolei. The non-potable water system within the City of Kapolei has been converted from a caprock brackish water source to the reclaimed effluent. Plans have been prepared for the installation of a non-potable water line connecting the 16-inch transmission main to the Ko Olina non-potable reservoir. This would bring a source of non-potable water to the eastern boundary of the project site.

6.2.2 *Probable Impacts*

Kapolei West, including the Proposed Action, is one of the proposed developments in the 'Ewa/Kapolei area that would impact the existing regional water system by increasing the demand for potable water.

Potable Water

The potable water demand for the Kapolei West project area (Urbanized Area and Petition Area) is summarized below:

<u>Land Use</u>	<u>No. of Units</u>	<u>gpd/unit</u>	<u>Average Daily Demand (gpd)</u>
Low Density Residential	869 units	400	347,600
Med. Density Residential	1,351 units	400	540,400
Mixed Use Residential	150 units	400	60,000
Neighborhood Commercial	2 acres	3,000	6,000
Regional Commercial	23 acres	3,000	69,000
Golf Course	213 acres	720	153,360
School/Public Facility	12 acres	4,000	48,000
Park	25 acres	720	<u>18,000</u>
			1,242,366
		Say	1.24 mgd

Based on an average daily demand of 1.24 mgd, a maximum daily demand of 1.86 mgd is expected. The corresponding peak hour demand would be 3.72 mgd.

Potable Water Use for Petition Area

<u>Land Use</u>	<u>No. of Units</u>	<u>gpd/unit</u>	<u>Average Daily Demand (gpd)</u>
Low Density Residential	11 units	400	440
Med. Density Residential	1,143 units	400	457,200
Park	17 acres	720	<u>12,240</u>
			469,880
		Say	0.47 mgd

Based on an average daily demand of 0.47 mgd, a maximum daily demand of 0.705 mgd is expected for the Petition Area. The corresponding peak hour demand would be 1.41 mgd.

Non-potable Water

In an effort to reduce the potable water requirements of the project, a dual water system is proposed. Non-potable water would be used for irrigation purposes only, to irrigate the proposed golf course and park spaces. Non-potable water demands are estimated below.

Non-potable Water Use for Kapolei West (Urbanized Area and Petition Area)

<u>Land Use</u>	<u>No. of Units</u>	<u>gpd/unit</u>	<u>Average Daily Demand (gpd)</u>
Golf Course	213 acres	4,080	869,000
Park	25 acres	4,080	<u>102,000</u>
			971,000
			Say 1.00 mgd

Non-potable Water Use for Petition Area

<u>Land Use</u>	<u>No. of Units</u>	<u>gpd/unit</u>	<u>Average Daily Demand (gpd)</u>
Golf Course	60 acres	4,080	244,800
Park	17 acres	4,080	69,360
			Say 0.31 mgd

Maximum daily non-potable demand for the Petition Area is estimated to be 0.47.

The proposed Kapolei West development would create additional water demands on the BWS system. Potable water demands would include service to the proposed residential, commercial and public facility developments, and non-irrigation water service to the proposed parks and the golf course.

6.2.3 Mitigation

Potable and non-potable infrastructure systems would have to be constructed to meet project demands. The existing potable water system serving the adjacent areas would be used and would be extended to serve the project and petition area. The distribution line in Aliinui Drive would be connected to the 16-inch line in Kapolei Parkway near Kalaeloa Boulevard. This would provide a “looped” water system and would result in a stronger, more reliable system overall. In addition to the connection of the main distribution lines, additional storage may need to be provided. Additional storage requirements would be coordinated with the BWS and would take into account regional water demands when sizing additional reservoirs. It is expected that an additional reservoir would be placed next to the existing Barbers Point 215 tanks.

Non-potable water would be used for irrigation purposes and would reduce the overall potable water demands for the project. Non-potable water from the BWS is expected to be available when the project proceeds. Plans for construction of the non-potable water line connecting the City of Kapolei system to the existing non-potable tanks above Farrington Highway is currently undergoing the review and approval process. Completion of the line is expected within the next two years. Additional storage would be required as well as extension of the proposed BWS non-potable water mains. As with the potable water storage tanks, sizing of the non-potable tanks would likely be a regional effort, however, at a minimum, a 1.0 MGD tank would probably be required for the project. Storage requirements could also be met within the golf course itself in the form of lakes and water features. Storage requirements would be coordinated with the

BWS during design of the golf course. The proposed offsite and onsite potable water system (including reservoirs and distribution mains) would be designed in accordance with the BWS Water System Standards and is anticipated to be dedicated to the BWS for operation and maintenance. A water master plan would be prepared and submitted to BWS for their review and approval.

Short term impacts due to the proposed water system would be construction related and may include dust, noise and traffic disturbances along Farrington Highway. Mitigation of these potential short term impacts can be achieved by limiting construction to off-peak traffic hours, use of wind breaks or watering to reduce dust, implementation of approved traffic control plans, and compliance with applicable Administrative Rules of the DOH, Title 11: Chapter 42 (Vehicular Noise Control for O'ahu), Chapter 43 (Community Noise Control for O'ahu), and Chapter 60 (Air Pollution Control).

It is also anticipated that the development would incorporate appropriate design and landscaping measures to encourage water conservation and minimize water consumption.

6.3 WASTEWATER

6.3.1 Affected Environment

The Honouliuli wastewater treatment plant is located approximately four miles east of the Kapolei West project site. The treatment plant currently has a capacity of 38 mgd with a site that could be expanded to 51 mgd.

The closest municipal sewer is the Ko Olina interceptor which parallels the OR&L ROW through the Petition Area. The Ko Olina interceptor is a force main/gravity sewer extending from the Ko Olina Resort along the OR&L ROW to Fort Barrette Road. At Fort Barrette Road, the Ko Olina interceptor connects to the Makakilo interceptor, a 30-inch sewer which extends from Makakilo along Fort Barrette Road and Renton Road to the Honouliuli WWTP on Geiger Road.

The Ko Olina interceptor sewer was sized to accommodate the Kapolei West development as Phase 2 of the Ko Olina resort development. There would probably be some additional capacity in the Ko Olina interceptor as the original Phase 1 and 2 densities were higher than currently proposed.

Currently under construction is the Kapolei Interceptor Sewer. A relief sewer line to the Makakilo interceptor, the Kapolei interceptor provides sewer conveyance capacity for the developments in the Kapolei area including Ko Olina, Kapolei West, the City of Kapolei, Kapolei Business Park, West Kalaeloa, the Villages of Kapolei, and portions of East Kapolei. Wastewater would also be generated from the various facilities within the proposed Makaiwa Hills development.

6.3.2 Probable Impacts

Wastewater generated from the parcels is expected to be of typical domestic composition. The estimated average wastewater design flow is based on estimated water use calculations and the City and County Sewer Standards. Contributions expected from the proposed facilities within the project are listed in Table 17 below. For planning purposes, the total average wastewater flow rate for Kapolei West (Petition Area and Urbanized Area) is 0.98 mgd.

Table 17
Average Wastewater Flow
(Petition Area and Urbanized Area)

<u>Land Use</u>	<u>Ave. Wastewater Flow Rate (gpd)</u>
Low Density Residential (869 units)	278,100
Medium Density Residential (1,351 units)	302,600
Mixed Use/Residential (150 units)	33,600
Neighborhood Commercial (2 acres)	6,400
Regional Commercial (23 acres)	257,600
Golf Course Clubhouse (2 acres)	22,400
School/Public Facility (1,000 students)	25,000
Dry Weather Infiltration	<u>49,100</u>
	974,800
	Say 0.98 mgd

Wastewater Flows
(Petition Area only)

<u>Land Use</u>	<u>Ave. Wastewater Flow Rate (gpd)</u>
Low Density Residential (11 units)	3,500
Medium Density Residential (1,143 units)	256,100
Dry Weather Infiltration	<u>16,300</u>
	275,900
	Say 0.30 mgd

For planning purposes, the total average wastewater flow rate for the Petition Area is 0.30 mgd. As with the total project area, peak flow factors would vary depending on the total tributary area that is being served.

6.3.3 Mitigation

Sewer lines would need to be extended to serve the project site from the existing Ko Olina interceptor sewer line running along the OR&L ROW. The proposed onsite wastewater collection system would consist of gravity sewer lines and manholes within the projects roadways. All improvements would be done in accordance with the City's wastewater design standards.

Implementation of the proposed improvements is subject to approval from DPP. A sewer master plan and an Application for Sewer Connection would be submitted, at which time the DPP would evaluate the capacity of the municipal sewerage system and treatment facility to handle the expected wastewater flow from the project site.

Wastewater impacts related to the proposed development are expected to be short-term in nature. Short-term impacts are related to the construction of the proposed sewer improvements. Construction impacts such as noise and dust generation can be minimized by complying with applicable Administrative Rules of the DOH, Title 11: Chapter 43 (Community Noise Control for O'ahu) and Chapter 60 (Air Pollution Control).

6.4 DRAINAGE

6.4.1 Affected Environment

The Kapolei West project area, including the Petition Area, is designated Zone D in the Flood Insurance Rate Map, indicating areas in which flood hazards are undetermined.

The Kapolei West project area lies within three natural drainage basins that extend seaward from the Wai'anae Mountains to the ocean (Makaiwa Gulch, Palailai Gulch and Awanui Gulch) which form two watersheds: Makaiwa and the Awanui/Palailai (Figure 16). The portion of the Petition Area above the OR&L ROW would drain into the western watershed. The portion of the Petition Area below the OR&L ROW would drain into the eastern watershed. The western watershed, fed by Makaiwa Gulch, discharges through the Ko Olina Resort via a culvert under Farrington Highway, an existing grass-lined channel paralleling Koio Drive, an existing grass-lined swale passing between the sixth and seventh fairways of the Ko Olina golf course (west of the Petition Area), draining into the Ko Olina Marina.

The eastern watershed, fed by the Palailai and Awanui gulches, discharges into the Kapolei West project area through a series of pipe culverts under the H-1 Freeway/Farrington Highway, to an existing ditch running in a west to east direction paralleling the makai side of the freeway/highway, before turning south to a rectangular culvert crossing at the OR&L ROW at the east end of the Petition Area. Previously used as an irrigation flume, the existing ditch is actually built up above the surrounding area. Smaller culvert crossings of the highway daylight directly onto the Kapolei West project area with no drainage improvements to collect mauka runoff.

Currently, much of the OR&L ROW is higher than the adjacent mauka areas, creating a berming effect along its alignment. Also, because the existing drainage ditch is built-up above ground, runoff cannot easily enter it. Consequently, much of the runoff from the project site and some of the mauka areas are retained in the low lying areas creating large areas of ponding.

The Estate of James Campbell and its affiliates are currently planning a major drainage channel as part of the West Kalaeloa development makai of the Kapolei West/Petition Area. Design of this channel would accommodate peak storm runoff contributions the mauka developments, including Kapolei West and Makaiwa Hills, in accordance with the storm drainage standards of the City and County of Honolulu. The drainage channel is planned to run east of Kalaeloa Harbor, passing along the western boundary of the existing Chevron, USA facility (Figure 2, Appendix L).

South (downstream) of the project site and Petition Area are the Barbers Point Harbor and West Kalaeloa area. Land uses for the West Kalaeloa development is currently being reviewed and could include commercial and light industrial uses.

Runoff from the mauka areas discharging through the Farrington Highway culverts have been estimated and are listed in Table 18. Peak runoff rates (in cubic feet per second) were calculated for the 10- and 50-year storms using the Soil Conservation Service TR 20 program. Calculations were based on a rainfall duration of one hour, and rainfall intensity of 1.9 inches for the 10-year storm and 2.3 inches for the 50-year storm. Total 10-year flows are estimated at 3,693 cfs and 50-year flows are estimated at 4,474 cfs.

**Table 18
Existing Mauka Runoff (1-hr duration)**

Area	Acres	10-YR Q (cfs)	50-YR Q (cfs)
A	705	697	844
B	23	41	53
C	62	103	125
D	5	10	12
E,F	162	208	252
G	508	522	631
H,I	286	288	349
J	95	137	166
K	31	51	62
L	1615	1350	1634
M	84	141	171
N	53	89	108
O	33	56	67
TOTAL	3,662	3,693	4,474

Watershed*
*mauka of Farrington Hwy.

Runoff from the Kapolei West project area, including the Petition Area, under existing conditions using the same criteria above were estimated with results found in Table 19.

**Table 19
Existing Site Runoff (1-hr duration)**

Area	Acres	10-YR Q (cfs)	50-YR Q (cfs)
Project	547	562	680
Petition Area	174	223	271

6.4.2 Probable Impacts

The existing drainage pattern associated with the Eastern Watershed would be maintained, and incorporated into the golf course as it passes through the project site. Development units within the project site would be graded higher than the golf course to provide positive drainage and freeboard.

The proposed Kapolei West development would alter the character of the 547-acre site. The vegetative cover currently established throughout the site would be replaced with pavement, buildings, and landscaped yards typical of a residential/commercial development.

As a result of the proposed improvements, the rate of peak runoff from the onsite areas is expected to increase. Estimated peak runoff rate for 10- and 50-year storms for the project site and petition area is provided in Table 20. The runoff for the 100-year storm is based on the peak curve of the City and County's Storm Drainage Standards. The peak runoff rate generated by the project site and petition area is expected to increase by about 18 percent for the 10- and 50-year storms after development of the project. Petition Area flows are predicted to increase by 7 – 8 percent for the 10- and 50-year storms.

Table 20
Future Runoff

Area	Acres	10-YR Q (cfs)	50-YR Q (cfs)	100-YR Q (cfs)
Project	547	665	805	1,700
Petition Area	174	240	291	800

Drainage patterns in the onsite areas proposed for development may be altered slightly from the existing conditions due to the alignment of the proposed roads, culverts and other drainage facilities.

6.4.3 Mitigation

Flows through the eastern watershed, south of the Petition Area, would be accommodated in a drainage channel being planned by the Petitioner, draining to an area south of Kalaeloa Harbor. Impacts on developments downstream of the Petition Area site are not expected to be adverse. A detailed drainage master plan would be prepared and submitted to DPP for review and approval.

Development of the portion of Kapolei West and the Petition Area within the western watershed can be accommodated by the existing Ko Olina drainage system. The original hydrologic study for the Ko Olina development included the increase in runoff for the Kapolei West project area mauka of the OR&L ROW.

The Kapolei West golf course would provide the major drainageway through the site. Runoff discharging from the mauka areas through culverts at Farrington Highway would be collected and directed to the golf course/drainageway. Onsite developments would collect runoff through an underground drainage system within the sites and roadways and convey the runoff to the golf course. Several major box or pipe culverts would be required at roadway crossings and at the crossing of the OR&L ROW. Connections to mauka and makai developments would be

coordinated as to locations and inverts. The golf course/drainageway and underground drainage systems would be designed to accommodate peak runoff flows for the onsite as well as offsite developments in accordance with the City's storm drainage standards.

The impact of the development is lessened by the inclusion of a golf course, parks and open areas. These uses help to lessen the increase in runoff associated with developments and provide some environmental benefits in improving the quality of storm runoff. It is anticipated that some areas of the golf course would be used as detention areas for water quality purposes. The quality of the storm water runoff would also be addressed with the individual development units within the project site. Flow through or structural means of water quality treatment would be reviewed for each development in accordance with the requirements of the storm drainage standards.

Short term impacts associated with construction can be mitigated by limiting construction to off-peak traffic hours, implementing an approved traffic control plan, and coordinating construction with any other construction projects along Farrington Highway. Generation of dust and noise due to construction operations would be mitigated by required compliance with the applicable Administrative Rules of the DOH, Title 11: Chapter 42 (Vehicular Noise Control for O'ahu), Chapter 43 (Community Noise Control for O'ahu), and Chapter 60 (Air Pollution Control).

6.5 SOLID WASTE

6.5.1 Affected Environment

A refuse collection service does not presently serve the project site. Currently, the site is undeveloped and does not generate solid wastes. The City and County is currently operating a landfill site in Waimanalo Gulch and the H-POWER waste energy recovery facility on the leeward side of O'ahu. The City and County is currently exploring alternative means of handling solid waste as an ongoing City and County-wide concern. Other programs being implemented are recycling and reuse of green waste.

6.5.2 Probable Impacts

The Proposed Action would be a new generator of solid waste during construction and after development. Construction wastes would primarily be made up of vegetation, rocks, and debris resulting from clearing the site prior to construction. The typical range of per capita solid waste generation from a municipal source (residential and commercial) is 2.0 to 5.0 pounds per capita per day (lb/capita/day). Municipal solid waste generation from the proposed development is estimated to be 22 tons/day based on an average per capita generation rate of 4.0 lb/capita/day. The solid waste composition is expected to be typical for a municipal source.

It is anticipated that refuse generated by the proposed Kapolei West residential development would be collected by the City and County refuse collection service. Refuse from the proposed commercial areas would be serviced by a private refuse collection company.

Generation of construction wastes due to clearing of the site would be a short term and in accordance with Federal and State regulations. Operational period waste would be collected via conventional means (City and County or private waste haulers) and disposed of at the City and County's H-POWER Facility.

6.5.3 Mitigation

The development would implement design strategies and technologies that support the use of recycled materials and conservation and recycling practices when feasible.

6.6 POWER AND COMMUNICATIONS

6.6.1 Affected Environment

HECO maintains two parallel 60-foot wide easements crossing the eastern end of the Kapolei West project area in a northeast direction. The easements serve 138 kV overhead transmission lines originating from a HECO substation southeast of the project site and east of the Petition Area.

The Estate and/or its affiliates are currently coordinating alignments for additional HECO power lines through the West Kalaeloa area from the H-POWER plant to the substation at the OR&L ROW. These lines are necessary to provide additional power source to the regional power grid, supporting the continued growth of the area.

HECO is also in the process of planning and design of a new substation in the Ko Olina development, immediately west of the Petition Area. This would serve the Ko Olina development and may also possibly serve portions of Kapolei West.

6.6.2 Probable Impacts

It is anticipated that HECO and Hawaiian Telcom, Inc would provide the necessary electrical and telephone service to the Petition Area. It is estimated that power requirements would be in the 1 to 4 kV range per residential unit with an assumed average of 48 kWh per unit per day. Power is planned to be supplied to the site via the existing substation at Kapolei and the new Ko Olina substation. Annual power consumption for Kapolei West is estimated at 45 mWh with the Petition Area consumption estimated at 21mWh. Current coordination with HECO and Hawaiian Telcom, Inc would continue as the project progresses to determine the actual needs of the development within the overall regional requirements. The possibility of relocating the HECO overhead transmission lines underground, within the right-of-way of the proposed development roads, is under consideration.

The Proposed Action would place additional demands on the utility systems. Discussions between the Estate of James Campbell and its affiliates and HECO are ongoing. Means of minimizing the potential impact to the HECO system due to the Proposed Action are under consideration in the planning of new facilities. HECO has indicated that it has plans for future

expansion of its power generation capabilities. It is also anticipated that the development would consider implementation of energy efficiency design guidelines in an effort to minimize energy consumption.

6.6.3 Mitigation

Coordination with HECO and Hawaiian Telcom, Inc would continue as the project progresses to determine the actual needs of the development within the overall regional requirements.

6.7 SCHOOLS

6.7.1 Affected Environment

The Petition Area is in the Kapolei Public School Complex. Schools in the Kapolei Complex include four elementary schools (Mauka Lani, Makakilo, Kapolei and Barbers Point), Kapolei Middle School and Kapolei High School. There are currently no schools within or near the Petition Area. All schools that serve the City of Kapolei have opened within the last ten years, reflecting the recent growth of the 'Ewa region. Schools in the service area of the Petition Area include Barbers Point Elementary, Kapolei Elementary, Kapolei Middle School and Kapolei High School. Table 21 presents the 2003 capacity, current and projected enrollments, and 2009 projected capacity for these schools.

Table 21
Capacity and Enrollment Projections for Kapolei Area Schools

School	2003 Capacity	2004 Actual Enrollment	2009 Projected Enrollment	2009 Projected Capacity
Barbers Point Elementary	636	510	426	+210
Kapolei Elementary	1,198	1,187	1,246	-48
Kapolei Middle	1,387	1,699	1,715	-328
Kapolei High	1,853	2,162	2,712	-859
TOTAL	5,074	5,558	6,099	-1,025

Source: DOE, November 2004

Current student enrollment for Kapolei Middle School and Kapolei High School exceeds the existing capacity. Both schools will be over capacity for the projected student enrollment in 2009. Kapolei Elementary School is near capacity, and is expected to exceed capacity by 2009. Barbers Point Elementary School is currently under capacity and will remain under capacity according to projections for 2009. New facilities being planned to address the demand for school facilities in the Kapolei area include a 12-acre elementary school planned to open in the 2009-2010 school year at the Mehana residential development within the City of Kapolei, an elementary school at Ko Olina (date undetermined), and a high school planned within the greater 'Ewa plains area. The high school is intended to relieve the enrollment pressure on Kapolei High School; however, its location and timing are yet to be determined. Enrollment in

Kapolei area schools is close to or already exceeding facility capacity and enrollment is expected to increase further within the next five years, resulting in a significant need for a middle school in the area.

6.7.2 Probable Impacts

Table 22 presents the DOE planning guidelines used to estimate student enrollment. Based on the enrollment planning guidelines and the number of residential units planned for the Petition Area, the Petition Area would generate a requirement for an additional 261 students. The student enrollment projection is shown in Table 23.

**Table 22
DOE School Enrollment Planning Guidelines**

School Type	SF Units	MF Units
Elementary (K-5)	0.279 st/du	0.109 st/du
Middle (6-8)	0.143 st/du	0.040 st/du
High (9-12)	0.154 st/du	0.069 st/du
SF = Single Family (Low Density Residential) MF = Multi-family (Medium Density and Mixed Use Residential) st/du = students / dwelling unit		

Source: DOE, December 2004

**Table 23
Student Enrollment Projection**

Housing Type Number of Units	Petition Area			Urbanized Area			Kapolei West		
	SF	MF	Total	SF	MF	Total	SF	MF	Total
	11	1,170	1,181	858	331	1,189	869	1,501	2,370
Students by School Type and Unit Type									
Elementary (K-5)	3	128	131	239	36	275	242	164	406
Middle School (6-8)	2	47	48	123	13	136	124	60	184
High School (9-12)	2	81	82	132	23	155	134	104	237
TOTAL	6	255	261	494	72	566	501	327	828

Source: DOE, December 2004

6.7.3 Mitigation

The Petitioner intends to dedicate a 15.5-acre site (north of the Petition Area) for a DOE Middle School to fulfill its fair share obligations (see Figure 3).

6.8 PARKS AND RECREATIONAL FACILITIES

6.8.1 Affected Environment

There are currently no public parks or recreational facilities in the Petition Area. Parks and recreational facilities within a one-mile radius of the Petition Area include the Makakilo Neighborhood Park, Kamokila Community Park, Kapolei Regional Park, Ko Olina Beach Park, Ko Olina Lagoon Beach ROW and Camp Malakole Beach ROW. The total acreage of public parks and recreational facilities within the one-mile radius surrounding the Petition Area is approximately 140 acres, consisting of 10 acres of neighborhood and community parks, 60 acres of beach facilities, and the Kapolei Regional Park. Facilities within a two-mile radius of the Petition Area provide approximately 411 acres of park space, including the Kalaeloa Regional Park, the 'Ewa Villages Golf Course and various neighborhood, community and beach parks. The total acreage of parks and recreational facilities within a three-mile radius of the Petition Area is approximately 628 acres. Table 24 summarizes the total available acreage of public parks and recreational facilities and distance with respect to the Petition Area.

Table 24
Acreage of Public Parks and Recreational Facilities
within a 3-mile Radius of the Petition Area

Distance from Petition Area	Neigh	Comm	District	Regional	Beach	Beach ROW	Golf Course	TOTAL
1 mile	4.0	5.9		69.4	18.0	42.2		139.5
1-2 miles	9.4	20.5		120.0	26.2		235.0	411.1
2-3 miles		22.8	25.0		30.0			77.8
Total Acres	13.4	49.2	25.0	189.4	74.2	42.2	235.0	628.4

Source: City and County, Department of Parks and Recreation, Dec. 2004

6.8.2 Probable Impacts

The Petition Area would generate a demand for additional park facilities to serve the new population. A review of the City and County of Honolulu Park Dedication Rules and Regulations (February 1996) indicates a need for 3.1 acres of park based on the proposed single and multi-family mix. Table 25 summarizes park dedication requirements.

**Table 25
Park Dedication Requirements**

Land Use	Planning Factor	Petition Area		Urbanized Area		Kapolei West	
		No. Units	Area (acres)	No. Units	Area (acres)	No. Units	Area (acres)
Low Density Residential (single-family)	350 sf/du	11	0.1	858	6.9	869	7.0
Medium Density Residential (multi-family)	110 sf/du	1,170	3.0	181	0.4	1,351	3.4
Mixed Use / Residential (multi-family)	110 sf/du			150	0.4	150	0.4
TOTAL		1,181	3.1	1,189	7.7	2,370	10.8

In addition to the total park dedication requirements, the ‘Ewa DP also provides guidelines for community-based parks based on service area populations (minimum 2 acres for every 1,000 residents). Table 26 summarizes the requirements for the park acreage that would be required for the proposed development. A community-based parks planning factor of 3.3 acres per 1,000 residents was used based on a request from DPP.

**Table 26
Community Based Park Standards**

Planning Factor	Petition Area		Urbanized Area		Kapolei West	
	No. Residents	Area (acres)	No. Residents	Area (acres)	No. Residents	Area (acres)
3.3 acres/1000 residents	1,900	6.3	2,870	9.5	4,770	15.7

6.8.3 Mitigation

The Petition Area provides a total of 17.1 acres of parks. The total proposed park area in the Petition Area exceeds the City’s park dedication requirement of 3.1 acres and the ‘Ewa DP community-based parks land requirement of 6.3 acres. In addition, the total amount of park area planned for the entire Kapolei West project (including the Urbanized Area) exceeds the City’s park dedication requirement of 10.8 acres and the ‘Ewa DP community-based park standard of 15.7 acres.

The proposed 14.3-acre neighborhood park would consist of passive and active recreation areas, and several small cultural preserves. The proposed neighborhood park, which is primarily intended to provide recreational space for residents of the Petition Area and the Kapolei West project, would also serve the communities at Ko Olina and Kapolei due to its central location linking the two areas.

In addition to the neighborhood park, the Petition Area includes a 2.8-acre mini park intended for passive recreation. Although uses for the mini park are still under consideration, it could include parking, seating areas and landscaping. The proposed residential developments would include open space areas and private recreational facilities to serve the immediate communities. The recreational facilities could provide amenities such as pools, play courts, passive recreational spaces, children play areas, and meeting spaces for social gatherings. Multi-purpose pathways would accommodate walking and bicycling activities.

In accordance with State Commission conditions placed on the reclassification of the Ko Olina Phase II project area from the Agricultural District to the Urban District (Appendix A), the Petitioner proposes to dedicate the existing 5.9-acre Kamokila Community Park currently owned by the Estate to the City and County of Honolulu. Additional community benefits may include adequate golf tee times at affordable rates for public play as determined by the Office of State Planning and the City and County of Honolulu (established by Condition No. 3).

6.9 POLICE PROTECTION

6.9.1 Affected Environment

The City and County of Honolulu Police Department provide police protection services of the Petition Area. The Petition Area falls within the jurisdiction of HPD District 8 (Kapolei District). District 8 is headquartered at the Kapolei Police Station, located less than 2 miles from the Petition Area.

6.9.2 Probable Impacts

The Honolulu Police Department indicated that the Kapolei West project would increase the demand for police services, and that the population growth in the region is resulting in the need for additional staffing and police facilities. The Petition Area would introduce approximately 1,180 homes and 1,900 new residents to the region. The need for increases in staffing and additional police facilities is a consequence of the planned regional population growth, which includes the Petition Area. The Honolulu Police Department will require increased resources to provide police services for the development which would presumably be funded out of increased real property tax revenues generated by the project. No mitigation is required.

6.10 FIRE PROTECTION

6.10.1 Affected Environment

Fire protection services for the Petition Area are provided by the City and County of Honolulu. The Makakilo Fire Station #35 and the Kapolei Fire Station #40 provide fire protection services to the Petition Area. The Honolulu Fire Department Battalion 4, which oversees fire protection services for West O'ahu, is headquartered at the Kapolei Fire Station. The Makakilo Fire

Station is located nearly three miles to the northeast. The Kapolei Fire Station is located approximately one mile to the southeast of the Petition Area.

6.10.2 Probable Impacts

The Petition Area would increase demand on existing fire protection facilities; however, existing fire protection facilities are adequate to provide fire protection services to the Petition Area. Design and construction of the water system would meet all the requirements of the BWS. Access roads capable of supporting the Department's fire apparatus would be designed and built according to the City and County of Honolulu's Fire Department requirements. All roadway and water system designs would be submitted to the Fire Department for review and approval. No mitigation is required.

6.11 EMERGENCY MEDICAL SERVICES

6.11.1 Affected Environment

The State of Hawai'i contracts with the City and County of Honolulu Department of Emergency Services to provide pre-hospital emergency medical services (EMS) and emergency medical ambulance services on O'ahu. The three ambulance units closest to the proposed development are located at Kapolei, the Waipahu Fire Station, and in Nanakuli at the Kaiser Permanente Clinic. There is a Rapid Response unit at Saint Francis Medical Center West in the Makakilo area. All City ambulances are staffed at the Advanced Life Support level, with either one paramedic and one emergency medical technician, or more commonly, two paramedics on each ambulance.

The City ground ambulances are augmented by the U.S. Army's 68th Medical Detachment, Military Assistance to Safety and Traffic program located at Wheeler Air Force Base. The MAST program provides aeromedical evacuation helicopter service, allowing serious medical and trauma cases to be transported from rural O'ahu areas to tertiary Honolulu hospitals. In addition, the Honolulu Fire Department provides first responder level co-response with personnel trained as Emergency Medical Technicians.

The EMS paramedics follow transportation protocols instituted by the State in transporting patients to receiving medical facilities. Typically, general medical patients and mild to moderate trauma patients would be transported to St. Francis West Hospital for initial stabilization. Severe trauma cases are transported to the Trauma Center at Queen's Medical Center in Honolulu, burns to the Burn Center at Straub Hospital in Honolulu, barotrauma cases to Kuakini Medical Center, and complicated pediatric and obstetric/gynecological cases to Kapiolani Medical Center for Women and Children in Honolulu.

Due to the increased population in the 'Ewa region, there is an existing need for additional emergency medical services at Kapolei. Staffing increases and scheduling modifications to

provide emergency medical services between the hours of 11:00 PM and 7:00 AM would satisfy the existing operational deficiency.

6.11.2 Probable Impacts

The Petition Area would increase the demand on the City's existing EMS resources in the 'Ewa region. Although actual response time would vary depending on the location within the Petition Area, response time is generally expected to be less than 15 minutes. There is a recognized need for 24-hour emergency medical care and services in the region, and the City's Emergency Services Department is currently working with the State to fund operations. No mitigation is required.

7.0
Cumulative Impacts



7.0 CUMULATIVE IMPACTS

"Cumulative impact" is defined as the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR §1508.7; §11-200-2, HAR). Section 11-200-17, HAR requires the EIS, at a minimum, to address the interrelationships and cumulative environmental impacts of the Proposed Action and other related projects.

Guidance for considering cumulative effects is set forth by the US Council on Environmental Quality (1997). The geographic boundaries used for the cumulative impact analysis vary with the resource considered and range from the watershed up to the State-wide economy. The time frame for the analysis is limited to the foreseeable future, which generally corresponds to a twenty-year planning horizon (consistent with the City and County's planning horizon).

7.1 PLANNING CONTEXT

The 'Ewa Region has been identified as one of two development areas within the City and County, as part of its directed growth management policy. As noted in Chapter 3, the City and County *General Plan* objective is to have the 'Ewa Region support 13 percent of the island wide population (up from 7.8% in 2000) which would require a doubling of the 2000 population by 2025. The directed growth policy is important because it preserves the rural and urban fringe areas of the City and County by directing population growth to the existing primary urban center and the 'Ewa Region's secondary urban center. As a matter of basic City and County policy, the 'Ewa Region will experience the largest share of growth over the next 25-year period of any of the City and County's eight planning regions. From a social perspective, the planned growth has provided expanded opportunities for homeownership within contemporary, master planned communities and a access to a range of new public schools, libraries and amenities. A review of Neighborhood Board minutes indicates a sense of pride in being a part of the city-building process and concern that the pace of development be carefully managed to minimize negative impacts such as traffic congestion and school overcrowding.

7.2 SUMMARY OF PROPOSED DEVELOPMENTS CONSIDERED IN THE CUMULATIVE IMPACT ANALYSIS

A summary of proposed developments considered in the cumulative analysis is provided on the following pages.

7.2.1 *City of Kapolei*

2005-2014 Development

- **City Civic Center** - The City and County of Honolulu has completed and has occupied most of City Office Building No. 1. Discussions with the City staff indicate that about 50

employees may be added to the current staff in the next few years as the building reaches full occupancy.

- **Kapolei Park Square** – A 2-acre parcel remains to be developed within this site located along the south end of Kapowai Place across from the Kapolei Shopping Center. The site is expected to be developed with office space.
- **Luana Koa Retirement Village** – A retirement village is planned for the 40-acre area along the west side of Fort Barrette Road between the future Kamaaha Avenue and Kapolei Parkway. The main entrance would be located along an extension of Manawai Street, with a secondary access located along the future extension of Kamaaha Avenue. Complete development is expected by about 2008.
- **Island Pacific Academy** – The initial phase of a private school opened in fall 2004 on a block on the southeast corner of Haumea and Wakea Streets. The school is planned to reach an enrollment of 760 students in 2009.
- **Kamokila Blocks between Wakea and Uluohia Streets** – These two blocks on the makai side of Kamokila Boulevard are expected to be developed with a mix of restaurant, retail, and office uses in the next several years.
- **Kapolei Power Center** – The remaining portions of the site adjacent to the Home Depot Store are expected to be developed by 2010 with a mix of retail, restaurant, and office uses.
- **Kalaeloa West Commercial Area** – The 18-acre commercial area west of Kalaeloa Boulevard, located across the future Kapolei Parkway alignment from the Advertiser Building, is planned for development as a retail complex (“Kapolei Commons”). Access to the parcel would be via driveway connections to the Kapolei Parkway.
- **Kapolei Mauka Residential Area** – A townhouse development is planned for the area just mauka of the H-1 Freeway on the west side of Makakilo Drive. The development is anticipated to have about 350 townhouses. Access would be provided to the Mauka Frontage Road or, if the Mauka Frontage Road has not been constructed, to Makakilo Drive.
- **Mehana at Kapolei Makai Residential Area** – Development of the full 130-acre project area is expected by 2014. The development would total about 1,150 residential units and a neighborhood commercial center.
- **Kapolei Makai Elementary School** – A public elementary school would be located adjacent to the Mehana at Kapolei development, although not included as a part of that development project. Although the timing is unknown, it is assumed that it would be developed by 2014.
- **Kapolei Rezoning Parcel 1 (Ord. No. 04-45)** – The development within this portion of the City of Kapolei is anticipated between 2011 and 2015. Approximately 80% of the floor area is assumed to be developed by 2014.
- **Kapolei Rezoning Parcel 2 (Ord. No. 04-45)**– This retail development, located makai of the Hawaiian Water Adventures Park, is expected to be completed prior to 2014.
- **Kapolei Rezoning Parcel 3 (Ord. No. 04-45)**– This commercial development is located on the northeast corner of the intersection of Farrington Highway and Makakilo Drive. The development of the parcel is expected between 2011 and 2015. The parcel was assumed to be 80% developed by 2014.

2015-2020 Development

The new development expected within the City of Kapolei from 2015 through the end of 2020 includes completion of Kapolei Rezoning Parcel 1 and 3.

7.2.2 Other Developments Near the Proposed Action

Additional development, or occupancy of previously completed development, is expected in several areas.

Makakilo - Most of the Makakilo area should be developed by 2010. The new development is expected to add 674 single-family homes and 236 apartments.

Villages of Kapolei and Kapolei Knolls - Kapolei Knolls and most of the Villages areas should be developed by 2010, with some development possibly extending beyond 2010. Both areas are expected to be developed by the end of 2014. The resultant development assumptions are as follows:

- Kapolei Knolls - The remaining 212 single-family homes would be completed.
- Village Center - The 15.4-acre vacant parcel would be developed with a neighborhood shopping area and half with churches.
- Village 6 – A vacant 9.8-acre parcel would be developed with about 150 apartments.
- Village 7/8 – An estimated 314 single-family homes would be developed on the 53-acre undeveloped area.
- Commercial Center in Village 1 – Assumed that the 22.9-acre parcel would be developed with shopping center or specialty retail uses by 2014.
- Village 2 - An 8-acre parcel would be developed with about 200 apartments.
- Village 5 – A 7.6-acre parcel would be developed with about 140 apartments.

Kalaeloa Redevelopment Area - Based on discussions with the Hawai'i Community Development Authority (HCDA) and the Department of Hawaiian Home Lands (DHHL), very limited additional development was assumed to occur in the near term due to the availability and competition from other development areas, as well as the uncertainties regarding the potential for basing a Naval Carrier Group Airwing at the Kalaeloa airfield. It was assumed that the light industrial areas would develop at an average rate of 5 acres per year, thus yielding about 55 acres of light industrial-warehousing uses by 2014 and 85 acres by 2020. The 85 acres would represent about one-half of the available development area for these uses. Because of the uncertainty regarding the potential return of Navy operations, only limited other development was assumed for the other conveyance areas by 2014. By 2014, development was assumed for a vocational school and about 150 acres of regional park facilities.

Near full development was assumed by 2020, with the uses envisioned in the Kalaeloa Redevelopment Plan. The anticipated land uses include:

- 42 acres of commercial recreational uses
- 20 acres of new office development
- A motor sports center/race track occupying about 140 acres
- A festival center occupying about 100 acres

A motor sports center and a festival center are expected to host major spectator events during several weeks and/or weekends, with these events spread out through the year.

Barbers Point Harbor - The Harbors Division of the State DOT indicated that there is approximately 169 acres of undeveloped land at the Harbor. Development of these areas was assumed to continue at the rate of traffic growth experienced along Malakole Street in recent years (about 2.2% per year).

Makaiwa Hills - Preliminary plans are to develop approximately 4,000 housing units with an emphasis on single-family homes. The developer plans to begin occupancy of units in 2009, with completion of the development projected for 2025.

Ko Olina Resort - Representatives of the Ko Olina Community Association and the Marriott Corporation were contacted regarding the planned general type and timing of development for the Ko Olina area. Based on available information and these discussions, the following levels of new development estimated:

2004 to 2014

- 1,290 new hotel rooms
- 470 new timeshare units
- 60 additional single-family homes (Centex)
- 390 additional townhouses (Coconut Plantation and Centex)
- 160 additional low density houses (across from Fairways Villas)
- 50 additional medium density houses
- Aquarium

2015 to 2020

- 800 additional hotel rooms (to 2,580 hotel rooms)
- 180 additional timeshare units (to Marriott project total of 750 units)
- 360 additional medium density houses (to 1,416 housing units)

Kapolei Business Park - An average of 115,000 square feet of new warehouse and distribution floor area are expected to be developed during each year. The new building floor area would total about 1.3 msf by yearend 2014 and 1.9 msf between 2014 and 2020. After 2020, with this level of development there would be about 25 acres of vacant lands available within the Kapolei Business Park.

Kapolei Theme Park – A theme-type amusement park is being considered for the approximately 65 acres along the west side of Kalaeloa Boulevard. The site would extend from the O‘ahu Railroad & Land (OR&L) railroad tracks makai to the vicinity of Opakapaka Street.

Amphitheater – An amphitheater has been proposed for 34 acres along the west side of Kalaeloa Boulevard. The site would extend mauka from the makai end of the planned future site of the Kapolei Theme Park (Islands of Paradise) to approximately 900 feet mauka of Malakole Street.

Table 27, reprinted from the Project Market Assessment (Mikiko Corporation, 2004, Appendix H), summarizes planned housing developments with State land use entitlements or exemptions proposed for the ‘Ewa DP area through 2025. A total of 19,000 primary resident-oriented homes are planned and another 900 non-resident/second home-oriented units are planned. This does not include the 1,190 homes planned for the Urbanized Area of the Kapolei West development (930 primary and 260 secondary).

Table 27
‘Ewa DP District Projected New Housing Unit Supply

Market orientation/ Project	Developer or Owner	2004 - 2005	2006 - 2010	2011 - 2015	2016 - 2020	2021 - 2025	Total projected units
Primary resident-oriented:							
Makaiwa Hills I and II	Aina Nui Corporation	0	500	1,250	1,250	66	3,066
City of Kapolei (Campbell)	Campbell Estate	0	300	700	0	0	1,000
Palehua East B (Makakilo buildout 1/3)	Castle & Cooke	60	210	0	0	0	270
Makakilo build-out 2/3	Finance Realty	200	50	0	0	0	250
Palehua East C & D (Makakilo buildout 3/3)	Finance Realty	0	80	400	220	0	700
Ewa by Gentry	Gentry Homes	600	700	0	0	0	1,300
Gentry Ewa Makai	Gentry Homes	0	800	1,065	0	0	1,865
Ocean Pointe	HASEKO (Ewa), Inc.	500	1,250	1,250	650	0	3,650
Mehana	Schuler Homes	0	450	698	0	0	1,148
UH West Oahu Campus area	State of Hawaii (DLNR)	0	500	1,250	1,250	1,000	4,000
Villages of Kapolei (Village 8)	State of Hawaii (HCDCH/DHHL)	0	327	0	0	0	327
Unnamed	State of Hawaii (DHHL)	0	500	0	0	0	500
Unnamed	State of Hawaii (DHHL)	0	0	240	0	0	240
Ewa Villages	City and County of Honolulu	100	567	0	0	0	667
Total primary residential market (rounded)		1,500	6,200	6,900	3,400	1,100	19,000
Non-resident/ second-home oriented:							
Ko Olina Resort & Marina	Ko Olina Development LLC	100	600	185	0	0	885
Total non-resident- oriented market (rounded)		100	600	200	0	0	900

7.3 ASSESSMENT

An assessment of potential cumulative effects for each resource area is provided below. In summary, the Proposed Action and Alternative, in conjunction with future public and private actions planned in the region, collectively would not have a significant cumulative impact on the resource areas analyzed.

7.3.1 Physical Environment

Climate, Topography and Slopes, Soils. The Proposed Action would not have a cumulative effect on climate, topography and slopes.

Agricultural Capability. The Proposed Action would not have a significant cumulative effect on Agricultural Capability. As discussed in Section 4.4, the conversion of the Petition Area's agricultural land into urban uses, when considered with other planned developments in Hawai'i, involves the loss of too little good agricultural land to affect (1) the availability of land to farmers in Hawai'i, (2) agricultural land rents, (3) the growth of diversified agriculture, or (4) potential agricultural employment.

Groundwater Resources. The Proposed Action would not have a significant cumulative effect on Groundwater Resources. Based on the sustainable yields of the 'Ewa-Kunia and Waipahu-Waiawa Aquifer Systems and the present unallocated and unused supplies, the available supply of water is sufficient to support the Petition Area and the larger Kapolei West project. The proposed development would not be a potential source of contamination to the underlying groundwater and would cause no significant degradation of the potable water supply.

Natural Hazards. The Proposed Action would not have a cumulative effect on Natural Hazards.

Biological Resources. The Proposed Action would not have a cumulative effect on biological resources with the exception that it could reduce potential forage area for the Hawaiian Owl. The Petition Area does not support any federally threatened or endangered species. The area was formerly under sugarcane cultivation with a long history of monoculture and active plantation operations.

Historic, Cultural and Archaeological Resources. The Proposed Action would not have a cumulative effect on Historic, Cultural and Archaeological Resources. Resources have been analyzed and recorded, and appropriate mitigation has been identified. The conversion of the 174-acre Petition Area to urban use, when considered in the context of the buildout of the 'Ewa Plain in accordance with the City and County growth policy, would contribute incrementally to the irretrievable loss of the historic landscape of the region. Appropriate mitigation measures have been identified to minimize cumulative impacts to the historic OR&L ROW.

Scenic and Visual Resources. The Proposed Action would not have a significant cumulative effect on Scenic and Visual Resources. The landscape of the Kapolei Region is changing from sugarcane fields as late as the mid 1990's to rooftops and urban, city-like forms. This is an inevitable change associated with the directed growth policy, in part to maintain scenic and visual resources elsewhere on the island. Open spaces visible from the major public thoroughfares and park spaces, including dramatic views of the Waianae Range and Diamond Head, and the wide offshore vistas and sunsets will not be affected due to the sloping nature of the coastal plain.

Air Quality. The Proposed Action would not have a significant cumulative effect on air quality. The additional 60,000 residents planned from the 'Ewa Region over the next two decades will significantly increase vehicle and stationary emissions associated with H-POWER and other power generation sources, reducing air quality. Fortunately, with Hawai'i's trade winds, air quality is relatively clean and is considered an attainment area under the Clean Air Act. Cumulative air quality impacts related to traffic congestion has been carefully evaluated in the Kapolei West traffic impact assessment. A range of traffic improvements has been proposed to minimize traffic congestion associated with the Proposed Action and future baseline conditions that include other proposed projects in the region. An important countervailing factor is that vehicle emissions (e.g., carbon monoxide) will go down by an average of about 30 to 40 percent per vehicle during the next 10 years due to the replacement of older vehicles with newer models. This would somewhat offset the increase in the sheer number of vehicles. The Kapolei West air quality assessment indicated that worst-case air quality concentrations predicted for 2020 (including projected regional growth) were well within the state and federal standards.

Noise. The Proposed Action would not have a significant cumulative effect on noise. It would contribute construction period noise which is by its nature, short term. Operational period vehicle trips would add to the overall regional growth in traffic noise associated with major roadway facilities. Typically the noise impact is confined to the major roadway corridors.

7.3.2 Socio-Economic Environment

Population Impacts. The Proposed Action would not have a significant cumulative impact on population. As noted, the 'Ewa Region's population is planned to almost double within the next two decades as part of the City and County's directed growth policy. From a cumulative perspective, directing growth to the 'Ewa Region indirectly takes growth pressure off the City and County's rural and urban fringe areas.

Housing. The Proposed Action would have a beneficial cumulative impact on housing. The Kapolei West market study identified an O'ahu-wide shortage of primary resident housing units of about 37,400 by 2020 and about 56,600 by 2025. The Proposed Action's 520 primary resident housing units would provide 2% to 3% of the demand over the 2005 to 2020 period. Although the Proposed Action's 640 secondary homes represent a significant share of the entitled, non-resident homes (all at Ko Olina), the market study (Appendix H) identifies strong underlying demand in this segment, sufficient to support additional homes in this market segment.

Employment. The City and County of Honolulu's Department of Planning and Permitting estimates that job growth in the Ewa region will increase from about 21,500 in 2000 to over 70,000 by 2030 (a 226% increase). Jobs within the Kapolei region (City of Kapolei, Ko Olina/Kapolei West/Kaleloa/JCIP/ Makaiwa/Makakilo/Kunia) are projected to increase from about 10,300 in 2000 to over 50,000 by 2030 (a 386% increase). From an incremental perspective, the Proposed Action would support job growth in the region. As discussed in Section 5.3, the Proposed Action could support a total of about 5,800 FTE jobs, or an annual average of about 390 direct, indirect and induced FTE jobs per year over its 15-year

development period. The direct jobs would primarily consist of on-site construction employment, but some professional services and administrative positions would likely be located elsewhere on O'ahu. Total development period earnings from the Petition Area are estimated at \$258 million, or average annual personal earnings of \$17.2 million. By its completion in about 2020, the Proposed Action could support some 260 FTE operational period jobs per year, with total annual average earnings of about \$13.1 million. The direct operational jobs could include a variety of types and levels of work, including real estate brokerage, management, sales and marketing, and maintenance. Average annual FTE earnings supported by all Petition Area employment (i.e., direct, indirect and induced) could average about \$45,000 during the development period and \$50,000 during the operational period.

Fiscal Impacts. The Proposed Action would have a positive cumulative fiscal impact through its construction period. The Project fiscal analysis indicated positive revenue/expenditure ratios for both Honolulu County (4.0) and State government (3.6). Beyond the construction period (i.e., beyond 2020), net operating revenue to expenditure ratios for the Petition Area only are anticipated as 4.1 for Honolulu County and 0.9 for State government. For the project as a whole, net operating revenue to expenditure ratios are anticipated to remain breakeven or better, representing 8.2 for Honolulu County (some \$5.2 million per year in additional operating revenues, largely real property taxes compared to some \$0.6 million per year in additional operating costs) and 1.0 for State government (some \$2.1 million in additional operating revenues against an equivalent \$2.1 million in additional operating costs).

Traditional Customs and Practices. The Proposed Action would not have a cumulative impact on traditional customs and practices. The cultural impact assessment concluded that the Petition Area is not associated with traditional cultural practices for subsistence and religious purposes and does not provide access to other areas in order to exercise those practices (i.e., gathering of plant and marine resources; presence of burials, historic properties and storied places; documentation of trails).

7.3.3 Public Facilities and Services

Transportation. The Proposed Action would not have a significant cumulative impact on transportation if the proposed mitigation measures are implemented. A number of transportation projects have been planned for the 'Ewa District to accommodate projected increases in traffic to and within the Kapolei Area. Most of these projects have been identified and/or confirmed through the O'ahu Metropolitan Planning Organization (OMPO) transportation planning process⁸, as well as the 'Ewa Highway Impact Fee Program studies and plans⁹. The OMPO process assesses the long-range transportation needs to serve forecast travel over the next 20 or more years, but also selects a high-priority short list of projects and programs for funding within the next three years as covered by its adopted Transportation Improvement Program (TIP). The 'Ewa Highway Impact Fee Program addresses the travel needs through

⁸ *Transportation for O'ahu Plan, TOP 2025*, prepared for OMPO by Carter-Burgess, April 6, 2001.

⁹ *Ewa Highway Impact Fee Program*, prepared for State of Hawai'i Department of Transportation by Kaku Associates, Inc. July, 2002.

2010 and establishes a developer-funded source to pay for 20% of the regional roadways needed in the 'Ewa District.

Utilities and Public Infrastructure Systems (Water Supply, Wastewater, Drainage, Solid Waste, Power and Communications). The Proposed Action and Alternative would not have a significant cumulative impact on power and solid waste systems; and would have no cumulative impact on other Utilities and Public Infrastructure Systems. Potable water commitments for new development are made by the BWS in consideration of maintaining safe sustainable yields of the potable aquifers. Based on the sustainable yields of the 'Ewa-Kunia and Waipahu-Waiawa Aquifer Systems and the present unallocated and unused supplies, the available supply of water is sufficient to support the Petition Area and the larger Kapolei West project. Increased wastewater flows are accommodated by long-range master planning process overseen by the City and County to ensure that collection and treatment facilities are expanded in a timely manner. Privately funded hook up fees are instituted to ensure appropriate cost allocation. The Kapolei West project, including the Proposed Action, would provide an important, environmentally friendly link in managing stormwater within the local watersheds, in part by using open, golf course fairways to allow for detention and recharge. Solid waste disposal is recognized as a critical municipal issue on O'ahu and in many municipalities around the country. The City and County is in the process of evaluating long-range land disposal options, as well as moving forward in implementing island wide curbside recycling programs to reduce the waste stream. HECO and Hawaiian Telcom maintain their own long-range master planning process to ensure new customers are provided for and levels of service are maintained for existing customers.

Public Services (Schools and Libraries Recreational Facilities, Police, Fire and Emergency Services). The Proposed Action would not have a significant cumulative impact on Public Services. The Kapolei West project includes a site for new Middle School, considered a critically needed facility by DOE. Two new elementary schools, one within the Mehana community in the City of Kapolei and the other within Ko Olina and a new East Kapolei High School complex being considered by DOE would satisfy the long term K-12 needs of the 'Ewa Region. The Kapolei West project, including the Petition Area, would provide 24.8 acres of parklands, in addition to private recreational areas, a net addition to 'Ewa Region parks and open space amenities. City and County real property taxes raised by the development of the Kapolei West project, including the Petition Area, would underwrite marginal increased demands placed on police, fire and emergency services.

8.0 Alternatives to the Proposed Action



8.0 ALTERNATIVES TO THE PROPOSED ACTION

In addition to the Proposed Action (urbanization of the approximately 174-acre Petition Area), the following development alternatives were considered for the project site:

- No Action (Development of approximately 373-acre Urbanized Area)
- Development in conformance with the land uses identified in the 'Ewa DP.

8.1 NO ACTION

Description. The No Action Alternative assumes only uses permitted within the Agricultural District would be developed within the Petition Area. The rest of the Kapolei West project area would continue to be developed for residential and commercial uses. Urbanization of the Petition Area would be delayed until a future, undetermined date. Several fairways of the proposed Kapolei West Golf Course would continue to be routed through Petition Area and the areas designated for Park use would remain (uses permitted in the State Agricultural District). Densities in the rest of the 373-acre portion of the Kapolei West development would be increased to partially offset the loss of residential units associated with the Petition Area.

Analysis. The No Action Alternative would retain a pocket of State Agricultural District land surrounded by State Urban District land, which is inconsistent with the City and County's *General Plan* and Development plan objectives to direct growth to the 'Ewa Region, and inconsistent with the Agricultural District standards. Only 15 acres of the Petition Area consist of soil classified as "good" for cultivation and these 15 acres exist as three noncontiguous irregularly-shaped areas along the Petition Area boundary. The remaining 126 acres of the Petition Area are characterized as Coral Outcrop, and are classified as "poor" soils for crop cultivation. Most of the former sugar cane and pineapple land remains fallow; therefore, there is no shortage of agricultural land available on O'ahu for diversified crops. The pockets of irregularly shaped areas of good soil are a challenge to efficient farming.

8.2 'EWA DEVELOPMENT PLAN CONFIGURATION ALTERNATIVE

Description. The Alternative assumes a development pattern similar to what is shown in the 'Ewa DP Urban Land Use Map for the 75.6-acre area south of the OR&L ROW. This area is represented on the DP Land Use Map as Industrial, part of the 2,300-acre area referred to as Kalealoa/JCIP. The 98.6-acre area north of the OR&L ROW is represented on the DP as Low/Medium Density Residential (L/MDR) with no associated golf course – consistent with the proposed uses. The City and County of Honolulu's Department of Planning and Permitting determined islandwide employment factors for heavy/waterfront industrial use and light industrial uses of 3.5 and 12.46 jobs per acre, respectively (DPP, April 1980). Existing job density in the Kalealoa/JCIP area is estimated at approximately 3.6 jobs per acre. Using the DPP light industrial factor of 12.46 jobs per acre, the 75.6-acre area would then generate approximately 940 jobs. Assuming a residential density and use similar to the Proposed Action for the area north of the OR&L ROW, the area north of the OR&L ROW would yield approximately 1,115 dwelling units and approximately 1,840 residents—approximately the same number of dwellings/residents as planned in the Proposed Action.

Alternative Plan Land Utilization

Use	Acres		
	Gross	Net	Roads
L/MDR	98.6	83.8	14.8
Industrial	75.6	64.3	11.3
Total	174.2	148.1	26.1

Comparison between Proposed Action and Alternative Plan

Use/Factor	Proposed	
	Action	Alternative
Residential (ac)	86	84
Homes (du)	1,150	1,115
Residents	1,900	1,840
Ind. Jobs	0	940
Golf Course (ac)	60	0
Parks (ac)	17	0
Roads/OS (ac)	11	26

Industrial use of the southern area is well supported by market demand. Honolulu's industrial market vacancy rate has dropped from 8.5 percent in 1997 to an estimated 1.7 percent in 2004. Vacancy rates in the Campbell Industrial and Kapolei Business Parks are estimated at 0.3 percent. Industrial land prices are undergoing significant increases due to the high demand and low supply (Colliers 2004). The Alternative would represent approximately 3.3 percent of the 2,300-acre Kalaeloa/JCIP industrial area.

Analysis. As described, the Alternative Plan would result in more intensive urban development. Under the Proposed Action, the area south of the OR&L ROW is planned with fairly low-density uses, primarily comprised of parks and golf course. Under the Alternative, the entire area would be developed for industrial use. The Alternative and the Proposed Action would have similar, residential uses above the OR&L ROW. The proposed 7,300-yard championship golf course would need to be substantially reduced in size to accommodate the loss of fairways that would be developed for industrial and residential purposes.

Land Use Compatibility. The Alternative would use the OR&L ROW as a basic land use divider, separating the industrial and residential uses, and in effect, serving as a physical barrier between the lands to the north and south of the ROW. The Proposed Action intentionally incorporates the OR&L ROW into the land use pattern, with appropriate setbacks, similar to the manner in which Ko Olina has been planned around the ROW. The integration with the surrounding land use pattern would provide a more interesting visual experience for travelers on the Historic Railroad, perhaps enhancing its popularity and ridership. The park and golf course uses identified in the Proposed Action provide a transitional land use between the residential uses north of the OR&L ROW and the existing and planned industrial uses associated with Kalaeloa Harbor and the Campbell Industrial Park. The alternative of extending industrial use up to the makai edge of the OR&L ROW would affect the quality of life for residents living in homes adjacent to the north side of the OR&L ROW and detract from the experience of travelers along the OR&L ROW. Separate roadway access would be needed to divide residential and industrial traffic. Finally, the light industrial alternative would result in an increase in a higher proportion of impervious surfaces and a decrease in groundwater recharge.

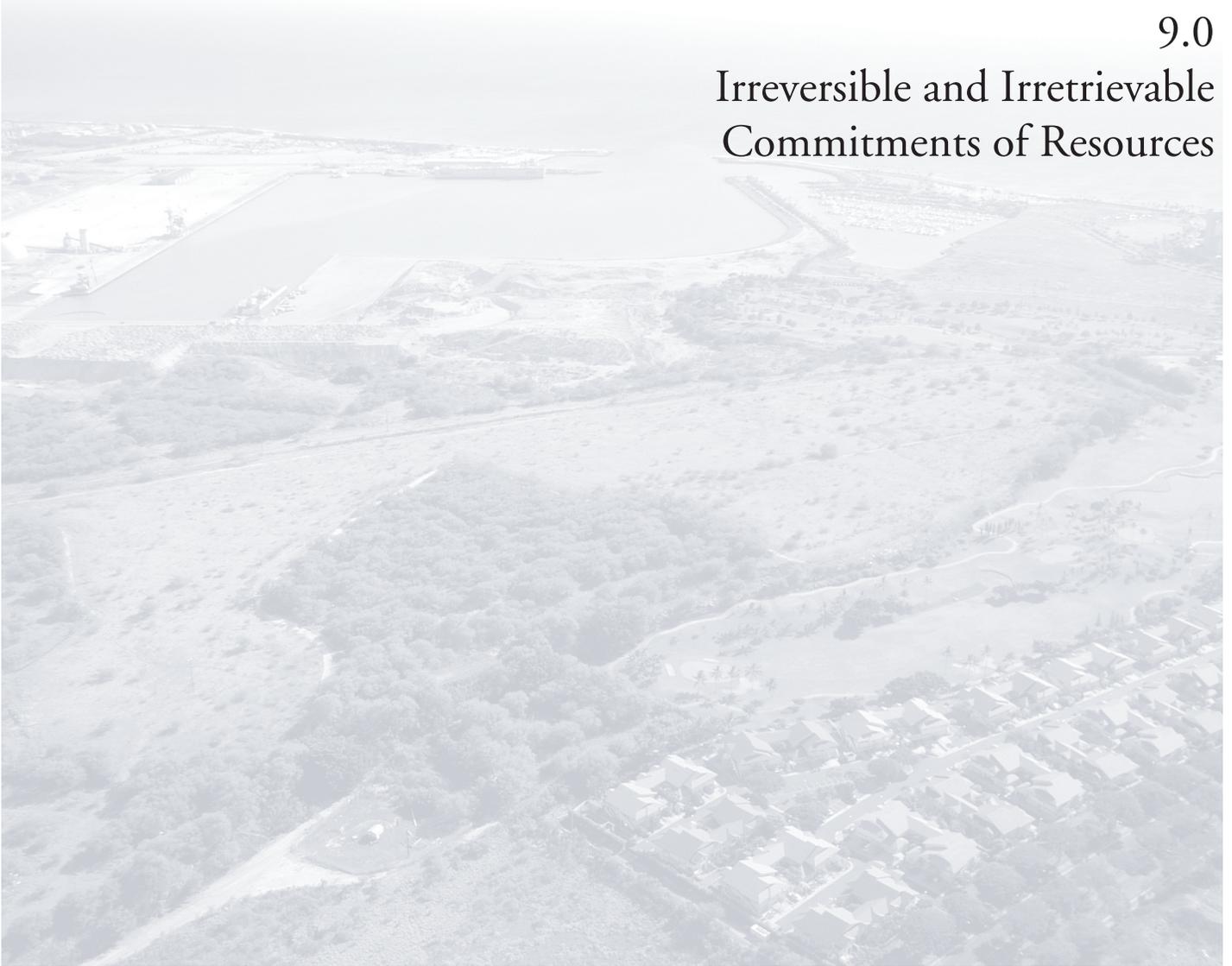
Traffic. The estimated 940 jobs associated with the industrial park would contribute to peak hour traffic congestion along Kalaeloa Boulevard. By contrast, the 157 residential units

associated with the Proposed Action south of the OR&L ROW (c. 195 de facto residents) would be primarily comprised of second homes buyers, without the need to travel during peak hours. The Alternative would require more than double the amount of land area dedicated to roadways to support the more intensive development.

Aesthetics. The park and golf course uses associated with the Proposed Action provide a more sensitive backdrop to the identified cultural resources in the area south of the OR&L ROW, allowing for careful screening and use of landscaping and open space to minimize intrusion. This would be more difficult to replicate in an industrial setting.

Note: DPP projects that jobs within the Kalaeloa/JCIP area will increase from about 5,530 in 2000 to over 14,200 by 2030 – a net increase of 8,670 jobs. From a long range, regional perspective, the Proposed Action should not have an adverse effect on projected regional growth in industrial jobs. It represents a small portion (3.3 percent) of the Kalaeloa/JCIP employment area and, based on DPP's job density factors, the developable area of Kalaeloa/JCIP (net of the 75.6-acre area) could support approximately 9,110 new jobs, more than the forecasted 8,670 jobs.

9.0
Irreversible and Irretrievable
Commitments of Resources



9.0 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

HAR Chapter 200 of Title 11, Environmental Impact Statement Rules (§11-200-17(k)) requires the “identification of unavoidable impacts and the extent to which the action makes use of non-renewable resources during phases of the action, or irreversibly curtails the range of potential uses of the environment.”

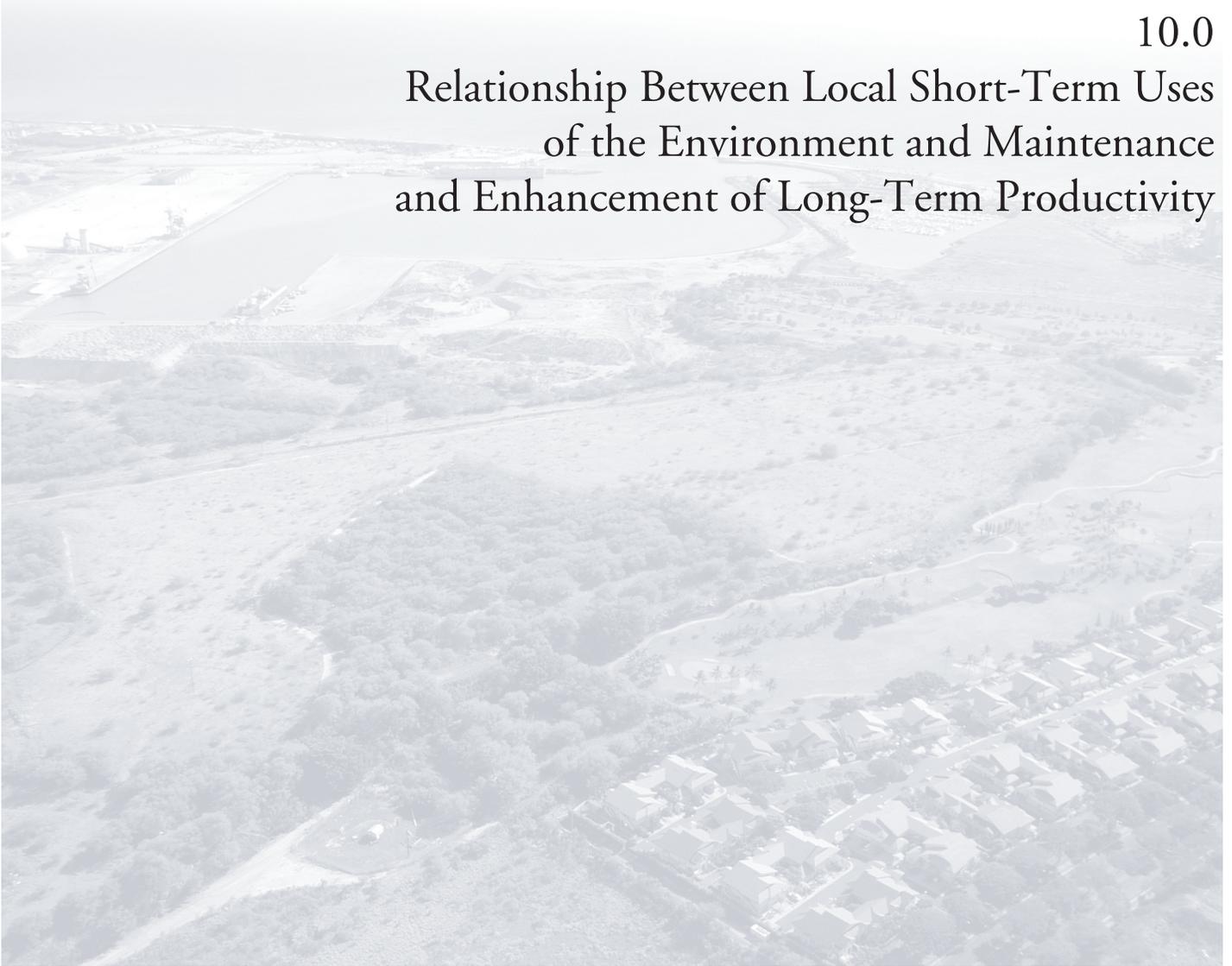
The construction of the Proposed Action would result in an irreversible and irretrievable commitment of capital, land, labor and energy for its design, development and operation. The commitment of these resources, however, should be evaluated in light of expected benefits to the community accruing from the project. The Proposed Action would irretrievably alter the existing views of the Petition Area from the H-1 Freeway and neighboring residential areas. However, it would not obstruct significant views identified in the *‘Ewa DP*.

The development of the project would transform the subject property from its present fallow agricultural/open state to an urban environment. As a result, the Proposed Action would irreversibly limit the potential use of the Petition Area for agricultural production. However, there is ample prime agricultural land in other locations on O‘ahu for diversified agriculture. The housing opportunities provided, the associated employment created, and public tax revenues generated by the project offset the loss of agricultural land.

The Proposed Action would not impact threatened or endangered biological resources or significant historic sites. The Proposed Action would not adversely affect rights customarily and traditionally exercised for subsistence, cultural and religious purposes and would have minimal or no impact on Hawaiian culture, its practices and traditions.

10.0

Relationship Between Local Short-Term Uses of the Environment and Maintenance and Enhancement of Long-Term Productivity



10.0 RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF THE ENVIRONMENT AND MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

HAR Chapter 200 of Title 11, Environmental Impact Statement Rules (§11-200-17(j)) requires the description of the “relationship between local short-term uses of humanity's environment and the maintenance and enhancement of long-term productivity,” including discussions of the extent to which the Proposed Action (1) involves trade-offs among short-term and long-term gains and losses; (2) forecloses future options, (3) narrows the range of beneficial uses of the environment, or (4) poses long-term risks to health or safety.

Trade-offs Among Short-Term and Long-Term Gains and Losses

There would be a short-term loss due to air quality and noise impacts during project construction. There would be a long-term change in regional traffic patterns and volumes. There would be long-term productivity gains through the project's provision of desirable homes for O'ahu residents. There would be long-term productivity gains through the creation of jobs and net fiscal benefits to the County and State related to the Proposed Action's in-migrant population.

Foreclosure of Future Options

The Proposed Action would foreclose the future option of agricultural use of the project area. However, the Petition Area includes only about 15 acres of good agricultural lands and has not been farmed in ten years. Due to the (1) ample supply of suitable land available for diversified agriculture and (2) limited market potential for diversified crop production, it is unlikely that the project area would be returned to large-scale agricultural use.

Narrowing of the Range of Beneficial Uses of the Environment

The Proposed Action would increase the range of beneficial uses of the environment by providing a productive use for the Petition Area, increasing the housing inventory for the O'ahu's families, and providing net fiscal benefits to the County and State.

Long-Term Risks to Health and Safety

The project would not pose long-term risks to human health and safety. The project would comply with Federal, State and County regulations governing the various aspects of project implementation. The Petition Area is not in a known flood hazard area and is outside the tsunami inundation.

11.0 References



11.0 REFERENCES

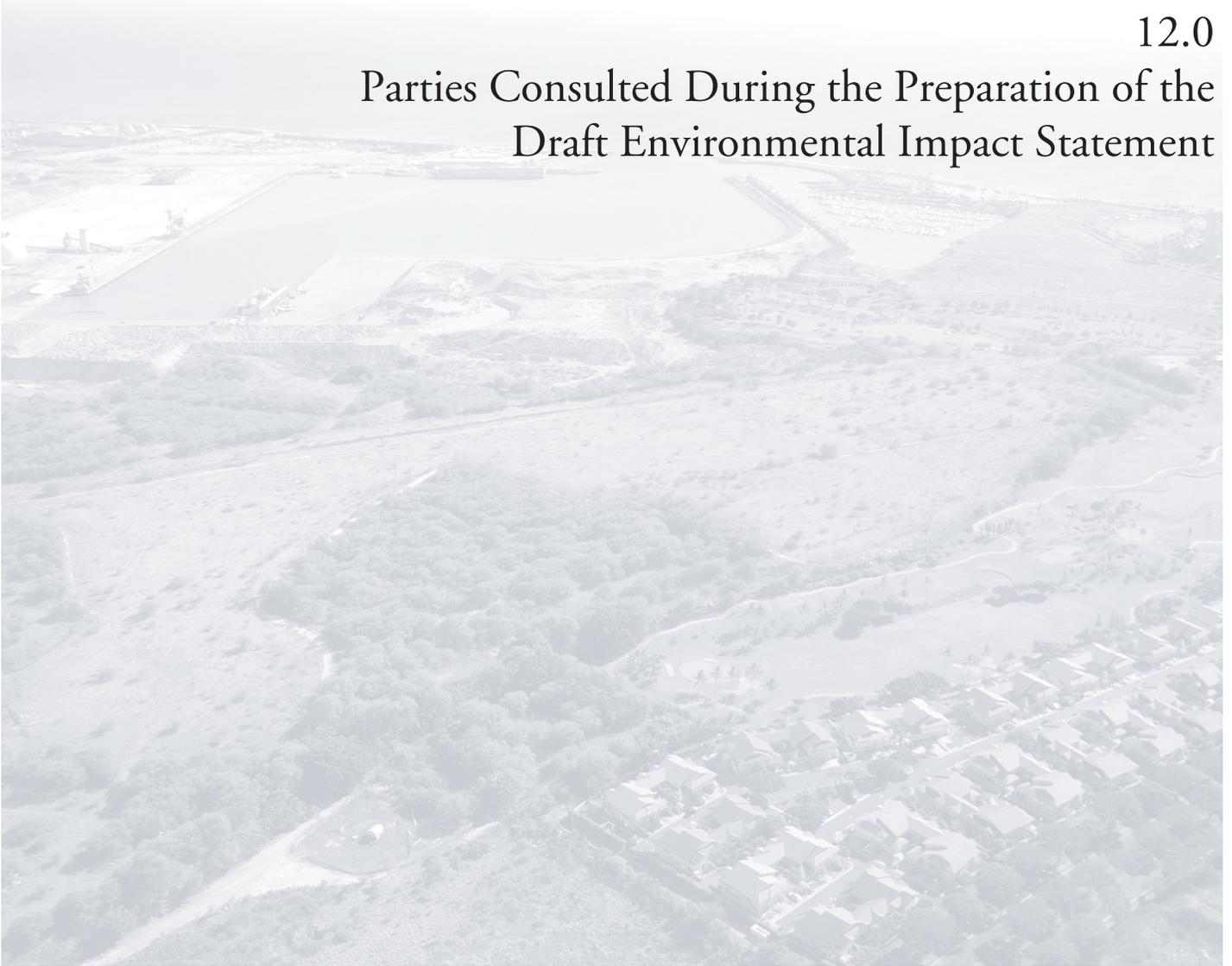
- Belt Collins Hawai'i. *Pearl Harbor Historic Trail Master Plan*. City and County of Honolulu. May 2001.
- B. D. Neal & Associates. *Air Quality Study for the Proposed Kapolei West Project: Kapolei, O'ahu, Hawai'i*. Prepared for Helber Hastert and Fee, Planners. February 2004.
- Berger, Andrew J. *Written Communication to F.J. Rodriguez*. Prepared for Environmental Communications, Inc. May 1984.
- Berger, Andrew J. *Birds of West Beach: Region Follow-Up Report*. Prepared for Environmental Communications, Inc. August 1979.
- Bruner, Phillip L. *Letter Report for Kapolei West Expansion Area*. Prepared for Helber Hastert and Fee, Planners. May 2005.
- Bruner, Phillip L. *Survey of the Avifauna and Feral Mammals at the Proposed Campbell Commercial-Industrial Site, 'Ewa, O'ahu*. Prepared for William E. Wanket Inc. August 1989.
- Char and Associates. *Botanical Survey Kapolei Rezoning ±96-Acre Parcel, Kapolei, 'Ewa District, O'ahu*. Prepared for Helber Hastert and Fee, Planners. November 2003.
- Char and Associates. *Botanical Survey Kapolei West – Parcels A to C, Kapolei, 'Ewa District, O'ahu*. Prepared for Helber Hastert and Fee, Planners. April 2004.
- Char and Associates. *Red Ilima (Abutilon menziesii) Reconnaissance Survey, 'Ewa, O'ahu*. Prepared for Helber Hastert and Fee, Planners. November 2003.
- City and County of Honolulu, Department of Planning and Permitting. *Annual Report on the Status of Land Use on O'ahu Fiscal Year 2003*. September 2004.
- City and County of Honolulu, Department of Planning and Permitting. *'Ewa Development Plan*. August 1997.
- City and County of Honolulu, Department of Planning and Permitting. *'Ewa Development Plan Five Year Review Draft Briefing Package*. January 2004.
- City and County of Honolulu, Department of Planning and Permitting. *General Plan: Objectives and Policies*. 1992.
- City and County of Honolulu, Department of Planning and Permitting, Planning Division. *General Demographic Characteristics*. January 2002.
- City and County of Honolulu, Department of Planning and Permitting. *Written communication: Letter from Randall K. Fujiki, Director to Keith Kurahashi, Kusao and Kurahashi, Inc., 2001/CLOG-819 (rns)*. March 7, 2001.

- City and County of Honolulu, Department of Planning and Permitting. *Written communication: Letter from Eric G. Crispin, Director to Thomas A. Fee, Helber Hastert and Fee, Planners, 2003/ELOG-3592 (MH).* December 19, 2003.
- Cultural Surveys Hawai'i, Inc. *A Cultural Impact Assessment of Approximately 595 Acres at Kapolei, Honouliuli Ahupua'a , 'Ewa District of O'ahu (TMK: 9-1-014: 33 and 9-1-15: 4, 18 and por. 20).* Prepared for Helber Hastert and Fee, Planners. December 2004.
- Cultural Surveys Hawai'i, Inc. *Archaeological Assessment of an Approximately 100-Acre Project Area at Kapolei, Honouliuli Ahupua'a , 'Ewa District, O'ahu (TMK: 9-1-015:004).* Prepared for Helber Hastert and Fee, Planners. November 2003.
- Cultural Surveys Hawai'i, Inc. *Archaeological Inventory Survey of Approximately 124 Acres at Kapolei, Honouliuli Ahupua'a , 'Ewa (TMK: 9-1-14:33 and 9-1-15:20).* Prepared for Helber Hastert and Fee, Planners. December 2004.
- Cultural Surveys Hawai'i, Inc. *Archaeological Inventory Survey of Two Sinkholes at Kapolei, Honouliuli Ahupua'a , 'Ewa.* Prepared for Helber Hastert and Fee, Planners. June 2004.
- Cultural Surveys Hawai'i, Inc. *Documentation of Plantation Infrastructure at Kapolei, Honouliuli Ahupua'a , 'Ewa District, O'ahu (TMK: 9-1-015:004).* Prepared for Helber Hastert and Fee, Planners. June 2004.
- Cultural Surveys Hawai'i, Inc. *Field Inspection of Approximately 124 Acres at Kapolei, Honouliuli Ahupua'a , 'Ewa District, O'ahu (TMK: 9-1-14:33 and 9-1-15:20).* Prepared for Helber Hastert and Fee, Planners. February 2004.
- Cultural Surveys Hawai'i, Inc. *Request for Status Clarification Regarding Historic Preservation Concerns at Certain Lands at Kapolei, Honouliuli Ahupua'a , 'Ewa District, O'ahu (TMKs 9-1-15:4 and 18).* Prepared for Helber Hastert and Fee, Planners. November 2003.
- D. L. Adams Associates, LTD. *Environmental Noise Assessment Report Kapolei West 100 Acre Petition: Kapolei, O'ahu, Hawai'i.* Prepared for Helber Hastert and Fee, Planners. February 2005.
- Decision Analysts Hawai'i, Inc. *Kapolei West: Impact on Agriculture.* Prepared for Helber Hastert and Fee, Planners. September 2004.
- Engineering Concepts, Inc. *Preliminary Engineering Report for the Proposed Kapolei West Development Kapolei, O'ahu, Hawai'i.* Prepared for Aina Nui Corporation. February 2005.
- Environmental Communications, Inc. *Final Supplemental Environmental Impact Statement for West Beach Honouliuli, 'Ewa District, Island of O'ahu, Hawai'i.* Prepared for West Beach Estates. June 1985.
- Foote, Donald E., et al. *Soil Survey of the Islands of Kauai, O'ahu, Maui, Molokai, and Lanai, State of Hawai'i, Prepared for U.S. Department of Agriculture, Soil Conservation Service in cooperation with the University of Hawai'i Agricultural Experiment Station.* 1972.

- Helber Hastert and Fee Planners. *Honolulu Bicycle Master Plan*. City and County of Honolulu, Department of Transportation Services. April 1999.
- Mikiko Corporation. *Market Assessment for Residential Uses at the Proposed Kapolei West, Island of O'ahu*. Prepared for Helber Hastert and Fee, Planners. May 21, 2004.
- Mikiko Corporation. *Economic and Fiscal Impact Assessment for the Proposed Kapolei West Development: Island of O'ahu*. Prepared for Helber Hastert and Fee, Planners. October 27, 2004.
- Mink & Yuen, Inc. *Kapolei West Geology, Hydrology and Water Resources Study*. Prepared for Helber Hastert and Fee, Planners. March 8, 2005.
- State of Hawai'i, Department of Agriculture. *Agricultural Lands of Importance to the State of Hawai'i Island of O'ahu*. January 1977.
- State of Hawai'i Land Use Commission. *Docket Number A90-65 Findings of Fact, Conclusions of Law, and Decision and Order*. February 14, 1991.
- State of Hawai'i Land Use Commission. *Docket Number A90-65 Order Granting Motion to Amend Findings of Fact, Conclusions of Law, and Decision and Order*. March 6, 1997.
- State of Hawai'i, Office of State Planning. *The Hawai'i State Plan*. 1991.
- State of Hawai'i, University of Hawai'i, Land Study Bureau. *Detailed Land Classification - Island of O'ahu*. L.S.B. Bulletin No. 11. December 1972.
- U.S. Federal Emergency Management Agency, National Flood Rate Map, Flood Insurance Rate Map. *Community Panel Number 15003C0305 E*. November 20, 2000.
- Wanket, William E. *Kapolei Business-Industrial Park Final Environmental Impact Statement*. April 1990.
- Wilbur Smith Associates, *Kapolei West Traffic Impact Study: City of Kapolei*. Prepared for Aina Nui Corporation. November 30, 2004.
- Wilson Okamoto & Associates. *Application for Development Plan Amendment and Environmental Assessment: Ko Olina Phase II*. Prepared for West Beach Estates. January 1991.
- Wilson Okamoto & Associates. *Ko Olina Phase II: Application for Zone Change (Withdrawn)*. Prepared for West Beach Estates. November 1995.
- Wilson Okamoto & Associates. *Ko Olina Phase II: Final Environmental Impact Statement*. Prepared for West Beach Estates. April 1989.

12.0

Parties Consulted During the Preparation of the
Draft Environmental Impact Statement



12.0 PARTIES CONSULTED DURING THE PREPARATION OF THE DRAFT ENVIRONMENTAL IMPACT STATEMENT

12.1 PARTICIPANTS IN THE DEIS PREPARATION PROCESS

The Kapolei West Expansion Area DEIS was prepared for the Petitioner, Aina Nui Corporation, by Helber Hastert & Fee, Planners. The following list identifies individuals and organizations involved in the preparation of this report and their respective contributions.

Helber Hastert & Fee, Planners

Thomas A. Fee, AICP	Principal-in-Charge
Corlyn Olson Orr	Project Planner
Gail Renard	Contributing Author
Brian Hann	Contributing Author
Ryan Masuda	Graphic Design

Technical Consultants

Decision Analysts Hawai'i, Inc.	Agriculture Impact Assessment
Mink and Yuen, Inc.	Water Resources
Char and Associates	Botanical Survey
Cultural Surveys Hawai'i, Inc.	Archaeological Inventory Survey
B.D. Neal and Associates	Air Quality Study
D.L. Adams and Associates	Noise Assessment
Mikiko Corporation, Inc.	Market Analysis
	Economic and Fiscal Impact Assessment
Cultural Surveys Hawai'i, Inc.	Cultural Impact Assessment
Wilbur Smith Associates	Traffic Impact Study
Engineering Concepts, Inc.	Civil Engineering

12.2 PARTIES CONSULTED DURING THE PREPARATION OF THE DEIS

A draft environmental assessment (DEA) pre-assessment consultation letter was mailed to various government agencies, community associations and elected representatives in April 2004 to ensure that interested parties were notified of the intended DEA and that all relevant issues and concerns were addressed. Letters were distributed to a diverse group of parties believed to have an interest in the project. Comments were received from 24 of the 71 parties consulted. Comments received in response to the DEA pre-assessment consultation were considered during the preparation of the DEIS.

As a result of the initial DEA pre-assessment consultation process and preliminary consultations with various agencies, it was determined that an environmental impact statement would be required for the Proposed Action (i.e., reclassification of the Petition Area from the Agricultural District to the Urban District). The Environmental Impact Statement Preparation Notice (EISPN) was published in the October 23, 2004 edition of the *Environmental Notice*. Copies of the EISPN were sent to 70 agencies, organizations and individuals. Written comments were

received from 18 of the parties consulted. The Department of the Interior, Fish and Wildlife Services and the City and County of Honolulu, Department of Facility Maintenance verbally informed the applicant that it had no comments and would not send any written comments.

Table 28 lists the agencies, organizations and individuals that were consulted during the DEA pre-assessment consultation and that received copies of the EISPN. Parties that were included in the DEA pre-assessment consultation and were not provided copy of the EISPN are noted (“removed from distribution”). Likewise, parties that were not included in the DEA pre-assessment consultation but were provided with a copy of the EISPN are noted (“not included in distribution”). The parties who provided written comments are identified by a checkmark (✓).

Table 28
Consulted Parties During Preparation of the EISPN

Consulted Parties	DEA	EISPN
Dept. of the Army, Army Corps of Engineers	✓	
Dept. of the Army, Army Support Command Hawai'i		Removed from distribution
Dept. of the Navy, Naval Base, Pearl Harbor		✓
U.S. Coast Guard	✓	
Dept. of Agriculture, Natural Resources Conservation Service		
Dept. of the Interior, Fish and Wildlife Services		
Dept. of the Interior, U.S. Geological Survey		
Federal Aviation Administration	✓	✓
Federal Highway Administration		
Dept. of Accounting and General Services	✓	Removed from distribution
Dept. of Agriculture		
Dept. of Budget and Finance		
Dept. of Business, Economic Development and Tourism	✓	
DBEDT, Energy Resources and Technology Division		✓
DBEDT, Office of Planning		✓
Dept. of Defense		
Dept. of Education	✓	✓
Dept. of Hawaiian Home Lands		
Dept. of Health	✓	
Dept. of Human Services, Housing & Comm. Develop. Corp.		✓
Dept. of Labor and Industrial Relations		
Dept. of Land and Natural Resources	✓	✓
DLNR, Historic Preservation Division	✓	
Dept. of Transportation	✓	

Consulted Parties	DEA	EISPN
Dept. of Transportation, Harbors Division	Not included in distribution	
O'ahu Metropolitan Planning Organization		
Office of Environmental Quality Control	✓	✓
Office of Hawaiian Affairs	✓	
Public Utilities Commission		
Environmental Center		✓
Water Resources Research Center		
Board of Water Supply	✓	✓
Dept. of Community Services		✓
Dept. of Design and Construction	✓	
Dept. of Environmental Services		
Dept. of Facility Maintenance	✓	
Dept. of Parks and Recreation	✓	✓
Dept. of Planning and Permitting	✓	✓
Dept. of Transportation Services	✓	✓
Honolulu Fire Department	✓	✓
Honolulu Police Department	✓	✓
O'ahu Civil Defense Agency	✓	
Councilmember Mike Gabbard		
Councilmember Donovan M. Dela Cruz		
Representative Mark Moses		
Representative Michael Kahikina		
Senator Brian Kanno		✓
Common Cause Hawai'i	Letter returned	Removed from distribution
Friends of the Pearl Harbor Historic Trail		
Gas Company	✓	
Hawai'i Audubon Society		
Hawai'i Building and Construction Trade Council		
Hawai'i Farm Bureau Foundation		
Hawai'i's Thousand Friends		
Hawaiian Civic Club		
Hawaiian Electric Company		
Hawaiian Railway Society	✓	
Honokai Hale/Nanakai Gardens Community Association		
Kapolei Rotary Club		

Consulted Parties	DEA	EISPN
Ko Olina Community Association	✓	
Ko Olina Fairways Association of Apartment Owners	Not included in distribution	
Ko Olina Resort, LLC	Not included in distribution	
Land Use Research Foundation of Hawai'i		
League of Women Voters		
Leeward O'ahu Transportation Management Association		
Life of the Land		
Makakilo/Kapolei/Honokai Hale Neighborhood Board No. 34		
Makakilo-Kapolei Lions Club		
Outdoor Circle	✓	✓
Sierra Club, Hawai'i Chapter		
Soroptimist International of West O'ahu	Letter returned	Removed from distribution
Verizon Telephone		
Waianae Coast Neighborhood Board No. 24		
West O'ahu Economic Development Association		

In addition to the parties listed above, copies of the DEA pre-consultation assessment letter and EISPN were sent to the Waianae, 'Ewa Beach, and Kapolei Public Libraries, and the Hawai'i State Main Library, in order to provide residents of the area access to this information. Copies were also sent to DBEDT Business Resource Center Library, the Legislative Reference Bureau, the Municipal Reference and Records Center, University of Hawai'i Hamilton Library, the Honolulu Advertiser and the Honolulu Star Bulletin.

Comments received in response to the DEA pre-assessment consultation and the EISPN, as well as response letters replying to substantive comments, follow in the order listed in Table 27.

Corlyn Olson Orr

From: Muraoka, John T CIV CNRH [john.muraoka@navy.mil]
Sent: Wednesday, January 05, 2005 4:19 PM
To: Corlyn Olson Orr
Subject: EISPN for Kapolei West

Thank you for sending us an EIS PN. We do not have any comments at this time, but would like to receive a copy of the DEIS when it becomes available. Thank you very much.

John T. Muraoka
REC Engineer
Regional Environmental Department

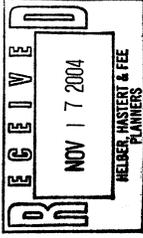
e-mail: john.muraoka@navy.mil
ph: 471-1171 ext 229
fax: 471-1160



U.S. Department
of Transportation
**Federal Aviation
Administration**

Western-Pacific Region
Real Estate and Utilities Section, AHNL-54B

P. O. Box 50109
Honolulu, Hawaii 96850-5000



November 15, 2004

Ms. Corlyn Olson Orr
Project Planner
Helber, Hastert, and Fee,
Planners, Inc.
733 Bishop Street, Suite 2590
Honolulu, HI 96813

Dear Ms. Olson Orr:

As discussed earlier, the Federal Aviation Administration has no comments or concerns regarding your Environmental Impact Statement Preparation Notice for your Kapolei West project. We do not need to participate further in this environmental review process.

We appreciate this opportunity to comment. Please contact me at 541-1236, if there are further questions.

Sincerely, :

Darice B. N. Young
Darice B. N. Young
Realty Contracting Officer



**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

STRATEGIC INDUSTRIES DIVISION
235 South Beretania Street, Leleopapa A Kamehameha Bldg., 5th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, HI 96804-2359

LINDA LINGLE
GOVERNOR
THEODORE E. LIU
DIRECTOR
STEVE BRETSCHEIDER
DEPUTY DIRECTOR

Telephone: (808) 587-3807
Fax: (808) 587-3820
Web site: www.hawaii.gov/dbedt

November 8, 2004

Donna Goth, President
Aina Nui Corporation
1001 Kamokila Boulevard, Suite 255
Honolulu, Hawaii 96707

Subject: Kapolei West
Environmental Impact Statement Preparation Notice (EISP/N)
Tax Map Key: 9-1-14; por. 33; 9-1-15; por. 4 and por. 20

Dear Ms. Goth:

In response to your October 23, 2004, notice, thank you for the opportunity to provide comments on the Environmental Impact Statement Preparation Notice (EISP/N) for Kapolei West. We note that the proposed action is reclassification of approximately 174 acres of land from the Agricultural to the Urban District to be consolidated with a 373-acre adjacent Urban parcel. The project would result in a 546.8-acre project including residential, golf course, and commercial uses. We would like to call your attention to: (1) State energy conservation goals, (2) energy saving design practices and technologies, and (3) recycling and recycled-content products.

1. **State energy conservation goals.** Project buildings, activities, and site grounds should be designed with energy saving considerations. The mandate for such consideration is found in Chapter 344, HRS ("State Environmental Policy") and Chapter 226 ("Hawaii State Planning Act"). In particular, we would like to call to your attention HRS 226 18(c)(4) which includes a State objective of promoting all cost-effective energy conservation through adoption of energy-efficient practices and technologies.

We recommend that you consider City & County of Honolulu Energy Code requirements early on in your project. Hawaiian Electric Co., Inc., (HECO) may also have demand-side management programs that offer rebates and/or incentives for installation of energy efficient technologies.

2. **Energy saving design practices and technologies.** We recommend that energy efficient design practices and technologies be specifically addressed. Energy

Ms. Donna Goth
Page 2
November 8, 2004

efficiency is improved with effective building location, orientation and massing, and the placement of vegetation for shade or wind protection. Some of the methods and technologies that could be considered, as appropriate, include:

- Establish the building on an east-west axis;
- Minimize east- and west-facing glass;
- Use natural ventilation to increase comfort of occupants;
- Maximize use of natural lighting without heat gain;
- Use high efficiency compact fluorescent lighting;
- Use insulation/radiant barrier for an equivalent R-19 value in ceiling; use ceiling fans;
- Use solar water heating; and
- Use landscaping for dust control and to minimize heat gain to area.

3. **Recycling and recycled-content products.**

- Develop a job-site recycling plan for construction and recycle as much construction and demolition waste as possible;
- Incorporate provisions for recycling into the project – a collection system and space for bins for recyclables; and
- Specify and use products with recycled content such as: steel, concrete aggregate fill, drywall, carpet and glass tile.

If you need clarification of any of the above, please do not hesitate to contact me.

Sincerely,


Maurice H. Kaya
Chief Technology Officer

c: OEQC
Land Use Commission
Helber, Hastert and Fee, Planners

COPY

Helber Hastert & Fee
Planners, Inc.

March 10, 2005

Mr. Maurice Kaya
Chief Technology Officer
Strategic Industries Division
Department of Business, Economic Development & Tourism
State of Hawaii
P.O. Box 2359
Honolulu, HI 96804-2359

Dear Mr. Kaya:

**Environmental Impact Statement Preparation Notice for the
Kapolei West Expansion Area, Ewa District, Oahu, Hawaii**

Thank you for your letter dated November 8, 2004 regarding your review of the Kapolei West Environmental Impact Statement Preparation Notice. We appreciate you calling our attention to the following items regarding energy conservation and recycling.

1. State energy conservation goals.
2. Energy saving design practices and technologies.
3. Recycling and recycled-content products.

We share the State's and County's interest in conserving energy through design and recycling measures. Heightened awareness of energy conservation has resulted in an ever increasing variety of quality and affordable recycled or energy conserving building materials available to architects and engineers. Building designs and specifications have not been developed, but energy-efficient materials and the methods and technologies you listed will be considered.

Extensive landscaping is proposed that would minimize heat gain. Recycled materials will be used to the extent practical. Recycling by residents will be encouraged.

The development would be bicycle and pedestrian friendly, which would encourage residents to rely less on their gasoline-powered vehicles; thereby reducing the use of fossil fuels.

Helber Hastert & Fee
Planners, Inc.

Mr. Maurice Kaya
March 10, 2005
Page 2



Hawaiian Electric Company, Inc. is participating in the environmental review process and we welcome their suggestions on energy conservation measures.

The project will be consistent with all State and County laws and rules.

We appreciate your participation in this review process and look forward to any additional comments you may have on the Draft Environmental Impact Statement (to which these letters will be appended).

Sincerely,

HELBER HASTERT & FEE, Planners

Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control



**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

OFFICE OF PLANNING

235 South Berenice Street, 6th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Ref. No. P-10745

January 27, 2005

Ms. Donna Goth,
Aina Nui Corporation
1001 Kamokila Boulevard, Suite 255
Honolulu, Hawaii 96707

Attn: Kapolei West

Dear Ms. Goth:

Subject: Draft Environmental Impact Statement Preparation Notice
Kapolei West, Ewa, Oahu, Hawaii

Aina Nui Corporation will petition the State Land Use Commission (LUC) for a land use boundary amendment from the State Land Use Agricultural District to the Urban District for approximately 174.2 acres within three parcels identified by TMK Nos. 9-1-14: 33 portion, and 9-1-15: 04 portion and 20 portion. Aina Nui Corporation proposes to consolidate the Petition Area (174.2 acres) with an adjacent 372.6-acre parcel (9-1-15:18 and 4 portion, 9-1-56: 11 portion, and 12 portion) to the north that was reclassified to the State Land Use Urban District in 1991 (LUC Docket A90-655) for development of Phase II of the Ko Olina Resort by West Beach Estates. Reclassification and consolidation would define the Project Area (Kapolei West) and facilitate development of the entire 546.8-acre parcel by Aina Nui Corporation according to the Kapolei West Master Plan.

We understand the Draft Environmental Impact Statement will address potential impacts and mitigation measures for the 174.2-acre portion of the project area, as well as the potential indirect and cumulative impacts associated with the adjacent 372.6-acre portion of the Project Area already classified Urban. Traffic congestion, wastewater treatment/disposal, flooding, drainage, groundwater recharge, the region's available water resource and other public services/facilities are major issues of State concern and should be addressed in the Draft Environmental Impact Statement.

The Office of Planning may comment further during the environmental review process when the Draft Environmental Impact Statement is reviewed by our office.

LINDA LINGLE
GOVERNOR
LUCY LIU
COMMISSIONER
STEVE BRETSCHNEIDER
DEPUTY DIRECTOR
MARY LOU KOBAYASHI
OFFICE OF PLANNING

Telephone: (808) 587-2846
Fax: (808) 587-2824



Ms. Donna Goth
Page 2
January 27, 2005

Thank you for including us in the review process. If you have any questions, please contact Judith Henry at 587-2803.

Sincerely,

Mary Lou Kobayashi
Mary Lou Kobayashi
Administrator
Office of Planning

c: Anthony Ching, Land Use Commission
✓ Helber, Hassert and Fee Planners
Office of Environmental Quality Control

Helber Hastert & Fee
Planners, Inc.

March 9, 2005
Ms. Mary Lou Kobayashi, Administrator
Office of Planning
Department of Business, Economic Development & Tourism
State of Hawaii
P.O. Box 2359
Honolulu, HI 96804-2359



Department of Education
Facilities and Support Services Branch
CIP Planning and Finance Section
809 8th Avenue, Honolulu, Hawaii 96816
FAX 733-4865/Phone 733-4862

Date: November 26, 2004

Dear Ms. Kobayashi:

**Environmental Impact Statement Preparation Notice (EISP/N) for the
Kapolei West Expansion Area, Ewa District, Oahu, Hawaii**

Thank you for your letter dated January 27, 2005 (Ref. No. P-10745) regarding your review of the Kapolei West EISP/N. We appreciate State concern regarding the following resource factors:

1. traffic congestion (Section 6.1)
2. wastewater treatment/disposal (Section 6.3)
3. flooding (Section 4.6)
4. drainage (Section 6.4)
5. groundwater recharge (Section 4.5)
6. potable water supply (Section 6.2)
7. other public services/facilities (6-all sections)

Specific agency concerns regarding these topics were not mentioned in the letter, but the existing conditions and potential impacts on these resource factors are presented in the DEIS for your review and further comment. In addition, technical reports were prepared that address many of these resources areas in depth and these are included in the DEIS appendices. Relevant DEIS sections are annotated in the list above. It should be noted that the Draft Environmental Impact Statement (DEIS) focuses on impacts of the *Petition Area*, which is a sub-area within the overall Kapolei West development area. The balance of the Kapolei West area was urbanized by the Land Use Commission in 1991 and its impacts are included in the evaluation of cumulative effects in the DEIS.

We appreciate your participation in this review process and look forward to any additional comments you may have on the DEIS (to which these letters will be appended).

Sincerely,

HELBER HASTERT & FEE, Planners

Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control

Pacific Guardian Center • 733 Bishop Street, Suite 2590 • Honolulu, Hawaii 96813
Tel. 808.545.2055 • Fax 808.545.2050 • www.hhf.com • e-mail: info@hhf.com

FAX TO: Corlyn Olson FAX: 545-2050
Helber Hastert & Fee, Planners, Inc.

PAGES: 4 (including this cover page)

FROM: Heidi Meecker
CIP Section/FSSB

SUBJECT: EISP/N for Kapolei West

Advance copy of our response on the subject project.

Ms. Mary Lou Kobayashi
Page 2
November 30, 2004

Advance Copy

Capacity and Enrollment Projections for Selected Kapolei Complex Schools

	Capacity 2003	Actual Enrollment 2004	Actual Enrollment 2009	2009	
				Projected Enrollment Less 2003 Capacity	Capacity
Kapolei High	1,853	1,928	2,712	859	
Kapolei Middle	1,387	1,698	1,715	328	
Barbers Point	636	381	426	-210	
Kapolei	1,198	1,165	1,246	48	

Mehana school opens
Ko Olina Site opening not determined

The DOE is planning to open an elementary school within the City of Kapolei, in a project called Mehana. Present plans call for the school to open in the 2009-2010 school year. The DOE also has land set aside within the Ko Olina project which could become an elementary school following the opening of the elementary school in the Mehana site. Both schools could serve students living in West Kapolei.

The DOE is also planning to open another high school within the greater Ewa plains area. A location and time schedule have not been determined. The second high school will relieve the enrollment pressure on Kapolei High School.

With new elementary schools planned and a new high school anticipated in the long term, the remaining need for schools in the area is a middle school. The DOE has already raised this concern with you and your consultants. We have discussed the possibility of a middle school being located on the West Kapolei site currently identified for an elementary school. We believe we can agree on using the site to meet our middle school needs.

The Decision and Order by the State Land Use Commission (SLUC) in 1991 for the West Kapolei lands already in the urban district contains a school condition that requires Aina Nui to provide a contribution for school facilities. It would be beneficial to the DOE to have a similarly worded, standard school fair-share condition placed on any new lands to be added to the West Kapolei project. We also request use of the following standard fair-share language:

The Applicant shall contribute to the development, funding, and/or construction of school facilities, on a fair-share basis, as determined by and to the satisfaction of the Department of Education. Terms of the contribution shall be agreed upon in writing by the Applicant and the Department of Education prior to obtaining county rezoning.

PATRICIA HAMAMOTO
SUPERINTENDENT



STATE OF HAWAII
DEPARTMENT OF EDUCATION
P.O. BOX 2380
HONOLULU, HAWAII 96828

November 30, 2004

Advance Copy

MEMO TO: Ms. Mary Lou Kobayashi, Administrator
Office of Planning
Department of Business, Economic Development and Tourism

F R O M: Patricia Hamamoto, Superintendent
Department of Education

Subject: Environmental Impact Statement Preparation Notice and Petition for Amendment to the State Land Use District Boundaries for Kapolei West, Ewa, Oahu, T.M.K. 9-1-14, por. 33 and 9-1-15; por. 4 and por. 20

The Department of Education (DOE) has reviewed the Environmental Impact Statement Preparation Notice (EISP/N) for the 535-acre, master-planned golf and residential community located between the Ko Olina Resort and the City of Kapolei.

The DOE used the number of single-family and multi-family units you supplied to project a possible student population of 1,278 students from kindergarten to grade 12. The students would be distributed between the following grade levels:

Estimated Student Population - Kapolei West

Number of units	Single Family Homes		Multi-Family Homes		Total
	Elementary (K-5)	Middle School (6-8)	High School (9-12)	Homes	
870	243	124	134	1350	2220
193	124	134	208	377	619
342				317	342

Kapolei Middle and Kapolei High schools have 2004 enrollments that are higher than the schools' facilities capacity. Kapolei Elementary's enrollment is close to capacity and is expected to exceed capacity in the next few years. School enrollments, capacity and projected enrollments are shown:

Advance Copy

Ms. Mary Lou Kobayashi
Page 3
November 30, 2004

The DOE would like to request that the material concerning numbers of students living in Kapolei West and the current and projected needs for school facilities be included in the text of the Environmental Impact Statements and in the Findings of Fact in the SLUC's determination of Aina Nui's petition.

The DOE has no other comment or concern at this time. If you have any questions, please call Rae Loui, Assistant Superintendent of the Office of Business Services, at 586-3444 or Heidi Mecker, at the Facilities and Support Services Branch, at 733-4862.

PH:HM:mp

c: Rae Loui, Office of Business Services
Mamo Carreira, CAS, Campbell/Kapolei/Waianae Complex Area
Bert Saruwatari, State Land Use Commission
Corlyn Olson Orr, Helber Hastert & Fee, Planners, Inc.
Genevieve Salmonson, Office of Environmental Quality Control
Dr. Tom Saka, Office of Information Technology Services
Donna Goth, Aina Nui Corporation

Helber Hastert & Fee
Planners, Inc.

March 10, 2005

Ms. Patricia Hamamoto, Superintendent
Department of Education
State of Hawaii
P.O. Box 2360
Honolulu, HI 96804

Dear Ms. Hamamoto:

**Environmental Impact Statement Preparation Notice (EISPN) for the
Kapolei West Expansion Area, Ewa District, Oahu, Hawaii**

Thank you for your memorandum dated November 30, 2004 regarding your review of the Kapolei West EISPN. We have reviewed your comments and offer the following responses.

The Draft Environmental Impact Statement (DEIS) includes a summary of the capacity and enrollment projections for selected Kapolei Complex schools provided in your memo. It should be noted that the DEIS focuses on impacts of the *Petition Area*, which is a sub-area within the overall Kapolei West development area. The balance of the Kapolei West area was urbanized by the Land Use Commission in 1991 and its impacts are included in the evaluation of effects in the Draft Environmental Impact Statement (DEIS).

The DEIS analyzes the public school impacts of the larger Kapolei West development as well the subset of the Petition Area impacts. The analysis includes a calculation of students living in Kapolei West and the corresponding need for school facilities. The DEIS notes that Aina Nui Corporation has entered into discussions with the DOE concerning possible contributions to offset the Petition Area's impact to public school facilities and that a 10-acre middle school site has been identified in the larger Kapolei West project area (to the north of the Petition Area) to meet the projected demand.

Aina Nui Corporation agrees to contribute to the development, funding and/or construction of school facilities, on a fair-share basis, as determined by and to the satisfaction of the DOE. Terms of the contribution shall be agreed upon in writing by the Petitioner and the DOE prior to obtaining county rezoning.

We appreciate your participation in this review process and look forward to any additional comments you may have on the DEIS (to which these letters will be appended).

Sincerely,

HELBER HASTERT & FEE, Planners


Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control

Pacific Guardian Center • 733 Bishop Street, Suite 2590 • Honolulu, Hawaii 96813
Tel. 808.545.2055 • Fax 808.545.2050 • www.hbf.com • e-mail: info@hbf.com

LINDA LINGLE
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF HUMAN SERVICES
Benefit, Employment and Support Services Division
820 Milliani Street, Suite 606
Honolulu, Hawaii 96813

November 19, 2004

Aina Nui Corporation
Attn: Donna Goth, President
1001 Kamokila Boulevard, Suite 255
Kapolei, Hawaii 96707

Dear Ms. Goth:

Thank you for your letter dated October 23, 2004 regarding the Environmental Impact Statement Preparation Notice (EISPN) for the Kapolei West project.

We appreciate the opportunity to review the EIS; however, we will not be submitting any comments at this time. If you have any questions or concerns please contact Mr. Larry Higa, Oahu Section 2 Administrator, at 587-3309.

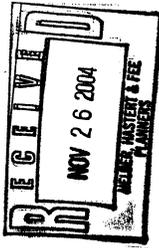
Sincerely,

Patricia Murakami
Division Administrator

c: Office of Environmental Quality Control
Land Use Commission, State of Hawaii
✓ Helber Hastert & Fee, Planners, Inc.

AN EQUAL OPPORTUNITY AGENCY

LILLIAN B. KOLLER, ESQ.
DIRECTOR
HENRY OLIVA
DEPUTY DIRECTOR



LINDA LINGLE
GOVERNOR OF HAWAII



November 30, 2004
LD-NAV

Honorable Mary Lou Kobayashi, Director
Office of Planning
State of Hawaii
P.O. Box 2359
Honolulu, Hawaii 96804

Dear Ms. Kobayashi:

Subject: Draft Environmental Impact Statement
State Land Use District Boundary Amendment
Petition: A04-753 and A90-655 (LUC)
Project: Kapolei West Project

Thank you for the opportunity to review and comment on the subject matter.

A copy of the documents pertaining to the subject matter was made available to the following Department of Land and Natural Resources' Divisions for their review and comment:

- Engineering Division
- Commission on Water Resource Management
- Office of Conservation and Coastal Lands
- Land-Oahu District Land Office
- Division of Forestry and Wildlife

Enclosed please find a copy of the Engineering Division, Commission on Water Resource Management and Division of Forestry and Wildlife comments.

Based on the attached responses, the Department of Land and Natural Resources has no other comment to offer on the subject matter. Should you have any questions, please contact Nicholas A. Vaccaro of the Land Division Support Services Branch at (808) 587-0384.

Very truly yours,

DIERDRE S. MAMITZA
Administrator

C: ODLO
LUC
Helber, Hastert & Fee, Planners



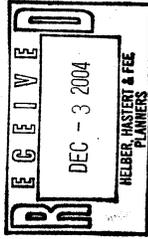
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96808

A04-753AINANUIRCM2

PETER T. YOUNG
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
DAN DAVIDSON
DEPUTY DIRECTOR - LAND
YVONNE Y. EBU
DEPUTY DIRECTOR - WATER

ADAMIC RESOURCES
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING DIVISION
HONOLULU PRESERVATION
HISTORIC PRESERVATION
MARQUAWE BUREAU OF LAND
STATE PARKS





LINDA LINGLE
GOVERNOR OF HAWAII

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
DAN DAVIDSON
DEPUTY DIRECTOR - LAND
YVONNE Y. EZU
DEPUTY DIRECTOR - WATER



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION
POST OFFICE BOX 621
HONOLULU, HAWAII 96809

AGRICULTURE
BOATING AND OCEAN RECREATION
BUREAU OF CONSERVATION
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES EMPLOYMENT
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND AND WATER RESERVE COMMISSION
STATE PARKS

November 15, 2004

LD/NAV
KAPOLEIWEST.CMT4
LUC A90-655

Suspense Date: 11/16/04
PETITION A04-753A IN ANU I

MEMORANDUM:

TO: XXX Engineering Division
XXX Division of Forestry and Wildlife
XXX Commission on Water Resource Management
XXX Conservation and Coastal Lands
XXX Land-Oahu District Land Office

TO: XXX Engineering Division
XXX Division of Forestry and Wildlife
XXX Commission on Water Resource Management
XXX Conservation and Coastal Lands
XXX Land-Oahu District Land Office

FROM: Dierdre S. Mamiya, Administrator
Land Division

FROM: Dierdre S. Mamiya, Administrator
Land Division

SUBJECT: Amendment to the State Land Use District Boundaries
TMK: 9-1-14: por. 33 and 9-1-15: por. 04 and por. 20.

SUBJECT: Amendment to the State Land Use District Boundaries
TMK: 9-1-14: por. 33 and 9-1-15: por. 04 and por. 20.

Please review the document pertaining to the subject matter and submit your comment (if any) on Division letterhead signed and dated by the suspense date.

Please review the document pertaining to the subject matter and submit your comment (if any) on Division letterhead signed and dated by the suspense date.

Note: One copy of the petition is available for review in the Land Division Office Room, 220.

Note: One copy of the petition is available for review in the Land Division Office Room, 220.

Should you need more time to review the subject matter, please contact Nick Vaccaro at 587--0384.

Should you need more time to review the subject matter, please contact Nick Vaccaro at 587--0384.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

We have no comments. () Comments attached.
Date: 11/23/04 Signed: Cecil Santos
Division: Land Division Name: Cecil Santos

() We have no comments. (X) Comments attached.
Date: 11/18/04 Signed: Eric Hirano
Division: Engineering Name: ERIC T. HIRANO, CHIEF ENGINEER

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SUSPENSE DATE: 11/16/04
PETITION A04-753A IN ANU I
A 11:30

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DEPT. OF LAND & NATURAL RESOURCES
STATE OF HAWAII

PETER T. VOLPE
 CHIEF ENGINEER
 BOARD OF LAND AND NATURAL RESOURCES
 COMMISSION ON NATURAL RESOURCES MANAGEMENT
 DAN DAVIDSON
 DEPUTY DIRECTOR, LAND
 YVONNE T. EDE
 DEPUTY DIRECTOR, WATER



RECEIVED
 LAND DIVISION
 2004 NOV 17 A 9: 54

LINDA LINDLE
 GOVERNOR OF HAWAII



STATE OF HAWAII
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 LAND DIVISION
 POST OFFICE BOX 621
 HONOLULU, HAWAII 96808
 November 9, 2004

LD/NAV
 KAPOLEI WESTEISP.CMT3
 LUC A90-655

Suspense Date: 11/16/04

MEMORANDUM:

04 NOV 10 PM 03:20 ENGINEERING

TO: XXX Engineering Division
 XXX Division of Forestry and Wildlife
 XXX Commission on Water Resource Management
 XXX Conservation and Coastal Lands
 XXX Land-Oahu District Land Office

FROM: Dierdre S. Mamiya, Administrator
 Land Division

SUBJECT: Environmental Impact Statement Preparation Notice
 Kapolei West Project
 TMK: 9-1-14; por. 33 and 9-1-15; por. 04 and por. 20.

Please review the attached document pertaining to the subject matter and submit your comment (if any) on Division letterhead signed and dated by the suspense date.

Should you need more time to review the subject matter, please contact Nick Vaccaro at 587--0384.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

() We have no comments.

Comments attached.
 Signed: *[Signature]*

Date: 11/6/04

Division: Engineering

Name: ERIC T. HIRANO, CHIEF ENGINEER

DEPARTMENT OF LAND AND NATURAL RESOURCES
 ENGINEERING DIVISION

LD/NAV
 Ref.: REZ 04-029.CMT

COMMENTS

- () We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zone X.
- (X) Please take note that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zone X. The Flood Insurance Program does not have any regulations for development within Zone X.
- () Please note that the correct Flood Zone Designation for the project site according to the Flood Insurance Rate Map (FIRM) is _____.
- () Please note that the project must comply with the rules and regulations of the National Flood Insurance Program (NFIP) presented in Title 44 of the Code of Federal Regulations (44CFR), whenever development within a Special Flood Hazard Area is undertaken. If there are any questions, please contact the State NFIP Coordinator, Ms. Carol Tyau-Beam, of the Department of Land and Natural Resources, Engineering Division at (808) 587-0267.
- () Please be advised that 44CFR indicates the minimum standards set forth by the NFIP. Your Community's local flood ordinance may prove to be more restrictive and thus take precedence over the minimum NFIP standards. If there are questions regarding the local flood ordinances, please contact the applicable County NFIP Coordinators below:
 - () Mr. Robert Summoto at (808) 523-4254 or Mr. Mario Siu Li at (808) 523-4247 of the City and County of Honolulu, Department of Planning and Permitting.
 - () Mr. Kelly Gomes at (808) 961-8327 (Hilo) or Mr. Kiran Emler at (808) 327-3530 (Kona) of the County of Hawaii, Department of Public Works.
 - () Mr. Francis Cerizo at (808) 270-7771 of the County of Maui, Department of Planning.
 - () Mr. Mario Antonio at (808) 241-6620 of the County of Kauai, Department of Public Works.
- () The applicant should include project water demands and infrastructure required to meet water demands. Please note that the implementation of any State-sponsored projects requiring water service from the Honolulu Board of Water Supply system must first obtain water allocation credits from the Engineering Division before it can receive a building permit and/or water meter.
- () The applicant should provide the water demands and calculations to the Engineering Division so it can be included in the State Water Projects Plan Update.
- (X) Additional Comments: We do not anticipate any effects to the Engineering program due to the proposed boundary change of the subject area.
- () Other: _____

Should you have any questions, please call Mr. Andrew Monden of the Planning Branch at 587-0229.

Signed: *[Signature]*
 ERIC T. HIRANO, CHIEF ENGINEER

Date: 11/6/04



RECEIVED
04 NOV 10 10:46



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION
POST OFFICE BOX 621
HONOLULU, HAWAII 96809
November 9, 2004

PETER T. YOUNG
DIRECTOR
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DAN DAVIDSON
DEPUTY DIRECTOR - LAND

YOUNG Y. ZUI
DEPUTY DIRECTOR - WATER

ADAMIC RESOURCES
CONSULTANTS
1000 KALANANAKU AVENUE, SUITE 200
HONOLULU, HAWAII 96813
COMMISSION ON WATER RESOURCE MANAGEMENT
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY PRESERVATION
HISTORIC PRESERVATION
MAROULAE ISLAND RESERVE COMMISSION
STATE PARKS

DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

LANAV

Ref.: KAPOLEIWESTEISO.CMT

COMMENTS

- We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zone D. The National Flood Insurance Program does not have any regulations for development within this area.
- Please take note that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zone.
- Please note that the correct Flood Zone Designation for the project site according to the Flood Insurance Rate Map (FIRM) is _____.
- Please note that the project must comply with the rules and regulations of the National Flood Insurance Program (NFIP) presented in Title 44 of the Code of Federal Regulations (44CFR), whenever development within a Special Flood Hazard Area is undertaken. If there are any questions, please contact the State NFIP Coordinator, Ms. Carol Tyau-Beam, of the Department of Land and Natural Resources, Engineering Division at (808) 587-0267.

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- Mr. Kelly Gomes at (808) 961-8327 (Hilo) or Mr. Kiran Emiler at (808) 327-3530 (Kona) of the County of Hawaii, Department of Public Works.
- Mr. Francis Cerizo at (808) 270-7771 of the County of Maui, Department of Planning.
- Mr. Mario Antonio at (808) 241-6620 of the County of Kauai, Department of Public Works.

The applicant should include project water demands and infrastructure required to meet water demands. Please note that the implementation of any State-sponsored projects requiring water service from the Honolulu Board of Water Supply system must first obtain water allocation credits from the Engineering Division before it can receive a building permit and/or water meter.

The applicant should provide the water demands and calculations to the Engineering Division so it can be included in the State Water Projects Plan Update.

Additional Comments: _____

Other: _____

Should you have any questions, please call Mr. Andrew Monden of the Planning Branch at 587-0229.

Signed: Eric T. Hiranano
ERIC T. HIRANO, CHIEF ENGINEER

Date: 11/16/04

LD/NAV
KAPOLEIWESTEISP.CMT3
LUC A90-655

MEMORANDUM:

TO: XXX Engineering Division
XXX Division of Forestry and Wildlife
XXX Commission on Water Resource Management
XXX Conservation and Coastal Lands
XXX Land-Oahu District Land Office

FROM: Dierdre S. Mamiya, Administrator
Land Division

SUBJECT: Environmental Impact Statement Preparation Notice
Kapolei West Project
TMK: 9-1-14: por. 33 and 9-1-15: por. 04 and por. 20.

Please review the attached document pertaining to the subject matter and submit your comment (if any) on Division letterhead signed and dated by the suspense date.

Should you need more time to review the subject matter, please contact Nick Vaccaro at 587--0384.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

We have no comments.

Comments attached.

Date: 11-15-04

Signed: [Signature]

Division: CWRM

Name: DOROTE WAKARANA

LINDA LINGLE
GOVERNOR OF HAWAII



RECEIVED
LAND DIVISION

2004 NOV 18 A 9:59

LINDA LINGLE
GOVERNOR OF HAWAII



RECEIVED

04 NOV 16 A 08:51

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DAN DAVIDSON
DEPUTY DIRECTOR - LAND
YVONNE Y. IZU
DEPUTY DIRECTOR - WATER

AGRICULTURE RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONSERVATION
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
FORESTRY AND WILDLIFE
NATURAL RESOURCES
STATE PARKS
LAND
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION
POST OFFICE BOX 621
HONOLULU, HAWAII 96809



Ref: Kapolei West EIS prep dr

November 17, 2004

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 621
HONOLULU, HAWAII 96809

TO: Ms. Dede Mamiya, Administrator
Land Division

FROM: Yvonne Y. Izu, Deputy Director
Commission on Water Resource Management (CWWRM)

SUBJECT: Environmental Impact Statement Preparation Notice, Kapolei West Project

Thank you for the opportunity to review the subject document. Our comments related to water resources are marked below.

In general, the CWWRM strongly promotes the efficient use of our water resources through conservation measures and use of alternative non-potable water resources whenever available, feasible, and there are no harmful effects to the ecosystem. Also, the CWWRM encourages the protection of water recharge areas, which are important for the maintenance of streams and the replenishment of aquifers.

- [X] We recommend coordination with the county government to incorporate this project into the county's Water Use and Development Plan.
- [] We recommend coordination with the Engineering Division of the State Department of Land and Natural Resources to incorporate this project into the State Water Projects Plan.
- [] We are concerned about the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.
- [] A Well Construction Permit and/or a Pump Installation Permit from the Commission would be required before ground water is developed as a source of supply for the project.
- [] The proposed water supply sources for the project is located in a designated water management area, and a Water Use Permit from the Commission would be required prior to use of this source.
- [] Groundwater withdrawals from this project may affect streamflows, which may require an instream flow standard amendment.
- [] We are concerned about the potential for degradation of instream uses from development on highly erodible slopes adjacent to streams within or near the project. We recommend that approvals for this project be conditioned upon a review by the corresponding county's Building Department and the developer's acceptance of any resulting requirements related to erosion control.
- [] If the proposed project includes construction of a stream diversion, the project may require a stream diversion works permit and amend the instream flow standard for the affected stream(s).
- [] If the proposed project alters the bed and banks of a stream channel, the project may require a stream channel alteration permit.

[X] OTHER:

If new ground-water sources are constructed to supply water for the project, well construction, pump installation, and water use permits from the Commission would be required.

Pump 10 (Well Nos. 2006-01 to 12) was identified as a potential source of non-potable water for the irrigation needs of the sports fields, parks and open spaces. Pump 10 is currently permitted for diversified agricultural use only. Sports Fields Pump 10 be selected to supply non-agricultural irrigation needs, the water use permit must first be modified, as provided in the State Water Code. In the event that Pump 10 is not selected as an irrigation source, the applicant should describe future plans for the well, which may include properly sealing the source to prevent possible contamination of the underlying aquifer.

We would also like to correct the water availability figures cited under the Potable Water section. Currently, the Ewa-Kunua Aquifer System has an estimated sustainable yield of 16 mgd, of which 15.547 mgd has been allocated. Thus, there is only 0.543 mgd that remains available for allocation at this time

If there are any questions, please contact Lenore Y. Nakama at 587-0218.

LD/NAV
KAPOLEI WEST.CMT 4
LUC A90-655

MEMORANDUM:

TO: XXX Engineering Division
XXX Division of Forestry and Wildlife
XXX-Commission on Water Resource Management
XXX Conservation and Coastal Lands
XXX Land-Oahu District Land Office

FROM: Dierdre S. Mamiya, Administrator
Land Division

SUBJECT: Amendment to the State Land Use District Boundaries
TMK: 9-1-14: por. 33 and 9-1-15: por. 04 and por. 20.

Please review the document pertaining to the subject matter and submit your comment (if any) on Division letterhead signed and dated by the suspense date.

Note: One copy of the petition is available for review in the Land Division Office Room, 220.

Should you need more time to review the subject matter, please contact Nick Vaccaro at 587--0384.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

() We have no comments. (X) Comments attached.

Date: _____ Signed: W. Nakama
Division _____ Name: W. Nakama

Suspense Date: 11/16/04
PETITION A04-753AINANUI

LINDA LINGLE
GOVERNOR OF HAWAII



PETER T. YOUNG
CHAIRPERSON
MEREDITH L. CHING
CLAYTON W. DEJA CRUZ
JAMES A. FRAZIER
CHIYOME L. FUKINO, M.D.
LAWRENCE H. MIKE, M.D., J.D.
STEPHANIE A. VHALEN
YVONNE Y. IZU
DEPUTY DIRECTOR

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LAND DIVISION
2004 NOV 18 P 3:50

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 621
HONOLULU, HAWAII 96809

November 18, 2004

Ref Ainanui Petition AO4-753AINANUI dr.doc

TO: Ms. Dede Mamiya, Administrator
Land Division

FROM: Yvonne Y. Izu, Deputy Director
Commission on Water Resource Management (CWRM)

SUBJECT: Amendment to the State Land Use Boundaries, TMK 9-1-14:por.33, 9-1-15:por. 04 & 20

Thank you for the opportunity to review the subject document. Our comments related to water resources are marked below.

In general, the CWRM strongly promotes the efficient use of our water resources through conservation measures and use of alternative non-potable water resources whenever available, feasible, and there are no harmful effects to the ecosystem. Also, the CWRM encourages the protection of water recharge areas, which are important for the maintenance of streams and the replenishment of aquifers.

- [X] We recommend coordination with the county government to incorporate this project into the county's Water Use and Development Plan.
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- [] If the proposed project alters the bed and banks of a stream channel, the project may require a stream channel alteration permit.
- [X] OTHER:
If new non-potable ground-water sources are constructed to supply water for the project, well construction, pump installation, and water use permits from the Commission would be required.
The use of non-potable alternative of wastewater reuse from the Honolulu Wastewater treatment plant is highly encouraged for analysis of such alternative use would be required should water use permits from the caprock be required or modified to supply developments on these parcels.

If there are any questions, please contact Roy Hardy at 587-0274.

LINDA LINGLE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

November 9, 2004

LD/NAV
KAPOLEI.WEISTEISP.CMT3
LUC A90-655

Suspense Date: 11/16/04

MEMORANDUM:

TO: XXX Engineering Division
XXX Division of Forestry and Wildlife
XXX Commission on Water Resource Management
XXX Conservation and Coastal Lands
XXX Land-Oahu District Land Office

FROM: Dierdre S. Mamiya, Administrator
Land Division

SUBJECT: Environmental Impact Statement Preparation Notice
Kapolei West Project
TMK: 9-1-14: por. 33 and 9-1-15: por. 04 and por. 20.

Please review the attached document pertaining to the subject matter and submit your comment (if any) on Division letterhead signed and dated by the suspense date.

Should you need more time to review the subject matter, please contact Nick Vaccaro at 587--0384.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

() We have no comments. () Comments attached.

Date: _____ Signed: _____

Division _____ Name: _____

Division of Forestry & Wildlife

1151 Punchbowl Street, Rm. 325 • Honolulu, HI 96813 • (808) 587-0166 • Fax: (808) 587-0160

November 15, 2004

MEMORANDUM

TO: Nick Vaccaro, Land Agent
Land Division

THRU: Dierdre S. Mamiya, Administrator
Land Division

FROM: Paul J. Conry, Administrator
Division of Forestry and Wildlife



SUBJECT: Environmental Impact Statement Preparation Notice, Kapolei West
Project TMK: 9-1-14: por. 33 and 9-1-15: por. 04 and por. 20.

DOFAW has remained consistent in its review of projects in the Kapolei-Kalaeloa-Ewa plains area. We know of three endangered plants: 1) *Achyranthes splendens* spp *rotundata*, 2) *Chamaesyce skottsbergii* and 3) *Abutilon menziesii* that are present in this area. Please mitigate these plants by doing an on-site survey prior to the construction of this development. Additional information can be obtained by calling Ms. Vickie Caraway, State Botanist at 587-0165 if you have questions regarding the endangered plants in this area. Although botanical surveys show no endangered plants, DOFAW has seen these plants in the wild following a completed survey. We ask that prior to the construction that a on-site inspection for these plants are completed. Thank you for the opportunity to comment on your project proposed at Kapolei, West Oahu.

C: Vickie Caraway, DOFAW

RECEIVED
DIVISION
2004 NOV 16 10 38 23



LINDA LINGLE
GOVERNOR OF HAWAII

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DIVISION

2004 NOV 15 A 10: 2b



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809
November 9, 2004

LD/NAV
KAPOLEIWESTEISP.CMT3
LUC A90-655

MEMORANDUM:

TO: XXX Engineering Division
XXX Division of Forestry and Wildlife
XXX Commission on Water Resource Management
XXX Conservation and Coastal Lands
XXX Land-Oahu District Land Office

FROM: Dierdre S. Mamiya, Administrator
Land Division

SUBJECT: Environmental Impact Statement Preparation Notice
Kapolei West Project
TMK: 9-1-14: por. 33 and 9-1-15: por. 04 and por. 20.

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If this office does not receive your comments by the suspense date, we will assume there are no comments.

We have no comments. () Comments attached.

Date: 11/15/04

Signed: Cecil Santos

Division: LAND

Name: Cecil Santos

ku

PETER T. YOUNG
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DAN DAVIDSON
DEPUTY DIRECTOR - LAND

YOUNG K. ELLIOTT
DEPUTY DIRECTOR - WATER

ADAMIC RESOURCES
CONSULTING ENGINEERS
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND RESOURCES EMPLOYMENT
ENGINEERING
HISTORIC PRESERVATION
MADOLENE ISLAND RESERVE COMMISSION
STATE PARKS

Suspense Date: 11/16/04

LINDA LINGLE
GOVERNOR OF HAWAII

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LAND DIVISION

2004 NOV 26 A 10:56



DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION
STATE OF HAWAII

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

November 15, 2004

LD/NAV
KAPOLEIWEST.CMT4
LUC A90-655

Suspense Date: 11/16/04
PETITION A04-753AINANUI

MEMORANDUM:

TO: XXX Engineering Division
XXX Division of Forestry and Wildlife
XXX Commission on Water Resource Management
XXX Conservation and Coastal Lands
XXX Land-Oahu District Land Office

FROM: Dierdre S. Mamiya, Administrator
Land Division

SUBJECT: Amendment to the State Land Use District Boundaries
TMK: 9-1-14: por. 33 and 9-1-15: por. 04 and por. 20.

Please review the document pertaining to the subject matter and submit your comment (if any) on Division letterhead signed and dated by the suspense date.

Note: One copy of the petition is available for review in the Land Division Office Room, 220.

Should you need more time to review the subject matter, please contact Nick Vaccaro at 587--0384.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

(X) We have no comments. () Comments attached.

Date: NOV 22 2004 Signed: *Paul J. Conroy*

Division _____ Name: PAUL J. CONROY, ADMINISTRATOR
DIVISION OF FORESTRY AND WILDLIFE

PETER T. YOUNG
COMMISSIONER
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
DAN DAVIDSON
DEPUTY DIRECTOR - LAND
YVONNE Y. IZU
DEPUTY DIRECTOR - WATER
ADULTY RESOURCES
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
COMMISSION ON OCEAN AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND
LAND
STATE PARKS

Helber Hastert & Fee
Planners, Inc.

March 10, 2005
Ms. Dierdre S. Mamiya, Administrator
Land Division
Department of Land & Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, HI 96809

Dear Ms. Mamiya

**Environmental Impact Statement Preparation Notice (EISP/N) for the
Kapolei West Expansion Area, Ewa District, Oahu, Hawaii**

Thank you for your letter dated November 30, 2004 (A04-7-753AINANUI.RCM2) regarding your department's review of the Kapolei West EISP/N. This letter is to acknowledge the comments from the Engineering Division, Commission on Water Resource Management and Division of Forestry and Wildlife. For ease of reference, we will respond to the comments in the order they appear in each memorandum.

Engineering Division

1. We have confirmed that the Petition Area is located within Zone D according to the Flood Insurance Rate Map. This is stated in the Draft Environmental Impact Statement (DEIS).
2. We note that you do not anticipate any effects to the Engineering program.

Commission on Water Resource Management

1. Aina Nui Corporation will coordinate with the County to incorporate this project into the County's Water Use and Development Plan. The DEIS notes that Pump 10 is currently permitted for diversified agricultural use only and that use of Pump 10 for non-irrigation purposes would require modification to the water use permit. The DEIS also notes that should Pump 10 not be used as an irrigation source, the Petitioner would develop future plans for the well, which could possibly include properly sealing the source to prevent possible contamination of the underlying aquifer; and that construction of new non-potable groundwater sources would require CWRM approval for well construction, pump installation and water use permits.
3. The DEIS contains the corrected information on the current allocation and sustainable yield of the Ewa-Kunia Aquifer System.
4. The DEIS notes that non-potable water will be used for landscaping and golf course irrigation. The source of non-potable water may be reclaimed wastewater supplied by Board of Water Supply or irrigation water from Pump 10. If Pump 10 is used as a non-potable water source, a water use permit modification will be obtained prior to use of Pump 10.

Helber Hastert & Fee
Planners, Inc.

Ms. Dierdre S. Mamiya
March 10, 2005
Page 2

Division of Forestry and Wildlife

1. Char and Associates conducted a botanical survey for the Petition Area north of the endangered red limba or *ko oloa'ula (Abutilon menziesii)*. A survey of the Petition Area south of the OR&L ROW was completed in April 2004. No candidate, proposed, or listed threatened or endangered species as set forth in the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1543), were found and no further surveys are warranted or planned. This is discussed in the DEIS.

We appreciate your participation in this review process and look forward to any additional comments you may have on the Draft Environmental Impact Statement (to which these letters will be appended).

Sincerely,

HELBER HASTERT & FEE, Planners



Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control

LINDA LINGLE
GOVERNOR OF HAWAII



GENEVIEVE SALMONSON
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

235 SOUTH BERETANIA STREET
SUITE 700
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4185
FAX (808) 586-4186
E-mail: oeqc@hawaii.state.hi.us

November 22, 2004

Ms. Donna Goth
'Aina Nui Corporation
1001 Kamokila Boulevard, Suite 255
Kapolei, Hawaii 96793

Mr. Anthony Ching,
State of Hawaii - Department of Business Economic Development and Tourism
Land Use Commission
235 South Beretania Street, Room 406
Honolulu, Hawaii 96813

Ms. Carolyn Olson Orr
Helber Hastert and Fee Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

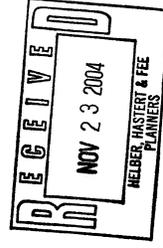
Dear Mesdames Goth and Orr, and Mr. Ching:

The Office of Environmental Quality Control has reviewed your environmental assessment for the Kapolei West Project, Tax Map Key 9-1-14 por. 33; 9-1-15 por. 4 and por. 20, situated in the judicial district of 'Ewa, and offers the following comment for your consideration and response.

1. **Sustainable Building Guidelines:** In construction of the proposed housing, please refer to the "Sustainable Building Guidelines" contained in the Office of Environmental Quality Control's "A Guidebook to the Hawaii State Environmental Review Process" found online at <http://www.state.hi.us/health/oeqc/index.html>.
2. **Cultural Impacts:** While the environmental assessment discusses the archaeological and historical aspects of the project required under Chapter 6E, Hawaii Revised Statutes, it does not discuss contemporary cultural resources and practices, if any. Please refer to the guidance for cultural impact assessment found on our Internet site above.

Thank you for the opportunity to comment. If there are any questions, please call Mr. Leslie Segundo, Environmental Health Specialist, at (808) 586-4185.

Sincerely,


GENEVIEVE SALMONSON
Director

TT/CO-

Helber Hastert & Fee
Planners, Inc.

March 10, 2005

Ms. Genevieve Salmonson, Director
Office of Environmental Quality Control
State of Hawaii
236 S. Beretania St., Suite 702
Honolulu, HI 96813

Dear Ms. Salmonson:

**Environmental Impact Statement Preparation Notice (EISP/N) for the
Kapolei West Expansion Area, Ewa District, Oahu, Hawaii**

Thank you for your letter dated November 22, 2004 regarding your review of the Kapolei West EISP/N. We appreciate you calling our attention to the following items:

1. OEQC's Sustainable Building Guidelines
2. Cultural Impacts

We share the State's and County's interest in conserving energy through design and recycling measures. Heightened awareness of energy conservation has resulted in an ever increasing variety of quality and affordable recycled or energy conserving building materials available to architects and engineers. Building designs and specifications have not been developed, but energy-efficient materials and the methods and technologies described in the Sustainable Building Guidelines will be considered.

Technical studies on archaeology and cultural issues are included as Appendices E and I, respectively, and key findings are summarized in Section 4.9 of the Draft EIS.

We appreciate your participation in this review process and look forward to any additional comments you may have on the Draft EIS (to which these letters will be appended).

Sincerely,

HELBER HASTERT & FEE, Planners



Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control

FAX TRANSMITTAL SHEET

ENVIRONMENTAL CENTER
University of Hawaii
2500 Dole Street, Krauss Annex 19, Honolulu, HI 96822
Telephone: (808) 956-7361 Fax: (808) 956-3980

DATE: 11/22/2004

FROM: John Harrison

TO: Donna Goth, Aina Nui Corp. (674-3349)

Tom Fee / Corlynn Olson Orr,
Helber Hastert & Fee, Planners (545-2050)

Anthony Ching, LUC (587-3827)

OEQC (586-4186)

SUBJECT: EISP/N
Kapolei West

PAGES: 4
(incl. cover page)

Ms. Donna Goth
November 22, 2004
Page 2 of 3

Area for the proposed Kapolei West project. In its entirety, The entire Kapolei West project is planned to include an 18-hole championship golf course, approximately 2,400 single and multi-family homes, neighborhood parks and a pedestrian pathway system to link the neighborhoods.

Regional commercial and transit/mixed-use areas are planned to enhance the City of Kapolei and support both the neighboring communities and the proposed Kapolei West community. Vehicular access to the project area is planned via a new segment of Kapolei Parkway connecting to Ali'i Nui Drive to the west and Kalaeloa Boulevard to the east; the proposed Hanua Street extension on the east; and a new roadway connected connecting to Farrington Highway to the west. Three new roadways, including two smaller neighborhood streets and the proposed Hanua Street extension, and two golf cart paths, are planned to cross the OR&L Railroad ROW.

Pursuant to Chapter 343, Hawai'i Revised Statutes, a Draft Environmental Impact Statement (DEIS) is being prepared for the project's proposed use of a historic site located on State lands (i.e., planned roadways cross the OR&L Railroad ROW, which is owned by the State of Hawai'i and listed on the National Register of Historic Places). The forthcoming DEIS will be organized to address both potential direct impacts and mitigation measures of the Proposed Action (i.e., reclassification of approximately 174.2 acres from the Agricultural to the Urban District) and the potential indirect and cumulative impacts associated with the larger, 547.8-acre West Kapolei project area.

This review was conducted with the assistance of Peter Flachsbart, Urban and Regional Planning; and Landin Johnson of the Environmental Center.

General Comments

The Environmental Impact Statement Preparation Notice (EISPN) appears to be prepared competently and touches on many points that an EISPN should. At this stage in the EIS process, there is limited content and specifics on which to comment. Consequently, our reviewers have only a few comments at this stage.

Specific Comments

Energy Consumption & Efficiency

Our reviewers believe the DEIS should thoroughly discuss the demands for electrical energy of this project, given that Hawaiian Electric Company (HECO) claims they have little spare capacity to generate more electricity at the present time. Our reviewers also strongly recommend the use of solar water heating and alternative energy systems (e.g., photovoltaic) for this project. The use of the alternative energy systems will undoubtedly help offset the power demand for the project and alleviate some of the concern as stated above. Other

UNIVERSITY OF HAWAII
Environmental Center

November 22, 2004
EA: 0309

Ms. Donna Goth
Aina Nui Corporation
1001 Kamokila Boulevard
Suite 255
Kapolei, Hawaii 96707

Dear Ms. Goth:

Environmental Impact Statement Preparation Notice
Kapolei West
Ewa, Oahu

'Aina Nui Corporation, an affiliate of the Estate of James Campbell, has filed a petition for a State Land Use District Boundary Amendment to reclassify approximately 174.2 acres of land from the Agricultural District to the Urban District (referred to as the "Petition Area") with the State Land Use Commission. The Petition Area is located in 'Ewa, O'ahu and consists of Tax Map Key parcels 9-1-14: 33 (por.), 9-1-15: 4 (por.), and 9-1-15:20 (por.). The Petition area straddles the State-owned, historic O'ahu Railway & Land Company (OR&L) Railroad right-of-way (ROW). Development proposed for the Petition Area (referred to as the Proposed Action) includes approximately 1,200 low and medium-density residential units, approximately 60 acres of golf course, and nearly 28 acres of park and open space.

The Petition Area is surrounded by the 372.6-acre area formerly known as Ko 'Olina Phase II to the north (urbanized in 1991 under Docket A90-655), Ko 'Olina Resort to the west, Kalaeloa Barbers Point Harbor and the Kapolei Business Park to the south, and the City of Kapolei and Kalaeloa Boulevard to the east.

The Petition Area is proposed to become part 'Aina Nui Corporation, and it includes a petition filed with the State Land Use Commission for a State Land Use District Boundary Amendment to reclassify approximately 174.2 acres of the project area from the Agricultural District to the Urban District. The Petition Area consists of Tax Map Key parcels 9-1-14: 33 (por.), 9-1-15: 4 (por.), and 9-1-15:20 (por.), and is located in the southern portion of the project, straddling the OR&L Railroad ROW.

Development proposed for the Petition Area includes approximately 1,200 low and medium-density residential units, approximately 60 acres of golf course, and nearly 28 acres of park and open space. The boundary amendment would allow development of the Petition Area and approximately 372.6 acres of land within the Urban District adjacent to the Petition

Ms. Donna Coth
November 22, 2004
Page 3 of 3

energy conservation measures should be implemented in construction and design of the project (e.g., compact fluorescent lightings, light colored roofing, situating buildings to utilize any natural air flow for cooling, etc.).

Solid Waste

It is unclear whether the DEIS will quantify the solid waste generated by the 2,370 dwelling units in the project area (p. 7). This is a critical issue as the City & County of Honolulu is searching for a new landfill site.

Schools

As with the above comments, it is also unclear if the DEIS will quantify the number of school-age children and teenagers who will live there. This impact is also of concern as it is our reviewers' understanding that the existing schools are already overcrowded in Kapolei.

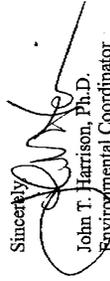
Landscaping

The use of native plants in landscaping, especially plants naturally acclimated to the project site's climate and consume a limited amount of water, is highly recommended by our reviewers. Drainage systems should also be designed to divert storm water to landscaping.

Water Use

The use of reclaimed water for the golf course and open space irrigation is strongly supported by our reviewers, but also recommend is the use in toilets, urinals, and landscaping where permitted. Other such water conservation measures should also be implemented in the project construction (e.g., low-flow toilets and shower heads, etc.).

Thank you for the opportunity to review this EISPN.

Sincerely,

John T. Harrison, Ph.D.
Environmental Coordinator

Cc: Helber Hatert & Fee, Planners, Inc.
Land Use Commission
OEQC
James Moncur, WRRC
Peter Flachsbarth
Landon Johnson

**Helber Hatert & Fee
Planners, Inc.**

March 10, 2005

John T. Harrison, Ph.D.
Environmental Coordinator
University of Hawaii
Environmental Center
2600 Dole Street, Krauss Annex 19
Honolulu, HI 96822

Dear Dr. Harrison:

**Environmental Impact Statement Preparation Notice (EISPN) for the
Kapolei West Expansion Area, Ewa District, Oahu, Hawaii**

Thank you for your letter dated November 22, 2004 regarding your review of the Kapolei West EISPN. We have reviewed your comments and offer the following responses.

Energy Consumption and Efficiency

The Draft Environmental Impact Statement (DEIS) discusses the Proposed Action's projected electrical power demand and anticipated sources. The DEIS notes that the Proposed Action will place additional demands on the utility systems. Discussions between the Estate of James Campbell and its affiliates and HECO are ongoing. Means of minimizing the potential impact to the HECO system due to the Proposed Action are under consideration in the planning of new facilities. HECO has indicated that it has plans for future expansion of its power generation capabilities. Although building designs and specifications have not been developed, it is also anticipated that the development will consider implementation of energy efficiency design guidelines in an effort to minimize energy consumption.

Solid Waste

The DEIS includes a discussion of the anticipated levels of solid waste the Proposed Action may generate during development and operation.

Schools

The DEIS includes of a calculation of students who will be living in Kapolei West and the corresponding need for school facilities. The DEIS analyzes the public school impacts of the Proposed Action on Kapolei area schools. The DEIS notes that Aina Nui Corporation has entered into discussions with the DOE concerning possible contributions to offset the Petition Area's impact to public school facilities and that a 10-acre middle school site has been identified in the larger Kapolei West project area (that includes the Petition Area) to meet the projected demand.

Landscaping

The use of Native Hawaiian plants will be considered for landscaping where it is ecologically appropriate, readily available and fits the theme and character of the surroundings. Stormwater runoff generated at the Petition Area will be directed to appropriate local and regional drainage facilities, including underground systems and grassed or landscaped areas such as the proposed golf course.



Helber Hastert & Fee
Planners, Inc.

John T. Harrison, Ph.D.
March 10, 2005
Page 2

Water Use

Non-potable water will be used for landscaping and golf course irrigation. The source of non-potable water will be reclaimed wastewater supplied by Board of Water Supply. This will be discussed in the DEIS.

We appreciate your participation in this review process and look forward to any additional comments you may have on the DEIS (to which these letters will be appended).

Sincerely,

HELBER HASTERT & FEE, Planners



Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwaiari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HI 96843



November 16, 2004

JEREMY HARRIS, Mayor
EDDIE FLORES, JR., Chairman
CHARLES A. STED, Vice-Chairman
HERBERT S. K. KAOPUA, SR.
DAROLYN H. LENDIO

RODNEY K. HARRAGA, Ex-Officio
LARRY J. LEOPARDI, Ex-Officio
CLIFFORD S. JAMILE
Manager and Chief Engineer

DONNA FAY K. KIYOSAKI
Deputy Manager and Chief Engineer



Mr. Thomas A. Fee, AICP
Helber Hastert & Fee Planners, Inc.
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Dear Mr. Fee:

Subject: Your letter of October 23, 2004 on the Environmental Impact Statement Preparation Notice for Kapolei West, TMK: 9-1-14: 33, 9-1-15: 4, 20

Thank you for the opportunity to comment on the subject document.

The developer will be required to install the necessary water system improvements to serve the proposed Development.

The construction drawings should be submitted for approval.

The availability of water will be confirmed when the building permits are submitted for approval. When water is made available, the applicant will be required to pay our Water System Facilities Charge for source.

If you have any questions, please contact Joseph Kaakua at 748-5442.

Sincerely,


KEITH S. SHIDA
Principal Executive
Customer Care Division

Helber Hastert & Fee
Planners, Inc.

March 10, 2005

Mr. Clifford S. Jamile
Manager and Chief Engineer
Board of Water Supply
City & County of Honolulu
630 South Beretania Street
Honolulu, HI 96843

Dear Mr. Jamile:

**Environmental Impact Statement Preparation Notice for the
Kapolei West Expansion Area, Ewa District, Oahu, Hawaii**

Thank you for your letter dated November 16, 2004 regarding your review of the Kapolei West Environmental Impact Statement Preparation Notice. This letter is to acknowledge your comments on water system issues including system improvements, plan approvals and your Water System Facilities Charge.

Aina Nui Corporation will install the necessary water system improvements to serve the proposed development and submit construction drawings for the Board's approval.

We appreciate your participation in this review process and look forward to any additional comments you may have on the Draft Environmental Impact Statement (to which these letters will be appended).

Sincerely,

HELBER HASTERT & FEE, Planners



Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control

Pacific Guardian Center • 733 Bishop Street, Suite 2590 • Honolulu, Hawaii 96813
Tel. 808.545.2055 • Fax 808.545.2050 • www.hhf.com • e-mail: info@hhf.com

DEPARTMENT OF COMMUNITY SERVICES
CITY AND COUNTY OF HONOLULU
715 SOUTH KING STREET, SUITE 311 • HONOLULU, HAWAII 96813
TELEPHONE: (808) 527-5311 • FAX: (808) 527-5498 • INTERNET: www.honolulu.hi.us



JEREMY HARRIS
MAYOR

MICHAEL T. AMI
DIRECTOR
JOHN P. SARAS
DEPUTY DIRECTOR

November 5, 2004

Ms. Donna Goth, President
Aina Nui Corporation
1001 Kamokila Boulevard, Suite 255
Kapolei, Hawaii 96707

Dear Ms. Goth:

Subject: Environmental Impact Statement Preparation Notice
Kapolei West

We appreciate the opportunity to review and comment on the subject Environmental Impact Statement (EIS) Preparation Notice. Based on our review, we have initially determined that the proposed project should have no impact on any projects or programs of the Department of Community Services.

The draft EIS should provide more detailed information on the types of housing that will be developed in the proposed project in terms of unit sizes, types, and prices. Given the severe shortage of affordable rental housing our community currently faces, it is our preference that the unit mix include an affordable rental housing component that could be developed by a nonprofit developer or nonprofit/for profit partnership using existing affordable housing programs such as the low income housing tax credit program. We would also ask that consideration be given to set aside of a few house lots for the development of group homes for persons with special needs. As a matter of policy, the City and County of Honolulu promotes the dispersal of housing for persons with special needs throughout the community, including new housing developments.

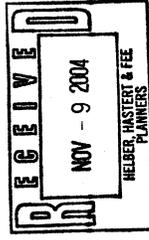
We appreciate your consideration of these comments, and we look forward to reviewing the draft EIS when it becomes available. Questions regarding this matter may be directed to Mr. Keith Ishida at 527-5092.

Sincerely,



MICHAEL T. AMII
Director

cc: Land Use Commission
Helber Hastert and Fee, Planners



Helber Hastert & Fee
Planners, Inc.

March 10, 2005

Ms. Debbie Kim Morikawa
Acting Director
Department of Community Services
City & County of Honolulu
715 South King Street, Suite 311
Honolulu, HI 96813

Dear Ms. Morikawa:

**Environmental Impact Statement Preparation Notice for the
Kapolei West Expansion Area, Ewa District, Oahu, Hawaii**

Thank you for your letter dated November 5, 2004 regarding your review of the Kapolei West Environmental Impact Statement Preparation Notice. This letter is to acknowledge your determination that the proposed project should have no impact on any projects or programs of your department. The Draft Environmental Impact Statement (DEIS) will include a discussion of the general unit type (single- or multi-family) and anticipated market for the proposed residential products. Unfortunately, detailed information on unit sizes and pricing are unavailable at this time. The Kapolei West project will comply with City requirements for the provision of affordable housing opportunities and will give consideration to including the development of "special needs" housing.

We appreciate your participation in this review process and look forward to any additional comments you may have on the DEIS (to which these letters will be appended).

Sincerely,

HELBERT HASTERT & FEE, Planners



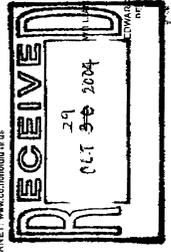
Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control

DEPARTMENT OF PARKS AND RECREATION
CITY AND COUNTY OF HONOLULU
1000 LULUOHA STREET, SUITE 500 • KAAHOLA, HAWAII 96707
TELEPHONE (808) 592-3561 • FAX (808) 592-5131 • INTERNET: www.ci.honolulu.hi.us



JEREMY HARRIS
MAYOR



D. BALFOUR, JR.
DIRECTOR
WILLIAM D. BALFOUR, JR.
CITY DIRECTOR

October 27, 2004

Ms. Donna Goth, President
Aina Nui Corporation
1001 Kaunokila Boulevard, Suite 255
Kapolei, Hawaii 96707

Dear Ms. Goth:

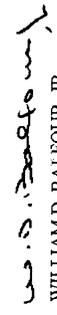
Subject: Kapolei West - Environmental Impact Statement Preparation Notice

Thank you for the opportunity to review and comment on the Environmental Impact Statement Preparation Notice relating to the development of Kapolei West.

The Department of Parks and Recreation has no comment at this time.

Should you have any questions, please contact Mr. John Reid, Planner, at 692-5454.

Sincerely,



WILLIAM D. BALFOUR, JR.
Director

WDB:mk
(81646)

cc: Mr. Bert Saruwatari, State of Hawaii, Land Use Commission
Ms. Corlyn Orr, Helber Hastert & Fee Planners, Inc.

AINA NUI CORPORATION
1001 Kamohila Blvd. #255 * Kapolei, HI 96707
Fax No: (808) 674-3349

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
(808) 523-4444 • FAX: (808) 527-6743
DEPT. WEB SITE: www.honolulu.gov • CITY WEB SITE: www.honolulu.gov



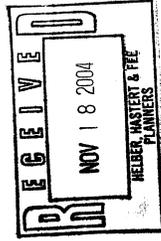
JEREMY HARRIS
MAYOR

ERIC S. GROGAN, AIA
DIRECTOR
BARBARA KIM STANTON
DEPUTY DIRECTOR

FACSIMILE TRANSMITTAL

2004/ELOG-2406 (RYS)

November 17, 2004



DATE: November 1, 2004
TO: Tom Fee
COMPANY: Helber Haster Fee, Planners, Inc.
FAX NUMBER: 545-2050
RE: Letter from William Balfour re Kapolei West-EIS Preparation Notice
FROM: Donna Goth

Mr. Thomas A. Fee, AICP
President
Helber Haster & Fee, Planners, Inc.
Pacific Guardian Center
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Attn: Corlyn Olson Orr, Project Planner

Number of pages (including cover sheet): 2
Hard copy to follow: Yes No

Dear Mr Fee:
Kapolei West, Ewa, Oahu, Hawaii
Environmental Impact Statement Preparation Notice (EISPN)

If you do not receive all of the pages, please call Janice Reisch at 674-3268 as soon as possible.

This is in response to your request dated October 23, 2004, for comments on the Environmental Impact Statement Preparation Notice (EISPN) for the proposed Kapolei West Project, which you are preparing for Aina Nui Corporation. We have reviewed the proposal and offer the following comments for your review and consideration for inclusion in the Draft Environmental Impact Statement (DEIS):

Comments:

1. EWA "DPLUM" on pages ii, 34, 36, and figure 8: should be revised to EWA DPULUM to refer to the Ewa Development Plan Urban Land Use Map.
2. Section 2.3 Utility Requirements: In addition to the discussion of the utility requirements in Section 2.3, the DEA should include discussions on the adequacy of existing public facilities and services, and the necessity for new public facilities and services, to support the proposed project. These discussions should include the potential transportation regional impacts, including the feasibility of industrial based traffic through residential areas of the project, and mitigating measures in the context of the Ewa Development Plan area.
 - a. Add a discussion of the Kapolei Interceptor Sewer master plan. We suggest calling Scott Gushi of our Wastewater Branch at 523-4886 to discuss the completion date and capacity requirements of the proposed sewer master plan. A sewage capacity reservation is contingent on submittal and approval of a Site

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Development Division Master Application (Sewer Connection). This project will be liable for payment of the Wastewater System Facility Charge.

- b. A drainage master plan will be required for the development of the area.
3. Discuss how the proposed project is consistent with the objectives and policies of the City and County of Honolulu's General Plan listed on pages 31 to 33 of the EISPN.

Please make the following changes to Section 3.12.4 City and County of Honolulu General Plan discussed on pages 30 through 33:

- a. The 1992 GP was last amended on October 3, 2002 to reflect the changes in Population Distribution percentages in Resolution 02-205, CD1, instead of in 2003 as cited.
- b. II. Economic Activity – Objective G: Policy 3 vice 2 as cited.
- c. IV. Housing – Objective C: Policy 3 vice 4 as cited.
- d. V. Transportation and Utilities – Objective A: Policy 1: “c” and “d” vice “b” and “c” as cited.
- e. X. Culture and Recreation – Policy 9 and 10 cited are for Objective D (To provide a wide range of recreational facilities and services that are readily available to all residents of Oahu) vice for Objective B.

4. Expand Section 2.6 on page 13 to include a discussion of the proposed rezoning for “Zone Change 2”, and how the proposed project will be consistent with the surrounding zoning. Addition of a new zone change map to illustrate the proposed zone changes would be helpful.

5. Discuss how the proposed project supports or is consistent with the Ewa Development Plan, including but not limited to the following:

- a. How the proposed golf course is consistent with the Ewa DP open space guidelines for golf courses (Section 3.1.4.6 on page 3-8 of the Ewa DP).
- b. The section on parks should be expanded:
 - (1) Include a discussion of how the acreage of the proposed parks compare with the recommended minimum of two acres of park per 1,000 residents (see page 3-16 of the Ewa DP).

- (2) Include how the proposed parks are consistent with the Ewa DP guidelines on the development of community-based parks (Section 3.3.2.1, page 3-17). Please specifically address the following:

- The proposed location of the elementary school and the three planned parks do not support the guideline regarding co-locating parks with schools (see also Section 4.7.2, page 4-32 of the Ewa DP); and
- The location of the three planned parks do not support the guideline regarding siting parks at the center of neighborhoods to maximize accessibility. The largest planned park, the 14.3-acre historic park, and the planned 2.8-acre passive park, are located at the edge of the proposed projects adjacent to the golf course. Accessibility to these parks may also be compromised by the OR&L right-of-way.

- c. How the proposed project will support the policies and principles regarding views in Section 3.4 of the Ewa DP (beginning on page 3-19).

- d. How the proposed project supports the guidelines in the Ewa DP related to the OR&L Historic Railway (Section 3.4.3.1, page 3-23).

- e. The EISPN states that no roadway connections would be made between the proposed project and the adjacent communities of Honokai Hale and Nanakai Gardens. This does not support the Ewa DP planning principles or design guidelines on developing a comprehensive roadway network (page 4-15). The *Smart Growth* principles of connectivity between communities should be promoted rather than hindered. The EIS should provide a compelling reason for the absence of the roadway connections.

- f. The following editorial changes are suggested:

- (1) The planned 1.8-acre passive park to the south of the Honokai Hale subdivision (on page 10 of the EISPN) is not shown on Figure 3.
- (2) Include the DPR park classification (neighborhood, community, or district park) for each of the three parks proposed and for the existing Kamokila Park.

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 533-4432 • FAX: (808) 527-8743
DEPT. WEB SITE: www.honolulu.gov • CITY WEB SITE: www.honolulu.gov

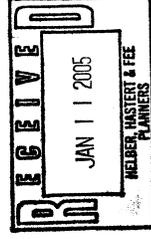


MUFI HANNEMANN
MAYOR

HENRY ENG, FAICP
ACTING DIRECTOR
DAVID K. TANOUJE
DEPUTY DIRECTOR

2004/ELOG-2406 (RYS)

January 10, 2005



Mr. Thomas A. Fee, AICP
President
Helber Hastert & Fee, Planners, Inc.
Pacific Guardian Center
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Attn: Corlyn Olson Orr, Project Planner

Dear Mr. Fee:

Additional Comments for Kapolei West, Ewa, Oahu, Hawaii
Environmental Impact Statement Preparation Notice (EISP/N)

Please accept our apology for the inconvenience caused by this additional late comment. This is to supplement our comments forwarded to you in our November 17, 2004 response to your request, dated October 23, 2004, for comments on the Environmental Impact Statement Preparation Notice (EISP/N) for the proposed Kapolei West Project, which you are preparing for Aina Nui Corporation.

We offer the following comments for your review and consideration for inclusion in the Draft Environmental Impact Statement (DEIS):

- Section 2.2 – Project Description on Page 10 - Circulation and Other Open Spaces: – “Vehicular access to Kapolei West is planned via a new segment of Kapolei Parkway connecting to Ali'i Nui Drive to the west and Kalaeloa Boulevard to the east.”, and Section 2.5 – Projected Project Phasing on page 13 – “The Kapolei Parkway would be constructed as development of adjacent lots occur.”

Mr. Thomas A. Fee, AICP, President
Helber Hastert & Fee, Planners, Inc.

Page 4
November 17, 2004

- (3) Some of the land use designation labels on Figure 8 are incorrect (the L/MDR and HDR). The leader from the PK/GC label on the upper left of the map also points to the wrong area. Perhaps the PK/GC label should be changed to L/MDR.
- (4) The sentence on page 34, second paragraph that begins with “The Phasing Map identifies...” is confusing. The Kapolei Low Density Apartments (LDA) project identified in the sentence is not shown on the Ewa DP Phasing Map. We suggest revising this sentence and the remaining portion of the paragraph in the EIS.
6. Page 36 of the EISP/N mentions that a portion of the project area lies within the SMA. The applicant should include a map showing the project area and the SMA boundary line, and indicate the square footage of the project area within the SMA.
7. Anticipated Impacts (page 38): The potential impacts of adjacent industrial uses on the proposed residential and park uses, and possible mitigation measures should be discussed.
8. In the discussion of the archeological assessments, include the standard warranty that “Should archeologically significant features be uncovered, construction will be halted and immediate archeological consultation will be sought with the Department of Land and Natural Resources State Historic Preservation Division in accordance with applicable regulations.”
9. Add the Ewa Neighborhood Board No. 23 to the list of “Other Agencies, Organizations and Individuals” to be consulted during the preparation of the DEIS to Section 7.0 on page 43.

We will reserve further comments for later after we review the completed DEIS. Should you have any questions, please contact Ray Sakai of our staff at 523-4047.

Sincerely yours,

Ray Sakai
ERIC G. CRISPIN, AIA
Director of Planning and Permitting

EGC:js

cc: Aina Nui Corporation
State Land Use Commission
Office of Environmental Quality Control
p:\DivFunction\Ea-eis\2004\elog-2406.doc

Mr. Thomas A. Fee, AICP, President
Helber Hastert & Fee, Planners, Inc.
Page 2
January 10, 2005

Please expand the discussion to include the applicant's anticipated phasing plan for construction of the new roadway segment and the "adjacent lots."

We will reserve further comments for later after we review the completed DEIS. Should you have any questions, please contact Ray Sakai of our staff at 523-4047.

Sincerely yours,



HENRY ENG, FAICP
Acting Director of Planning and Permitting

HE:js

cc: Aima Nui Corporation
State Land Use Commission
Office of Environmental Quality Control

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Helber Hastert & Fee
Planners, Inc.

March 10, 2005

Mr. Henry Eng, FAICP
Acting Director
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, HI 96813

Dear Mr. Eng:

**Environmental Impact Statement Preparation Notice (EISP/N) for the
Kapolei West Expansion Area, Ewa District, Oahu, Hawaii**

Thank you for your letters dated November 17, 2004 and January 10, 2005 (2004/ELOG-2406 RYS) regarding your review of the Kapolei West EISP/N. We have reviewed your comments and offer the following responses. It should be noted that the DEIS focuses on impacts of the *Petition Area*, which is a sub-area within the overall Kapolei West development area. The balance of the Kapolei West area was urbanized by the Land Use Commission in 1991 and its impacts are included in the evaluation of cumulative effects in the Draft Environmental Impact Statement (DEIS).

1. The DEIS does not include an acronym referencing the Ewa Development Plan Urban Land Use Map.
2. The DEIS includes a discussion of the adequacy of existing public facilities and services and any requirements for new public facilities and services needed to support the proposed project. The DEIS also includes a discussion of potential regional transportation impacts and mitigation. Potential impacts of industrial traffic from the Kalaheoa Harbor industrial area were not modeled in the traffic impact analysis due to the uncertainty of how the industrial-zoned lands adjacent to the south of the Petition Area will be developed in the future. The southern segment of Road "F" in the Petition Area would primarily provide access to the proposed 14-acre neighborhood park, and its potential connection to the area south of the OR & L right-of-way is only conceptual at this time.
3. The DEIS includes a discussion of the project's impacts with respect to the Kapolei Interceptor Sewer, now under construction. The applicant acknowledges that a Wastewater System Facility Charge will be applied to the project and that a drainage master plan will be required.
4. The DEIS includes a discussion of the Proposed Action's consistency with the objectives and policies of the City and County's General Plan. The corrections to the references pointed out in your letter have been made in the DEIS.
5. The DEIS includes a conceptual discussion of the proposed rezoning, but does not include a proposed zoning map. The proposed zoning will be included in a future zone change application with your department.



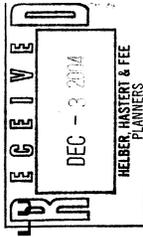
Helber Hastert & Fee
Planners, Inc.

Mr. Henry Eng, FAICP
March 10, 2005
Page 2

DEPARTMENT OF TRANSPORTATION SERVICES
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 3RD FLOOR • HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-4529 • FAX: (808) 523-4730 • INTERNET: www.cc.honolulu.hi.us



JEREMY HARRIS
MAYOR



GEORGE KEEKI MIYAMOTO
DIRECTOR

ROBERT FISHMAN
ROBERT GUSTAFSON

TP10/04-81562R

November 30, 2004

Ms. Donna Goth, President
Aina Nui Corporation
1001 Kamokila Boulevard, Suite 255
Kapolei, Hawaii 96707

Dear Ms. Goth:

Subject: Kapolei West

In response to the October 23, 2004 letter from Helber Hastert & Fee, Planners, Inc., we have reviewed the Environmental Impact Statement (EIS) Preparation Notice for the subject project. The following comments are the result of this review:

1. The traffic impact assessment should discuss the impact of the development on surrounding City streets. In addition, the study should state whether the project roads will be dedicated to the City.
2. We have some concerns regarding promised transit amenities and the City's ability to provide bus services to low density neighborhoods. We welcome the opportunity to review your plans to develop a transit friendly development.
3. We would like to encourage the applicant to every extent possible, adopt design concepts and recommended standards of the "Ewa Smart Growth Design Code" into their project plans for the area. Although the code has not been adopted at this time, there is a high possibility of it becoming the new requirement.

We look forward to reviewing the draft EIS. To facilitate our review, please provide us with two copies of this document.

6. The DEIS discusses the Proposed Action's support or consistency with the Ewa Development Plan (DP), including consistency with its guidelines and recommendations for golf courses, parks, views, and the OR&L Historic Railway.
7. The DEIS describes the rationale for why the Proposed Action does not include a roadway connection between the proposed development and Honokai Hale and Nanakai Gardens. In short, the project's proposed roadway alignments respect and reflect the strong sentiments expressed at community meetings by residents of the two areas against a direct roadway connection and the additional through-traffic it would bring to their neighborhoods.
8. We appreciate the editorial suggestions and have incorporated them, where appropriate.
9. The DEIS includes a map illustrating the SMA boundary line with respect to the Petition Area, along with the acreage located within the SMA.
10. The DEIS includes a discussion of the potential impacts and mitigation measures of adjacent industrial uses on the proposed residential and recreational land uses.
11. The DEIS includes the standard warranty cited in your letter regarding archaeological finds during the construction period.
12. The Ewa Neighborhood Board No. 23 has been added to the list of parties consulted during the DEIS preparation.
13. The phasing of the Petition Area development is under consideration at this time, since it will be implemented as part of an overall master plan for Kapolei West. More detailed phasing will be available at later stages in the development process and actual phasing will be based on future market conditions.

We appreciate your participation in this review process and look forward to any additional comments you may have on the DEIS (to which these letters will be appended).

Sincerely,

HELBER HASTERI & FEE, Planners

Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control

Ms. Donna Goth
Page 2
November 30, 2004

Should you have any questions regarding these comments, please contact Faith Miyamoto of the Transportation Planning Division at 527-6976.

Sincerely,



GEORGE "KEOKI" MIYAMOTO
Director

cc: Ms. Genevieve Salmonson, Director
Office of Environmental Quality Control

Mr. Bert Saruwatari, Planner
Land Use Commission

Ms. Corlyn Olson Orr, Project Planner
Helber Hastert & Fee, Planners

Helber Hastert & Fee
Planners, Inc.

March 10, 2005

Mr. Ed Hirata, Acting Director
Department of Transportation Services
City and County of Honolulu
650 South King Street, 3rd Floor
Honolulu, HI 96813

Dear Mr. Hirata:

**Environmental Impact Statement Preparation Notice (EISP/N) for the
Kapolei West Expansion Area, Ewa District, Oahu, Hawaii**

Thank you for your letter dated November 30, 2004 regarding your review of the Kapolei West EISP/N. We have reviewed your comments and offer the following responses. It should be noted that the DEIS focuses on impacts of the *Petition Area*, which is a sub-area within the overall Kapolei West development area. The balance of the Kapolei West area was urbanized by the Land Use Commission in 1991 and its impacts are included in the evaluation of effects in the Draft Environmental Impact Statement (DEIS).

1. The DEIS includes a discussion of the Proposed Action's impacts on surrounding City streets. It has not yet been determined whether the Petition Area's roadways will be dedicated to the City.
2. As more detailed planning proceeds, Aina Nui Corporation will work with your department and other relevant City departments in making Kapolei West a transit-friendly development community.
3. The developer is reviewing the design concepts and recommended standards of the "Ewa Smart Growth Design Code" in the overall Kapolei West project.
4. We will provide two copies of the DEIS to facilitate your department's review.

We appreciate your participation in this review process and look forward to any additional comments you may have on the DEIS (to which these letters will be appended).

Sincerely,

HELBER HASTERT & FEE, Planners



Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control

Pacific Guardian Center • 733 Bishop Street, Suite 2590 • Honolulu, Hawaii 96813
Tel. 808.545.2055 • Fax 808.545.2050 • www.hbf.com • e-mail: info@hbf.com



FIRE DEPARTMENT
CITY AND COUNTY OF HONOLULU

3375 KOAPAKA STREET, SUITE 1425 • HONOLULU, HAWAII 96819-1869
TELEPHONE: (808) 831-7761 • FAX: (808) 831-7750 • INTERNET: www.honolulufire.org



ATTILIO K. LEONARDI
FIRE CHIEF

JOHN CLARK
DEPUTY FIRE CHIEF



JEREMY HARRIS
MAYOR

November 10, 2004

Ms. Donna Goth, President
Aina Nui Corporation
1001 Kamokila Boulevard, Suite 255
Kapolei, Hawaii 96707

Dear Ms. Goth:

Subject: Environmental Impact Statement Preparation Notice
Project: Kapolei West
Location: Kapolei, Oahu, Hawaii
Tax Map Keys: 9-1-014: Portion 033
9-1-015: Portions 004 and 020

We received a letter from Mr. Thomas A. Fee of Helber Hastert & Fee Planners, Inc., dated October 23, 2004, requesting that our comments on the above-mentioned project be submitted to you.

The Honolulu Fire Department (HFD) requires that the following be complied with:

1. Provide a fire apparatus access road for every facility, building, or portion of a building hereafter constructed or moved into or within the jurisdiction when any portion of the facility or any portion of an exterior wall of the first story of the building is located more than 150 feet (45 720 mm) from fire apparatus access as measured by an approved route around the exterior of the building or facility. (1997 Uniform Fire Code, Section 902.2.1)
2. Provide a water supply, approved by the county, capable of supplying the required fire flow for fire protection to all premises upon which facilities or buildings, or portions thereof, are hereafter constructed or moved into or within the county.

Ms. Donna Goth, President
Page 2
November 10, 2004

On-site fire hydrants and mains capable of supplying the required fire flow shall be provided when any portion of the facility or building is in excess of the 150 feet (45 720 mm) from a water supply on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building. (1997 Uniform Fire Code, Section 903.2 as amended)

3. Provide civil drawings to HFD for review and approval.

Should you have any questions, please call Battalion Chief Lloyd Rogers of our Fire Prevention Bureau at 831-7778.

Sincerely,


ATTILIO K. LEONARDI
Fire Chief

AKL/SK:bh

cc: Ms. Genevive Salmonson, Director
State of Hawaii, Department of Health, Office of Environmental Quality Control
Mr. Bert Saruwatari, Planner
State of Hawaii, Department of Business, Economic Development & Tourism,
Land Use Commission
Ms. Corlyn Olson Orr, Project Planner
Helber Hastert & Fee Planners, Inc.



Helbert Hastert & Fee
Planners, Inc.

March 10, 2005

Mr. Attilio K. Leonard
Fire Chief
Fire Department
City & County of Honolulu
3375 Koapaka Street, Suite H425
Honolulu, HI 96819-1869

Dear Chief Leonard:

**Environmental Impact Statement Preparation Notice for the
Kapolei West Expansion Area, Ewa District, Oahu, Hawaii**

Thank you for your letter dated November 10, 2004 regarding your review of the Kapolei West Environmental Impact Statement Preparation Notice. This letter is to acknowledge your comments on Honolulu Fire Department requirements for water availability, fire apparatus access and plan approvals.

We appreciate your participation in this review process and look forward to any additional comments you may have on the Draft Environmental Impact Statement (to which these letters will be appended).

Sincerely,

HELBERT HASTERT & FEE, Planners



Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control

Pacific Guardian Center • 733 Bishop Street, Suite 2590 • Honolulu, Hawaii 96813
Tel. 808.545.2055 • Fax 808.545.2050 • www.hhf.com • e-mail: info@hhf.com

POLICE DEPARTMENT
CITY AND COUNTY OF HONOLULU
801 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96813 - AREA CODE (808) 529-3111
http://www.honolulu.gov

JEREMY HARRIS
MAYOR

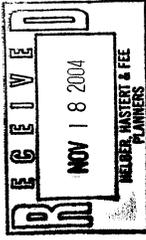


BOISSE P. CORREA
CHIEF

GLEN R. KAJIYAMA
PAUL D. PUTZULU
DEPUTY CHIEFS

OUR REFERENCE CS-KP

November 15, 2004



Ms. Donna Goth, President
Aina Nui Corporation
1001 Kamokila Boulevard, Suite 255
Kapolei, Hawaii 96707

Dear Ms. Goth:

Thank you for the opportunity to review and comment on the Environmental Impact Statement Preparation Notice for Kapolei West.

This area will be serviced by officers of District 8, which is headquartered at the Kapolei Police Station located at 1100 Kamokila Boulevard.

This project will have an impact on the services and facilities of the Honolulu Police Department. Due to the increase in patrol area, population, and traffic, we anticipate more calls for police services to the area. We may have more specific comments when details of the project are developed.

If there are any questions, please call Captain Gregory Lefcourt of District 8 at 692-4253 or Ms. Carol Sodelani of the Support Services Bureau at 529-3658.

Sincerely,

BOISSE P. CORREA
Chief of Police

By 
KARL GODSEY
Assistant Chief of Police
Support Services Bureau

cc: Ms. Genevieve Salmonson, OEQC
Mr. Bert Saruwatari, Land Use
Commission, State of Hawaii
Ms. Corlyn Olson Orr, Helbert Hastert
& Fee, Planners, Incorporated

Serving and Protecting with Aloha

Helber Hastert & Fee
Planners, Inc.

March 10, 2005

Mr. Karl Godsey
Assistant Chief of Police
Support Services Bureau
Police Department
City & County of Honolulu
801 South Beretania Street
Honolulu, HI 96813

Dear Mr. Godsey:

**Environmental Impact Statement Preparation Notice for the
Kapolei West Expansion Area, Ewa District, Oahu, Hawaii**

Thank you for your letter dated November 15, 2004 regarding your review of the Kapolei West Environmental Impact Statement Preparation Notice. This letter is to acknowledge your comments and the impacts on the services and facilities of the Honolulu Police Department. These impacts will be described in the Draft Environmental Impact Statement (DEIS) which will be published shortly.

We appreciate your participation in this review process and look forward to any additional comments you may have on the DEIS (to which these letters will be appended).

Sincerely,

HELBER HASTERT & FEE, Planners



Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control



The Senate
State of Hawaii

STATE CAPITOL
HONOLULU, HAWAII 96813

November 22, 2004



Ms. Donna Goth, President
Aina Nui Corporation
1001 Kamokila Blvd., Suite 255
Kapolei, Hawaii 96707

Dear Ms. Goth:

Upon review of the Environmental Impact Statement Preparation Notice for Kapolei West, prepared for your company by Herber Hastert & Fee, Planners, I would like to offer the following comments which express my great anticipation as well as concerns regarding the Kapolei West project. As you are aware, the development of this area will be highly beneficial to the people of Kapolei, provided, however, that the proper infrastructure is in place. The continued expansion of this area will result in increased population, which will in turn require the construction of adequate roadways to accommodate additional traffic, as well as sufficient educational facilities.

Several different projects, undertaken by varying entities, are currently being contemplated for the Kapolei area. As a result, the residents of the various communities within Kapolei are greatly concerned that serious traffic issues will result should these projects, including the Kapolei West project, be constructed prior to the completion of the proper roadway infrastructure. Proper timing of the construction of adequate infrastructure is crucial in order to ensure that current traffic problems are not further exacerbated. Pursuant to section 2.2 of the Preparation Notice, it is indicated that no roadways with direct connections between Kapolei West and the adjacent communities of Honokai Hale and Nanakai Gardens will be included due to strong community sentiment against the addition of traffic in those areas. The continued attention to these types of concerns raised by the residents of Honokai Hale, Nanakai Gardens and Kapolei is appreciated and should be encouraged throughout this arduous process.

Ms. Donna Goth
November 22, 2004
Page 2

The Preparation Notice also indicates that the project is substantially consistent with the Hawaii State Plan and the City and County of Honolulu General Plan in regard to meeting the objectives of encouraging transportation systems that accommodate the current and future development needs of a community and helping Oahu continue to be a desirable place to live. Although this is the assessment, I believe that the status of this project must continue to be closely monitored in order to ensure that the proper infrastructure exists prior to its further undertaking and completion. Currently, traffic is particularly congested in the area fronting the Kapolei Shopping Center. As the developers, you should endeavor to do whatever possible to mitigate the negative impact on traffic that the project may pose.

Additionally, as previously indicated, the need for additional educational facilities for the children of Kapolei is of the utmost importance. The increased population will amplify the already critical problem of overcrowded classrooms. Timing of the construction of new developments in this area must also be carefully designed and planned so as to ensure that the residents of Kapolei are provided with safe and adequate roads and facilities to meet the growing needs of the area.

Thank you for the opportunity to submit comments on the Preparation Notice. I look forward to receiving further information, particularly that prepared as a result of the Traffic Impact Assessment, and to working together so as to better understand how this project may be successfully completed.

Mālama pono,



Brian Kanno
State Senator, 19th District

cc: Office of Environmental Quality Control
Bert Saruwatari, Land Use Commission, State of Hawaii
Coryn Olson Orr, Helber Hastert & Fee, Planners, Inc.

Helber Hastert & Fee
Planners, Inc.

March 10, 2005

The Honorable Brian Kanno
State Senator, 19th District
The Senate
State of Hawaii
State Capitol
Honolulu, HI 96813

Dear Senator Kanno:

**Environmental Impact Statement Preparation Notice (EISP/N) for the
Kapolei West Expansion Area, Ewa District, Oahu, Hawaii**

Thank you for your letter dated November 22, 2004 regarding your review of the Kapolei West EISP/N. We appreciate your comments and offer the following responses.

1. The Draft Environmental Impact Statement (DEIS) includes detailed discussion of the Proposed Action's anticipated impacts on existing and planned infrastructure, including transportation and educational facilities, and potential mitigation measures. For example, Aina Nui Corporation has entered into discussions with the DOE concerning possible contributions to offset the Petition Area's impact on public school facilities and has identified a 10-acre middle school site has been identified in the larger Kapolei West project area (that includes the Petition Area) to meet the projected demand.
2. As you noted in your letter, the Proposed Action does not include a roadway connecting the Petition Area with the Honokai Hale and Nanakai Gardens neighborhoods. This is in response to concerns expressed by residents of these communities that a connector roadway may generate increased through-traffic in their neighborhoods. However, the City and County of Honolulu's Department of Planning and Permitting (DPP) has indicated its strong support of providing connectivity between these neighboring communities. Aina Nui Corporation will continue to work with both the Honokai Hale and Nanakai Gardens communities and the DPP to arrive at an acceptable roadway alignment plan that will serve the needs of the Petition Area residents as well as their neighbors.

We appreciate your participation in this review process and look forward to any additional comments you may have on the DEIS (to which these letters will be appended).

Sincerely,

HELBER HASTERT & FEE, Planners



Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control

Pacific Guardian Center • 733 Bishop Street, Suite 2590 • Honolulu, Hawaii 96813
Tel. 808.545.2055 • Fax 808.545.2050 • www.hbf.com • e-mail: info@hbf.com





THE OUTDOOR CIRCLE

1314 South King St., Suite 306 • Honolulu, HI 96814
Phone: 808-593-0300 Fax: 808-593-0525

November 22, 2004

Established 1912
A Non-profit Organization
BRANCHES
O'AHU

Kane'ohie
Lani-Kailua
North Shore
Wai'alea Kahaia
Wai Momi

HAWAII

Ka'u
Kona
Waikoloa Village
Waimea

KAUAI

MAUI

GARDEN CIRCLE

Lani-Kailua

Ms. Kimberly Hillebrand
Certified Arborist
Landscape and Planting Project Manager
1314 S. King St., Suite 306
Honolulu, HI 96814

Dear Ms. Hillebrand:

**Environmental Impact Statement Preparation Notice for the
Kapolei West Expansion Area, Ewa District, Oahu, Hawaii**

Thank you for your letter dated November 22, 2004 regarding your review of the Kapolei West Environmental Impact Statement Preparation Notice. Our responses below are presented in the order of your bulleted list of comments, which are paraphrased:

1. Please describe number of kiawe trees and their fate. The Botanical Survey in Appendix D of the Draft EIS includes an aerial photo of the project area that shows the dense tree vegetation within the project boundaries. No attempt was made to count individual kiawe or koa haole plants, as these are invasive species and not considered "significant." Individual kiawe trees may be retained at the project area in recreation areas, but there is no commitment to retain specific trees. Most of the species will be removed and there are no plans to relocate them.
2. Please itemize other significant trees and their fate. The botanical survey did not identify any significant trees in the project area.
3. Please provide a map of specific locations of all trees. See response to comment 2
4. A certified arborist must be obtained to perform a tree assessment. This would have been appropriate if the botanical survey identified significant trees.
5. Please illustrate a landscaping plan. A landscape plan will be developed, but is not available in the Draft EIS. Landscaping is an integral part of the design.
6. Please describe the tree replacement plan to restore shade that is lost by tree removal. The landscape plan will include trees along streetscapes, in recreation areas, and on residential lots. The landscape plan will include shade trees with individual canopies greater than individual kiawe trees. There is no commitment to replace the lost canopy 100 percent. A tree "replacement plan" will not be prepared.

On behalf of The Outdoor Circle I would like to thank you for including our organization as a consulted party in the above referenced Environmental Impact Statement Preparation Notice (EISP). Our comments and questions are listed below:

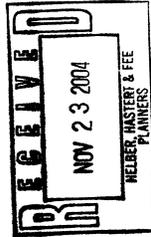
- > The EISP states that there is no significant flora within the project area with the exception of a kiawe forest. Please describe the number of trees within this kiawe forest and whether they will be removed, relocated or remain in place.
- > Please itemize how many other significant trees are located in the project area, how many will be removed, how many will remain, and how many will be relocated;
- > Please provide a map with specific locations of all trees in the project area;
- > A qualified certified arborist must be obtained to perform a tree assessment based on the International Society of Arboriculture's guidelines to determine which trees are healthy and structurally sound and should be preserved;
- > Please illustrate the overall landscaping plan for the area;
- > The Outdoor Circle believes that no canopy cover should be lost due to construction. Please describe the tree replacement plan you will develop to restore the shade that is lost by removals, and
- > Please describe the steps that will be taken to protect trees that will remain on site during construction, i.e. a tree preservation and protection plan developed by a certified arborist.

Thank you for the opportunity to comment. We look forward to reviewing the Draft Environmental Impact Statement.

Sincerely,

Kimberly Hillebrand
Certified Arborist
Landscape and Planting Project Manager

Cc: Helber Hastert and Fee, Planners, Inc.
Office of Environmental Quality Control
Land Use Commission, State of Hawaii



Helber Hastert & Fee
Planners, Inc.

March 10, 2005

Ms. Kimberly Hillebrand
Certified Arborist
Landscape and Planting Project Manager
1314 S. King St., Suite 306
Honolulu, HI 96814

Dear Ms. Hillebrand:

**Environmental Impact Statement Preparation Notice for the
Kapolei West Expansion Area, Ewa District, Oahu, Hawaii**

Thank you for your letter dated November 22, 2004 regarding your review of the Kapolei West Environmental Impact Statement Preparation Notice. Our responses below are presented in the order of your bulleted list of comments, which are paraphrased:

1. Please describe number of kiawe trees and their fate. The Botanical Survey in Appendix D of the Draft EIS includes an aerial photo of the project area that shows the dense tree vegetation within the project boundaries. No attempt was made to count individual kiawe or koa haole plants, as these are invasive species and not considered "significant." Individual kiawe trees may be retained at the project area in recreation areas, but there is no commitment to retain specific trees. Most of the species will be removed and there are no plans to relocate them.
2. Please itemize other significant trees and their fate. The botanical survey did not identify any significant trees in the project area.
3. Please provide a map of specific locations of all trees. See response to comment 2
4. A certified arborist must be obtained to perform a tree assessment. This would have been appropriate if the botanical survey identified significant trees.
5. Please illustrate a landscaping plan. A landscape plan will be developed, but is not available in the Draft EIS. Landscaping is an integral part of the design.
6. Please describe the tree replacement plan to restore shade that is lost by tree removal. The landscape plan will include trees along streetscapes, in recreation areas, and on residential lots. The landscape plan will include shade trees with individual canopies greater than individual kiawe trees. There is no commitment to replace the lost canopy 100 percent. A tree "replacement plan" will not be prepared.

Pacific Guardian Center • 733 Bishop Street, Suite 2590 • Honolulu, Hawaii 96813
Tel. 808.545.2055 • Fax 808.545.2050 • www.hbf.com • e-mail: info@hbf.com

Helber Hastert & Fee
Planners, Inc.

Ms. Kimberly Hillebrand
March 10, 2005
Page 2

Additional information on botanical resources is included in the Draft EIS in Chapters 4,7 and Appendix D.

We appreciate your participation in this review process and look forward to any additional comments you may have on the Draft Environmental Impact Statement (to which these letters will be appended).

Sincerely,

HELBER HASTERT & FEE, Planners



Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control

Corlynn Olson Orr

From: Hawaii's Thousand Friends [htf@java.net]
Sent: Thursday, January 13, 2005 4:05 PM
To: Corlynn Olson Orr
Subject: Kapolei West DEIS

Aloha, I hope it is not too late to put in our request for a copy of the Draft EIS for Kapolei West. We inadvertently missed sending in this request earlier. I do apologize.

Our mailing address is:
Hawaii's Thousand Friends
305 Hahani St. #282
Kailua, Hawaii'i 96734
Mahalo,

Danica Noble



DEPARTMENT OF THE ARMY
U. S. ARMY ENGINEER DISTRICT, HONOLULU
FT. SHAFTER, HAWAII 96858-5440

REPLY TO
ATTENTION OF

April 29, 2004

Regulatory Branch

Mr. Thomas A. Fee, A.I.C.P.
Principal
Helber, Hastert & Fee, Planners Inc.
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Dear Mr. Fee:

This responds to your request for written comments to a master plan and draft Environmental Assessment (dEA) that will address activities and impacts of the proposed Kapolei West development, Kapolei, Oahu Island (existing 535 acres and TMKs 9-1-14; por. 33 and 9-1-15; pors. 4, 20).

The dEA should indicate whether waters of the United States, as represented by perennial or intermittent streams, and wetlands are in, or adjacent to, or absent from, the proposed project area. The dEA should state in appropriate sections that there is, or no potential for waters of the U.S. to be impacted by construction of project structures and associated ground disturbing activities within, and adjacent to, the proposed improvement area. Upon our receipt of the dEA, it may be determined whether a Department of Army (DA) permit for Section 404 activities of the Clean Water Act may, or may not be, required for the proposed Kapolei West development.

Thank you for your consideration of potential impacts to the aquatic environment of the Kapolei watershed. Please contact Mr. Farley Watanabe of my staff at 438-7701, or facsimile 438-4060, if you have any questions or need additional information. Please refer to File Number 200400297 in any future correspondence with us.

Sincerely,

George P. Young, P.E.
Chief, Regulatory Branch



Commander
Fourteenth Coast Guard District
Prince Kalaniana'ole Federal Building

300 Ala Moana Boulevard
Honolulu, HI 96804-4562
Staff Symbol: (90)
Phone: (808) 541-2268
Fax: (808) 541-3103
Email: spapuga@d14.uscg.mil

11100
May 14, 2004

Helber, Hastert and Fee Planners
Attn: Kapolei West
733 Bishop Street, Suite 2590
Honolulu, HI 96813

Dear Mr. Fee:

Thank you for including the Coast Guard in your Kapolei West development pre-assessment consultation.

Because Coast Guard Air Station Barbers Point operates out of Kalaeloa Airport, we are interested in your project. Preliminary issues that we see are the proximity of the project to Kalaeloa Airport's designated flight paths and the marina development. We would like to review the analysis and findings of the Noise Assessment and Water Resources technical studies. Please continue to consider the Coast Guard as an interested party and include us on your distribution list.

I can be contacted at (808) 541-2268 if you need any additional information.

Sincerely,

SA L. PAPUGA
Lieutenant, U.S. Coast Guard
Assistant Planning Officer
Fourteenth Coast Guard District
By direction of the District Commander



U.S. Department
of Transportation
**Federal Aviation
Administration**

May 19, 2004

Mr. Thomas A. Fee
Helbert, Hastert & Fee Planners
733 Bishop Street Suite 2590
Honolulu, Hawaii 96813

Dear Mr. Fee:

Kapolei West
Proposed Kapolei West Development

We acknowledge receipt of the Draft Environmental Assessment Pre-Assessment Consultation dated April 20, 2004 for the subject project at Kapolei, Hawaii.

Enclosed for your use is the FAA Form 7460-1, Notice of Proposed Construction or Alteration, and the Federal Aviation Regulation (FAR) Part 77 filing requirements and instructions. The form should be submitted no less than 30 days prior to the start of construction. This will allow us ample processing time once the form is received in our office.

Should you have any questions, please contact Carissa Pesquira at (808) 541-1242.

Sincerely,

Steven Y. Wong
Civil Engineer

Enclosures

300 Ala Moana Blvd, Rm. 7-128
Honolulu, HI 96850
Mail To: Box 50244
Honolulu, HI 96850-0001
Facsimile: (808) 541-5666

Western-Pacific Region
Airports District Office

NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION

\$77.13 Construction or alteration requiring notice.

(a) Except as provided in §77.15, each sponsor who proposes any of the following construction or alteration shall notify the Administrator in the form and manner prescribed in §77.17:

- (1) Any construction or alteration of more than 200 feet in height above the ground level at its site.
- (2) Any construction or alteration of greater height than an imaginary surface extending from the ground level to the top of the structure.
- (i) 100 feet for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of each airport specified in paragraph (a) (5) of this section with at least one runway more than 3,200 feet in actual length, excluding heliports.
- (ii) 100 feet for a horizontal distance of 10,000 feet from the nearest point of the nearest runway of each airport specified in paragraph (a) (5) of this section with its longest runway no more than 3,200 feet in actual length, excluding heliports.
- (iii) 25 to 1 for a horizontal distance of 5,000 feet from the nearest point of the nearest landing and takeoff area of each heliport specified in paragraph (a) (5) of this section.
- (3) Any highway, railroad, or other traverse way for mobile objects, of a height which, if adjusted upward 17 feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where overcrossings are required, is greater than 17 feet above the highest mobile object that would normally traverse the road, whichever is greater, for a private road, 23 feet for a railroad, and for a waterway or any other traverse way not previously mentioned, an aircraft that would exceed a standard of paragraph (b) (1) or (2) of this section.

(4) When requested by the FAA, any construction or alteration that would be in an instrument approach area (defined in the FAA standards governing instrument approach procedures) and available information indicates it might exceed a standard of Subpart C of this part.

(5) Any construction or alteration on any of the following airports (including heliports):

- (i) An airport that is available for public use and is listed in the Airport Directory, General Aviation Supplemental Manual or in either the Alaska or Pacific Airman's Guide and Chart Supplement.
- (ii) An airport under construction, that is the subject of a notice of proposal on file with the Federal Aviation Administration, and except for military airports, it is clearly indicated that airport will be available for public use.
- (iii) An airport that is operated by an armed force of the United States.

(b) Each sponsor who proposes construction or alteration that is the subject of a notice under paragraph (a) of this section and is advised by an FAA regional office that a supplemental notice is required shall submit that notice on a prescribed form to be received by the FAA regional office at least 48 hours before the start of construction or alteration.

(c) Each sponsor who undertakes construction or alteration that is the subject of a notice under paragraph (a) of this section shall, within 5 days after that construction or alteration reaches its greatest height, submit a supplemental notice on a prescribed form to the FAA regional office having jurisdiction over the region involved, if:

- (1) The construction or alteration is more than 200 feet above the surface level of its site, or
- (2) An FAA regional office advises him that submission of the form is required.

\$77.15 Construction or alteration not requiring notice.

No person is required to notify the Administrator for any of the following construction or alteration:

- (a) Any construction or alteration that is shielded by existing structures of a permanent and substantial character or by natural in the congested area of a city, town, or greater height, and would be located in the congested area of the structure so shielded will not adversely affect safety in air navigation.
- (b) Any antenna structure of 20 feet or less in height except one that would be used for the purpose of transmitting or receiving radio signals.
- (c) Any air navigation facility, airport visual approach or landing air, aircraft arresting device, or meteorological device, of a type approved by the Administrator, or an appropriate military service on military airports, the location and height of which is fixed by its functional purpose.
- (d) Any construction or alteration for which notice is required by any other FAA regulation.

\$77.17 Form and time of notice.

(a) Each person who is required to notify the Administrator under §77.13 (a) shall send one executed form set of FAA Form 7460-1, Notice of Proposed Construction or Alteration, to the Manager, Air Traffic Division, FAA Regional Office having jurisdiction over the area involved. Copies of FAA Form 7460-1 may be obtained from the headquarters of the Federal Aviation Administration and the regional offices.

(b) The notice required under §77.13 (a) (1) through (4) must be submitted at least 30 days before the start of construction or alteration is to begin.

(1) The date the proposed construction or alteration is to begin.

(2) The date an application for a construction permit is to be filed.

However, a notice relating to proposed construction or alteration that is subject to the licensing requirements of the Federal Aviation Act of 1958, as amended, shall be filed with the FAA at the same time the application for construction is filed with the Federal Communications Commission, or at any time before that filing.

(3) A proposed structure or an alteration to an existing structure that exceeds 100 feet in height, or a structure that would be used for air navigation and to result in an inefficient utilization of airspace, shall have the burden of overcoming that presumption. Each notice submitted under the pertinent provisions of this part 77 proposing a structure in excess of 2,000 feet above ground, or an alteration that will make an existing structure exceed that height, shall include a statement of the sponsor's reasons for proposing such an exceptional case, where the FAA is required to meeting this burden. Only in showing has been made that it would not result in an inefficient utilization of the airspace and would not result in a hazard to air navigation, will a determination of no hazard be issued.

(d) In the case of an emergency involving essential public services, public health, or public safety that required immediate construction or alteration, the 30 day requirement in paragraph (b) of this section does not apply and the notice may be sent by telephone, teletype, or other expeditious means, with an executed FAA Form 7460-1, and a copy of the notice by telephone or teletype to the nearest FAA Flight Service Station.

(e) Each person who is required to notify the Administrator by paragraph (b) or (d) of this section shall send an executed copy of FAA Form 7460-2, Notice of Actual Construction or Alteration, to the Manager, Air Traffic Division, FAA Regional Office having jurisdiction over the area involved.

ADDRESSES OF THE REGIONAL OFFICES

Alaska Region

Alaska Regional Office
Air Traffic Division, AAL-530
222 West An Avenue
Anchorage, Alaska 99501
Tel: 907-271-5893

Eastern Region

DC, DE, MD, NJ, NY, PA, VA, WV
Eastern Regional Office
Air Traffic Division, AEA-520
JFK International Airport
Flagstaff Federal Building
Flagstaff, VA 22033
Tel: 718-553-2816

Central Region

IA, KS, MO, NE
Central Regional Office
Air Traffic Division, ACE-520
1000 North Lincoln
Kansas City, MO 64108
Tel: 816-426-3408 or 3409

Northwest Mountain Region

CO, ID, MT, OR, UT, WA, WY
Northwest Mountain Regional Office
Air Traffic Division, ASW-520
1601 Lind Avenue SW
Renton WA 98055-4066
Tel: 425-221-2520

Southern Region

AL, FL, GA, KY, MS, NC, SC, TN, VA
Southern Regional Office
Air Traffic Division, ASD-520
1701 Columbia Avenue
College Park, GA 30037
Tel: 404-905-9685

Southwest Region

AR, LA, NM, OK, TX
Southwest Regional Office
Air Traffic Division, ASW-520
2601 West Loop West
Fort Worth TX 76137-4520
Tel: 817-222-5551

Western Pacific Region

HI, CA, NV, AZ, GU
Western-Pacific Regional Office
Air Traffic Division, AWP-520
15000 Aiea Drive
Hawthorne, CA 90280
Tel: 310-725-8557

Great Lakes Region

IL, IN, MI, MN, ND, OH, SD, W
Great Lakes Regional Office
Air Traffic Division, AGL-520
2300 East Devon
Dear Plains, IL 60018
Tel: 847-294-7568

New England Region

CT, MA, ME, NH, RI, VT
New England Regional Office
Air Traffic Division, ANE-520
12 New England Executive Park
Haverhill, MA 01830
Tel: 978-238-7200

LINDA LINGLE
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P.O. BOX 119, HONOLULU, HAWAII 96810

RUS K. SAITO
COMPTROLLER
KATHERINE H. THOMASON
DEPUTY COMPTROLLER

(9)116.4



DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM

OFFICE OF PLANNING

235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

LINDA LINGLE
GOVERNOR
THEODORE E. LIU
DIRECTOR
STEVE BRETSKY
DEPUTY DIRECTOR
MARY LOU KOBAYASHI
ADMINISTRATOR
OFFICE OF PLANNING

Telephone: (808) 587-2846
Fax: (808) 587-2824

Ref. No. P-10462

APR 23 2004

June 29, 2004

Ms. Corilyn Olson Orr, Project Planner
Helber, Hasert and Fee Planners, Inc.
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Dear Ms. Orr:

Subject: Kapolei West, Ewa, Oahu, Hawaii
Draft Environmental Assessment (DEA) Pre-Assessment Consultation

Thank you for the opportunity to provide comments prior to the subject project's Draft Environmental Assessment. This project does not directly impact any Department of Accounting and General Services' projects or existing facilities. Therefore, we have no comments to offer and request to be removed from the distribution list.

If you have any questions, please have your staff call Mr. Bruce Bennett of the Planning Branch at 586-0491.

Sincerely,


HAROLD SONOMURA
Acting Public Works Administrator

BB.jp

c: Ms. Genevieve Salmonson, DOH-OEQC

Mr. Thomas A. Fee, AICP Principal
Helber, Hasert and Fee Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Attn: Kapolei West

Dear Mr. Fee:

Subject: Draft Environmental Assessment Pre-Assessment Consultation,
Kapolei West, Ewa, Oahu, Hawaii

Aina Nui Corporation (landowner) will petition the State Land Use Commission (LUC) for a land use boundary amendment from the State Land Use Agricultural District to the Urban District for approximately 162 acres within three parcels identified by TMK Nos. 9-1-14: por. 33, and 9-1-15: por. 04 and por. 20. The proposed petition area represents a portion of a 535-acre project area from which 372.6 acres were reclassified to the Urban District by the State Land Use Commission in 1991 (LUC Docket A90-655) for Phase II development of the Ko Olina development..

The Kapolei West project will encompass the 372.6-acre Ko Olina Phase II project area and the 162-acre site proposed for reclassification. Uses proposed for the 162-acre site include residential, portions of a 18-hole golf course, private leisure facilities, and open space. The landowner intends to consolidate the 162-acre petition area with the 372.6-acre portion to develop a master planned community that will include uses consisting of low and medium density residential units, commercial development, park space, and an 18-hole golf course. The uses proposed for the 162-acre petition area are consistent with the uses proposed for the initial Ko Olina plan.

The Environmental Assessment for the project will address potential impacts and mitigation measures for the 162-acre portion of the project area, as well as the potential indirect and cumulative impacts associated with the portion already classified urban.

The subject area (162 acres) is located within the Ewa District, Island of Oahu, approximately 20 miles west of Honolulu. The Ewa District encompasses the entire Ewa



STATE OF HAWAII
DEPARTMENT OF EDUCATION
P.O. BOX 2380
HONOLULU, HAWAII 96804

OFFICE OF THE SUPERINTENDENT
May 6, 2004

Mr. Thomas A. Fee
Page 2
June 29, 2004

Plain from Kunia/Fort Weaver Road on the east, to Kahe Point on the west and is the location of the City of Kapolei, Kalaheo (formerly the Barbers Point Naval Air Station) and several master planned suburban residential communities including Ewa by Gentry. The Ewa-Kapolei region has become Oahu's prime growth area in terms of population and development.

Traffic congestion, groundwater recharge, wastewater treatment/disposal, drainage and flooding are major issues throughout the Ewa region and should be addressed in the Draft Environmental Impact Statement.

Developments in the Ewa Plain have also affected the region's available water resources. The project area is within the Pearl Harbor Water Management Area. The Commission on Water Resources Management (CWRM) regulates water withdrawn from Water Management Areas. The region contains many industrial facilities and residential subdivisions that increase demands on potable water aquifers resulting in the gradual rise in salinity levels. Impacts to the aquifer result from:

Reduction in the amount of recharge that the caprock aquifer receives because of reduced agricultural activity, and increased development of impervious surfaces;

Pumping of brackish water from the caprock aquifer for irrigation of the many golf courses (existing and proposed) in the region); and

Increase in potable water demands from industrial/commercial uses and residential subdivisions.

The Office of Planning will comment further regarding the project's impacts on drainage patterns, wastewater treatment, traffic, roadways, non-point source pollution, and water availability when the Environmental Assessment is reviewed by our office.

Thank you for including us in the Draft Environmental Assessment Pre-Assessment Consultation process. If you have any questions, please contact Judith Henry at 587-2803.

Sincerely,

Mary Lou Kobayashi

Mary Lou Kobayashi
Administrator
Office of Planning

c: Anthony Ching, Land Use Commission

Mr. Thomas A. Fee
Heber, Haster and Fee Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Attn: Ms. Corlyn Olson Orr

Dear Mr. Fee:

SUBJECT: Draft Environmental Assessment Pre-Assessment Consultation for Kapolei West, Ewa, Oahu. TMK: 9-1-14: por. 33 and 9-1-15: por. 4 and por. 20

The Department of Education (DOE) is responding to your request for a pre-assessment consultation for a 535 acre, master-planned golf and residential community located between the Ko Olina Resort and the City of Kapolei.

The DOE requests that the Draft Environmental Assessment (DEA) discuss the current understanding of the developer/landowner concerning the need for and reservation of land for a school within the Ko Olina and Kapolei West area. The DOE has operated under the assumption that a school site was available within the 373 acres of Kapolei West which was previously referred to as Ko Olina Phase II.

Although the petition area for the DEA is the additional 162.4 acres being added to the project, the DEA should address the overall impact of Ko Olina/Kapolei West on current and future public school enrollments.

The DOE has no other comment or concern at this time. If you have any questions, please call Rae M. Loui, Assistant Superintendent of the Office of Business Services, at 586-3444 or Heidi Meecker of the DOE Facilities and Support Services Branch at 733-4862.

Very truly yours,

Patricia Hamamoto

Patricia Hamamoto
Superintendent

PH:jl

cc: Rae M. Loui, OBS
Mamo Carreira, CAS, Campbell/Kapolei/Waianae



CHRISTINE L. CUKINS, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. Box 3378
HONOLULU, HAWAII 96801-3378

In reply, please refer to:
EPO-04-091

April 23, 2004

Mr. Corlyn Olson Orr
Helber Hastert & Fee
Pacific Guardian Center
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Dear Mr. Orr:

SUBJECT: Kapolei West master-planned golf/residential community planned on approximately 535 acres, Ewa, O'ahu, Hawaii, TMK: 9-1-014; por 33 & 9-1-015; por 4 and por 20

Thank you for allowing us to review and comment on the subject document. We have the enclosed standard comments to offer. If you have any questions about the standard comments please contact Ryan Davenport at 586-4346.

Sincerely,

June F. Harrigan-Lum

JUNE F. HARRIGAN-LUM, MANAGER
Environmental Planning Office

Enclosures

- C: CAB
- EPO
- SHWB
- NRAIQ
- CWB
- WWB
- HEER
- SDWB

Standard Comments

Environmental Planning Office Dated 3/2/04

The Environmental Planning Office (EPO) is responsible for several surface water quality management programs mandated by the federal Clean Water Act or dictated by State policy. (<http://www.state.hi.us/doh/eh/epo/wqgm/wqgm.htm>). Among these responsibilities, EPO:

- maintains the *List of Impaired Waters in Hawaii Prepared under Clean Water Act §303(d)* (<http://www.state.hi.us/doh/eh/epo/wqgm/303dpefinal.pdf>);
- develops and establishes Total Maximum Daily Loads (TMDLs) for listed waters (suggesting how much existing pollutant loads should be reduced in order to attain water quality standards, please see <http://www.epa.gov/owow/tmdl/intro.html>);
- writes TMDL Implementation Plans describing how suggested pollutant load reductions can be achieved; and
- conducts assessments of stream habitat quality and biological integrity.

To facilitate TMDL development and planning, and to assist our assessment of the potential impact of proposed actions upon water quality, pollutant loading, and biological resources in receiving waters, we suggest that environmental review documents, permit applications, and related submittals include the following standard information and analyses:

Waterbody type and class

1. Identify the waterbody type and class, as defined in Hawaii Administrative Rules Chapter 11-54 (<http://www.state.hi.us/doh/rules/11-54.pdf>), of all potentially affected water bodies.

Existing water quality management actions

2. Identify any existing National Pollutant Discharge Elimination System (NPDES) permits and related connection permits (issued by permittees) that will govern the management of water that runs off or is discharged from the proposed project site or facility. Please include NPDES and other permit numbers; names of permittees, permitted facilities, and receiving waters (including waterbody type and class as in 1. above); diagrams showing drainage/discharge pathways and outfall locations; and note any permit conditions that may specifically apply to the proposed project.

3. Identify any planning documents, groups, and projects that include specific prescriptions for water quality management at the proposed project site and in the potentially affected waterbodies. Please note those prescriptions that may specifically apply to the proposed project.

Pending water quality management actions

4. Identify all potentially affected water bodies that appear on the current *List of Impaired Waters in Hawaii Prepared under Clean Water Act §303(d)* including the listed waterbody, geographic scope of listing, and pollutant(s) (See Table 7 at <http://www.state.hi.us/doh/eh/epo/wqgm/303dpcfinal.pdf>).
5. If the proposed project involves potentially affected water bodies that appear on the current *List of Impaired Waters in Hawaii Prepared under Clean Water Act §303(d)*, identify and quantify expected changes in the following site and watershed conditions and characteristics:
 - surface permeability
 - hydrologic response of surface (timing, magnitude, and pathways)
 - receiving water hydrology
 - runoff and discharge constituents
 - pollutant concentrations and loads in receiving waters
 - aquatic habitat quality and the integrity of aquatic biota

Where TMDLs are already established they include pollutant load allocations for the surrounding lands and point source discharges. In these cases, we suggest that the submittal specify how the proposed project would contribute to achieving the applicable load reductions.

Where TMDLs are yet to be established and implemented, a first step in achieving TMDL objectives is to prevent any project-related increases in pollutant loads. This is generally accomplished through the proper application of suitable best management practices in all phases of the project and adherence to any applicable ordinances, standards, and permit conditions. In these cases we suggest that the submittal specify how the proposed project would contribute to reducing the polluted discharge and runoff entering the receiving waters, including plans for additional pollutant load reduction practices in future management of the surrounding lands and drainage/discharge systems.

Proposed Action and Alternatives Considered

We suggest that each submittal identify and analyze potential project impacts at a watershed scale by considering the potential contribution of the proposed project to cumulative, multi-project watershed effects on hydrology, water quality, and aquatic and riparian ecosystems.

We also suggest that each submittal broadly evaluate project alternatives by identifying more than one engineering solution for proposed projects. In particular, we suggest the

consideration of "alternative," "soft," and "green" engineering solutions for channel modifications that would provide a more environmentally friendly and aesthetically pleasing channel environment and minimize the destruction of natural landscapes.

If you have any questions about these comments or EPO programs, please contact Ryan Davenport at 586-4346.

¹"Potentially affected waterbodies" means those in which proposed project activity would take place and any that could receive water discharged by the proposed project activity or water flowing down from the proposed project site. These waterbodies can be presented as a chain of receiving waters whose top link is at the project site upslope and whose bottom link is in the Pacific Ocean, and can be named according to conventions established by Chapter 11-54 and the *List of Impaired Waters in Hawaii Prepared under Clean Water Act §303(d)*. For example, a recent project proposed for Nuhelewai Stream, Oahu might potentially affect Nuhelewai Stream, Kapalama Canal, and Honolulu Harbor and Shore Areas.

[OTHER EXAMPLES OR DIAGRAM??]

Solid and Hazardous Waste Branch Dated 3/2/04

- 1) The OSWM recommends the development of a solid waste management plan that encompasses all project phases including demolition, construction, and occupation/operation of the completed project.

Specific examples of elements that the plan should address include:

- The recycling of green-waste during clear and grub activities;
- Recycling construction and demolition wastes, if appropriate;
- The use of locally produced compost in landscaping;
- The use of recycled content building materials;
- The provision of recycling facilities in the design of the project.

- 2) The developer shall ensure that all solid waste generated during project construction is directed to a Department of Health permitted solid waste disposal or recycling facility.

- 3) The developer should consider providing space in the development for recycling activities. The provision of space for recycling bins for paper, glass, and food/wet waste would help to encourage the recycling of solid waste(s) generated by building occupants.

- 4) The discussion of solid waste issues contained in the document is restricted to activities within the completed project. The OSWM recommends the development of a solid waste management plan that encompasses all project phases, from construction (and or demolition) to occupation of the project.

- a. Storm water associated with industrial activities, as defined in Title 40, Code of Federal Regulations, Sections 122.26(b)(14)(i) through 122.26(b)(14)(ix) and 122.26(b)(14)(xi).
- b. Construction activities, including clearing, grading, and excavation, that result in the disturbance of equal to or greater than one (1) acre of total land area. The total land area includes a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under a larger common plan of development or sale. **An NPDES permit is required before the commencement of the construction activities.**
- c. Discharges of treated effluent from leaking underground storage tank remedial activities.
- d. Discharges of once through cooling water less than one (1) million gallons per day.
- e. Discharges of hydrotesting water.
- f. Discharges of construction dewatering effluent.
- g. Discharges of treated effluent from petroleum bulk stations and terminals.
- h. Discharges of treated effluent from well drilling activities.
- i. Discharges of treated effluent from recycled water distribution systems.
- j. Discharges of storm water from a small municipal separate storm sewer system.
- k. Discharges of circulation water from decorative ponds or tanks.

The CWB requires that a Notice of Intent (NOI) to be covered by a NPDES general permit for any of the above activities be submitted at least 30 days before the commencement of the respective activities. The NOI forms may be picked up at our office or downloaded from our website at <http://www.state.hi.us/health/eh/cwb/forms/genl-index.html>.

3. The applicant may be required to apply for an individual NPDES permit if there is any type of activity in which wastewater is discharged from the project into State waters and/or coverage of the discharge(s) under the NPDES general permit(s) is not permissible (i.e. NPDES general permits do not cover discharges into Class 1 or Class AA receiving waters). An application for the NPDES permit is to be submitted at least 180 days before the commencement of the respective activities. The NPDES application forms may also be picked up at our office or downloaded from our website at <http://www.state.hi.us/health/eh/cwb/forms/ndiv-index.html>.
4. Hawaii Administrative Rules, Section 11-55-38, also requires the owner to either submit a copy of the new NOI or NPDES permit application to the State Department of Land and Natural Resources, State Historic Preservation Division (SHPD), or demonstrate to the satisfaction of the DOH that the project, activity, or site covered by the NOI or application has been or is being reviewed by SHPD.

Specific examples of plan elements include: the recycling of green-waste during clear and grub activities; maximizing the recycling of construction and demolition wastes; the use of locally produced compost in the landscaping of the project; and the provision of recycling facilities in the design of the project.

- 5) -----
Hawaii Revised Statutes Chapter 103D-407 stipulates that all highway and road construction and improvement projects funded by the State or a county or roadways that are to be accepted by the State or a county as public roads shall utilize a minimum of ten per cent crushed glass aggregate as specified by the department of transportation in all base-course (treated or untreated) and sub-base when the glass is available to the quarry or contractor at a price no greater than that of the equivalent aggregate.

If you have any questions, please contact the Solid and Hazardous Waste Branch at (808) 586-4240.

Noise, Radiation & Indoor Air Quality Branch Dated 3/2/04

"Project activities shall comply with the Administrative Rules of the Department of Health:

- Chapter 11-39 Air Conditioning and Ventilating.
- Chapter 11-45 Radiation Control.
- Chapter 11-46 Community Noise Control.
- Chapter 11-501 Asbestos Requirements.
- Chapter 11-502 Asbestos-Containing Materials in Schools.
- Chapter 11-503 Fees for Asbestos Removal and Certification
- Chapter 11-504 Asbestos Abatement Certification Program

Should there be any questions, please contact Russell S. Takata, Environmental Health Program Manager, Noise, Radiation and Indoor Air Quality Branch, at 586-4701."

Clean Water Branch Dated 3/2/04

1. The Army Corps of Engineers should be contacted at (808) 438-9258 to identify whether a Federal license or permit (including a Department of Army permit) is required for this project. Pursuant to Section 401(a)(1) of the Federal Water Pollution Act (commonly known as the "Clean Water Act"), a Section 401 Water Quality Certification is required for "[a]ny applicant for Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters...."
2. A National Pollutant Discharge Elimination System (NPDES) general permit coverage is required for the following activities:

Please submit a copy of the request for review by SHPD or SHPD's determination letter for the project.

If you have any questions, please contact the CWB at 586-4309.

Waste Water Branch Dated 3/2/04

All wastewater plans must conform to applicable provisions of the Department of Health's Administrative Rules, Chapter 11-62, "Wastewater Systems". We do reserve the right to review the detailed wastewater plans for conformance to applicable rules.

Should you have any questions, please contact the Planning & Design Section of the Wastewater Branch at 586-4294.

Clean Air Branch Dated 3/2/04

Construction/Demolition Involving Asbestos:

Since the proposed project would entail renovation/demolition activities which may involve asbestos, the applicant should contact the Asbestos Abatement Office in the Noise, Radiation and Indoor Air Quality Branch at 586-5800.

Control of Fugitive Dust:

A significant potential for fugitive dust emissions exists during all phases of construction. Proposed construction activities will occur in proximity to existing residences, businesses, public areas and thoroughfares, thereby exacerbating potential dust problems. It is recommended that a dust control management plan be developed which identifies and addresses all activities that have a potential to generate fugitive dust. Implementation of adequate dust control measures during all phases of development and construction activities is warranted.

Construction activities must comply with the provisions of Hawaii Administrative Rules, §11-60.1-33 on Fugitive Dust.

The contractor should provide adequate measures to control dust from the road areas and during the various phases of construction. These measures include, but are not limited to, the following:

- a) Plan the different phases of construction, focusing on minimizing the amount of dust-generating materials and activities, centralizing on-site vehicular traffic routes, and locating potential dust-generating equipment in areas of the least impact;
- b) Provide an adequate water source at the site prior to start-up of construction activities;
- c) Landscape and provide rapid covering of bare areas, including slopes, starting from the initial grading phase;
- d) Minimize dust from shoulders and access roads;

- e) Provide adequate dust control measures during weekends, after hours, and prior to daily start-up of construction activities; and
- f) Control dust from debris being hauled away from the project site.

Hazard Evaluation and Emergency Response Office(HEER) Dated 3/2/04

1. A Phase I Environmental Site Assessment (ESA) should be conducted for developments or redevelopments. If the investigation shows that a release of petroleum, hazardous substance, pollutants or contaminants occurred at the site, the site should be properly characterized through an approved Hawaii State Department of Health (DOH)/Hazard Evaluation and Emergency Response Office (HEER) soil and or groundwater sampling plan. If the site is found to be contaminated, then all removal and remedial actions to clean up hazardous substance or oil releases by past and present owners/tenants must comply with chapter 128D, Environmental Response Law, HRS, and Title 11, Chapter 451, HAR, State Contingency Plan.
2. All lands formerly in the production of sugarcane should be characterized for arsenic contamination, if arsenic is detected above the US EPA Region (preliminary remediation goal (PRG) for non-cancer effects, then a removal and or remedial plan must be submitted to the Hazard Evaluation and Emergency Response (HEER) Office of the State Department of Health for approval. The plan must comply with Chapter 128D, Environmental Response Law, HRS, and Title 11, Chapter 451, HAR, State Contingency Plan.
3. If the land has a history of previous releases of petroleum, hazardous substances, pollutants, or contaminants, we recommend that the applicant request a "no further action" (NFA) letter from the Hawaii State Department of Health (DOH)/Hazard Evaluation and Emergency Response (HEER) Office prior to the approval of the land use change or permit approval.

Safe Drinking Water Branch Dated 3/11/04

The Safe Drinking Water Branch administers programs in the areas of: 1) public water systems; 2) underground injection control; and 3) groundwater protection. Our general comments on projects are as follows.

Public Water Systems

Federal and state regulations define a public water system as a system that serves 25 or more individuals at least 60 days per year or has at least 15 service connections. All public water system owners and operators are required to comply with Hawaii Administrative Rules, Title 11, Chapter 20, titled Rules Relating to Potable Water Systems.

All new public water systems are required to demonstrate and meet minimum capacity requirements prior to their establishment. This requirement involves demonstration that the system will have satisfactory technical, managerial and financial capacity to enable the system to comply with safe drinking water standards and requirements.

Projects that propose development of new sources of potable water serving or proposed to serve a public water system must comply with the terms of Section 11-20-29 of Chapter 20. This section requires that all new public water system sources be approved by the Director of Health prior to its use. Such approval is based primarily upon the submission of a satisfactory engineering report which addresses the requirements set in Section 11-20-29.

The engineering report must identify all potential sources of contamination and evaluate alternative control measures which could be implemented to reduce or eliminate the potential for contamination, including treatment of the water source. In addition, water quality analyses for all regulated contaminants, performed by a laboratory certified by the State Laboratories Division of the state of Hawaii, must be submitted as part of the report to demonstrate compliance with all drinking water standards. Additional parameters may be required by the Director for this submittal or additional tests required upon his or her review of the information submitted.

All sources of public water system sources must undergo a source water assessment which will delineate a source water protection area. This process is preliminary to the creation of a source water protection plan for that source and activities which will take place to protect the source of drinking water.

Projects proposing to develop new public water systems or proposing substantial modifications to existing public water systems must receive approval by the Director of Health prior to construction of the proposed system or modification. These projects include treatment, storage and distribution systems of public water systems. The approval authority for projects owned and operated by a County Board or Department of Water or Water Supply has been delegated to them.

All public water systems must be operated by certified distribution system and water treatment plant operators as defined by Hawaii Administrative Rules, Title 11, Chapter 11-25 titled; Rules Pertaining to Certification of Public Water System Operators.

All projects which propose the use of dual water systems or the use of a non-potable water system in proximity to an existing potable water system to meet irrigation or other needs must be carefully design and operate these systems to prevent the cross-connection of these systems and prevent the possibility of backflow of water from the non-potable system to the potable system. The two systems must be clearly labeled and physically separated by air gaps or reduced pressure principle backflow prevention devices to avoid contaminating the potable water supply. In addition backflow devices must be tested periodically to assure their proper operation. Further, all non-potable spigots and irrigated areas

should be clearly labeled with warning signs to prevent the inadvertent consumption on non-potable water. Compliance with Hawaii Administrative Rules, Title 11, Chapter 11-21 titled; Cross-Connection and Backflow Control is also required.

All projects which propose the establishment of a potentially contaminating activity (as identified in the Hawaii's Source Water Assessment Plan) within the source water protection area of an existing source of water for a public water supply should address this potential and activities that will be implemented to prevent or reduce the potential for contamination of the drinking water source.

For further information concerning the application of capacity, new source approval, operator certification, source water assessment, backflow/cross-connection prevention or other public water system programs, please contact the Safe Drinking Water Branch at 586-4258.

Underground Injection Control (UIC)

Injection wells used for the subsurface disposal of wastewater, sewage effluent, or surface runoff are subject to environmental regulation and permitting under Hawaii's Administrative Rules, Title 11, Chapter 11-23, titled Underground Injection Control (UIC). The Department of Health's approval must be first obtained before any injection well construction commences. A UIC permit must be issued before any injection well operation occurs.

Authorization to use an injection well is granted when a UIC permit is issued to the injection well facility. The UIC permit contains discharge and operation limitations, monitoring and reporting requirements, and other facility management and operational conditions. A complete UIC permit application form is needed to apply for a UIC permit.

A UIC permit can have a valid duration of up to five years. Permit renewal is needed to keep an expiring permit valid for another term.

For further information about the UIC permit and the Underground Injection Control Program, please contact the UIC staff of the Safe Drinking Water Branch at 586-4258.

Groundwater Protection Program

Projects that propose to develop a golf course are asked to use the Guidelines Applicable to Golf Courses in Hawaii (Version 6) in order to address certain groundwater protection concerns, as well as other environmental concerns

PETER T. YOUNG
 CHAIRPERSON
 BOARD OF LAND AND NATURAL RESOURCES
 COMMISSION ON WATER RESOURCE MANAGEMENT

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ADJUTANT GENERAL
 BOWLING AND OCEAN RECREATION
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 HAWAIIAN MONUMENTS COMMISSION
 HISTORIC PRESERVATION
 KAOLOAWE ISLAND RESERVE COMMISSION
 STATE PARKS



STATE OF HAWAII
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 LAND DIVISION
 POST OFFICE BOX 621
 HONOLULU, HAWAII 96809

LINDA LINGLE
 GOVERNOR OF HAWAII



May 21, 2004

MEMORANDUM

TO: Dierdre S. Mamiya, Administrator
 Land Division

FROM: Robert M. Ing, Land Agent
 Land Division

SUBJECT: Pre-Assessment consultation for the Preparation of a Draft Environmental Assessment (DEA) Kapolei West Project
 TMK: (1) 9-1-014:Por. 33 and 9-1-015:Por. 04 and Por. 20.

COMMENTS:

The Southern end of the project site is abutting TMK No. (1) 9-1-014-024, which is State land encumbered by Executive Order 3383 to the Department of Transportation (DOT)-Harbors Division as part of Barbers Point Harbor. A land disposition from the State may be required should any use of parcel 24, or other State parcel, be necessary during the planning and development of the project site.

RECEIVED
 LAND DIVISION
 2004 MAY 21 P 1:16
 DEPT. OF LAND &
 NATURAL RESOURCES
 STATE OF HAWAII

RECEIVED
 LAND DIVISION
 2004 MAY 21 P 2:35
 DEPT. OF LAND &
 NATURAL RESOURCES
 STATE OF HAWAII

PETER T. YOUNG
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 DEPUTY DIRECTOR - WATER

ADJUTANT GENERAL
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 STATE PARKS



STATE OF HAWAII
 DEPARTMENT OF LAND AND NATURAL RESOURCES
 LAND DIVISION
 POST OFFICE BOX 621
 HONOLULU, HAWAII 96809

LINDA LINGLE
 GOVERNOR OF HAWAII



May 25, 2004

KAPOLEIWEST.RCM2

Helber Hastect & Fee, Planners, Inc.
 Carolyn Olson Orr, Project Planner
 733 Bishop Street, Suite 2590
 Honolulu, Hawaii 96813

Dear Ms. Orr:

SUBJECT: Pre-Assessment Consultation for the Preparation of a Draft Environmental Assessment for the Proposed Kapolei West Project
 TMK: (1) 9-1-14: por. 33 and 9-1-15: por. 04 and por. 20

This is a follow-up to our letter to you dated May 19, 2004 (Ref.: KAPOLEIWEST.RCM) pertaining to the subject matter.

Enclosed please find a copy of the Oahu District Land Office comment.

Should you have any questions, please contact Nicholas A. Vaccaro of the Land Division Support Services Branch at 587-0384.

Very truly yours,

DIERDRE S. MAMIYA
 Administrator

C: ODLO

Thomas A. Fee, AICP
Page 2

exception of a portion of the OR&L alignment were found. However, 4 sinkholes were observed (CSH 1-4) that provide the best examples of sinkholes in the project area and have the potential to contain cultural or faunal deposits. Cultural Surveys Hawaii recommended that further archaeological research, in the form of subsurface testing be conducted at two of the sinkholes. SHPD agreed with the recommendation that an archaeological inventory survey in the form of subsurface testing be conducted for sinkholes CSH2A and CSH3. To date, we have not had the opportunity to review for acceptance the results of the inventory survey testing report.

Recently, Cultural Surveys Hawaii submitted for review a report document the results of a field inspection of certain lands within the planned development area, Hoffman & Hammett 2004 *Field Inspection of Approximately 124 Acres at Kapolei, Honolulu* *Ahiupua'a*, *Ewa District O'ahu* TMK: 9-1-14:33 and 9-1-15:20. The results of the field inspection indicate that large portions of the project area are clear of historic sites due to past grading and clearing. Fourteen sites were identified in other portions of the project area including stone pavements, sinkholes and modified sinkholes, stone walls, mounds and remnants of plantation-era infrastructure. Four of these sites may have been identified during earlier archaeological surveys in the area. It was recommended that an archaeological inventory survey with subsurface testing be conducted of these areas. We concur with the recommendation for archaeological inventory survey with subsurface testing and look forward to reviewing for acceptance the results of the inventory survey report. Also noted within the field inspection was the OR&L right-of-way which runs along the northern boundary of the parcel.

In sum the three field inspections and archaeological assessments have recommended that further archeological investigations take place including inventory survey with subsurface testing and documentation of historic era plantation infrastructure. Until these investigations have been completed and reports document their findings have been accepted, we cannot comment on the effect this project will have on significant historic sites.

Should you have any questions, please feel free to call Sara Collins at (808) 692-8026 or Elaine Jourdane at (808) 692-8027.

Aloha,

Sara Collins

P. Holly McEldowney, Administrator
State Historic Preservation Division

EJ:jen

c: David Shideler, Cultural Surveys Hawaii, 733 N. Kalaheo Avenue, Kailua, Hawaii 96734
Kai Markell, Burial Sites Program
A. Van Horn Diamond, Chair, OIBC
Nathan Napoka, Branch Chief, History and Culture Branch



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809
May 19, 2004

KAPOLEI WEST .RCM

Helber Hastect & Fee, Planners, Inc.
Corlyn Olson Orr, Project Planner
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Dear Ms. Orr:

SUBJECT: Pre-Assessment Consultation for the Preparation of a Draft Environmental Assessment for the Proposed Kapolei West Project
TMK: (1) 9-1-14: por. 33 and 9-1-15: por. 04 and por. 20

Thank you for the opportunity to review and comment on the subject matter

A copy of the document pertaining to the proposed project was transmitted or made available to the following Department of Land and Natural Resources' Divisions for their review and comment.

- Division of Aquatic Resources
- Division of Forestry & Wildlife
- Division of State Parks
- Engineering Division
- Division of Boating and Ocean Recreation
- Commission on Water Resource Management
- Office of Conservation and Coastal Lands
- Land-Oahu District Land Office
- Land-Planning and Development

Enclosed please find a copy of the Division of Forestry and Wildlife, Engineering Division and Commission on Water Resource Management comment.

Based on the attached responses, the Department of Land and Natural Resources has no other comment to offer on the subject matter.

Should you have any questions, please contact Nicholas A. Vaccaro of the Land Division Support Services Branch at 587-0384.

Very truly yours,

Nicholas A. Vaccaro

NIKHOLA S. MAMIYA
Administrator

C: ODLO

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DAN DAVIDSON
DEPUTY DIRECTOR- LAND

ERNEST YAN LAU
DEPUTY DIRECTOR- WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
ENGINEERING
HONOLULU DISTRICT LAND OFFICE
HISTORIC PRESERVATION
LAND-PLANNING AND DEVELOPMENT
MAHOOLAIE ISLAND RESERVE COMMISSION
STATE PARKS

ID-NAV

RECEIVED
LAND DIVISION
7:00 PM MAY 11 2004
Division of Forestry & Wildlife

1151 Punchbowl Street, Rm. 325 • Honolulu, HI 96813 • (808) 587-0166 • Fax: (808) 587-0160
DEPT. OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

May 12, 2004
MEMORANDUM

TO: Nick Vaccaro, Land Agent
Land Division

THRU: Dierdre S. Mamiya, Administrator
Land Division

FROM: Michael G. Buck, Administrator
Division of Forestry and Wildlife
Paul G. Gray

SUBJECT: Pre-Assessment Consultation for the Preparation of a Draft
Environmental Assessment (DEA) Kapolei West Project.

DOFAW has reviewed this subject document and we provide the following comments for your consideration. The Developer will need to do an on-site survey for three endangered plants: 1) *Achyranthes splendens* spp *rotundata*, 2) *Chamaesyce skottsbergii* and 3) *Abutilon menziesii* before the planning of this development begins. Please call Ms. Vickie Caraway, State Botanist at 587-0165 if you have questions regarding the endangered plants in this area. DOFAW will do a complete review of this project when the draft EA list the survey of plants in the area. We appreciate the opportunity to comment on the Kapolei West Project.

C: Oahu DOFAW Branch
Vickie Caraway, State Botanist

LINDA LINGLE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 821
HONOLULU, HAWAII 96809

May 10, 2004

LD/NAV
KAPOLEI WEST.CMT
LUC A90-655

MEMORANDUM:

TO: XXX Division of Aquatic Resources
XXX Division of Forestry & Wildlife
XXX Engineering Division
XXX Division of State Parks
XXX Division of Boating and Ocean Recreation
XXX Conservation and Coastal Lands
XXX Land-Oahu District Land Office
XXX Land-Planning and Development
XXX CWRM
FROM: Dierdre S. Mamiya, Administrator
Land Division

SUBJECT: Pre-Assessment Consultation for the Preparation of a Draft
Environmental Assessment (DEA) Kapolei West Project
TMK: 9-1-14: por. 33 and 9-1-15: por. 04 and por. 20.

Please review the attached letter pertaining to the subject matter and submit your comment (if any) on Division letterhead signed and dated by the suspense date.

Should you need more time to review the subject matter, please contact Nick Vaccaro at ext.: 7-0384.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

() We have no comments.

Comments attached.

Date: 5/13/04
Division: CWRM

Signed: *Dierdre S. Mamiya*
Name: *Dierdre S. Mamiya*

Suspense Date: 5/17/03

RECEIVED
04 MAY 11 A7:04
COMMISSION ON WATER
RESOURCE MANAGEMENT

PETER T. YOUNG
CHAIRPERSON
COMMISSION ON WATER RESOURCE MANAGEMENT
DAN JENSEN
DEPUTY DIRECTOR - LAND
ERNEST Y.M. LAU
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AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
COMMISSION ON WATER RESOURCE MANAGEMENT
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LINDA LINGLE
GOVERNOR OF HAWAII

2006 MAY 14 P 3:24

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 621
HONOLULU, HAWAII 96809

May 14, 2004

Ref: Kapolei West Pre-EA.dr

TO: Ms. Dede Mamiya, Administrator
Land Division

FROM: Edwin T. Sakoda, Acting Deputy Director
Commission on Water Resource Management (CWRM)

SUBJECT: Pre-Assessment Consultation for the Preparation of a Draft Environmental Assessment (DEA),
Kapolei West Project, Oahu

FILE NO: KAPOLEIWEST.CMT

Thank you for the opportunity to review the subject document. Our comments related to water resources are marked below.

In general, the CWRM strongly promotes the efficient use of our water resources through conservation measures and use of alternative non-potable water resources whenever available, feasible, and there are no harmful effects to the ecosystem. Also, the CWRM encourages the protection of water recharge areas, which are important for the maintenance of streams and the replenishment of aquifers.

- [X] We recommend coordination with the county government to incorporate this project into the county's Water Use and Development Plan.
- [] We recommend coordination with the Land Division of the State Department of Land and Natural Resources to incorporate this project into the State Water Projects Plan.
- [] We are concerned about the potential for ground or surface water degradation/contamination and recommend that approvals for this project be based upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.
- [] A Well Construction Permit and/or a Pump Installation Permit from the Commission would be required before ground water is developed as a source of supply for the project.
- [] The proposed water supply source for the project is located in a designated water management area, and a Water Use Permit from the Commission would be required prior to use of this source.
- [] Groundwater withdrawals from this project may affect streamflows, which may require an instream flow standard amendment.
- [] We are concerned about the potential for degradation of instream uses from development on highly erodible slopes adjacent to streams within or near the project. We recommend that approvals for this project be conditioned upon a flow by the developer corresponding county's Building Department and the developer's acceptance of any resulting requirements related to erosion control.
- [] If the proposed project includes construction of a stream diversion, the project may require a stream diversion works permit and amend the instream flow standard for the affected stream(s).
- [] If the proposed project alters the bed and banks of a stream channel, the project may require a stream channel alteration permit.
- [X] OTHER:

Our records indicate that a monitor well (Well No. 2006-18) and the EP 10 battery of wells (Well Nos 2006-01 to 11) are in the vicinity of the project. We recommend that the Draft Environmental Assessment (DEA) identify any existing wells in the project area and discuss the future use of the wells, or sealing of the wells if no future use is planned. We also recommend that the DEA disclose the potable and non-potable water requirements and the proposed sources to meet these demands.

If there are any questions, please contact Lenore Y. Nakama at 587-0218.

LINDA LINGLE
GOVERNOR OF HAWAII

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2006 MAY 17 P 2:49

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION
POST OFFICE BOX 621
HONOLULU, HAWAII 96809

May 10, 2004

LD/NAV
KAPOLEIWEST.CMT
LUC A90-655

Suspense Date: 5/17/03
T/10

MEMORANDUM:

TO: XXX Division of Aquatic Resources
XXX Division of Forestry & Wildlife
XXX Engineering Division
XXX Division of State Parks
XXX Division of Boating and Ocean Recreation
XXX Conservation and Coastal Lands
XXX Land-Oahu District Land Office
XXX Land-Planning and Development
XXX CWRM

FROM: Dierdre S. Mamiya, Administrator
Land Division

SUBJECT: Pre-Assessment Consultation for the Preparation of a Draft Environmental Assessment (DEA) Kapolei West Project
TMK: 9-1-14: por. 33 and 9-1-15: por. 04 and por. 20.

Please review the attached letter pertaining to the subject matter and submit your comment (if any) on Division letterhead signed and dated by the suspense date.

Should you need more time to review the subject matter, please contact Nick Vaccaro at ext.: 7-0384.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

() We have no comments.
(X) Comments attached.

Date: 5/15/04
Division: Engineering
Signed: Eric T. Hiranano
Name: ERIC T. HIRANO, CHIEF ENGINEER

PETER T. YOUNG
DIRECTOR
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DAN DAVIDSON
DEPUTY DIRECTOR - LAND
ERNEST Y.W. LAU
DEPUTY DIRECTOR - WATER

AWAIAE RESOURCES
BOATING AND OCEAN RECREATION
HISTORIC PRESERVATION
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND COASTAL LANDS
ENGINEERING
HISTORIC PRESERVATION
KAPAOLEI ISLAND RESERVE COMMISSION
STATE PARKS



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING, ROOM 555
801 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707

LIZDA LINGLE
GOVERNOR OF HAWAII



DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

LANAV
Ref.: KAPOLEIWEST.CMT
LUC490-655

COMMENTS

- We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Flood Zone _____.
- Please take note that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zone D. The National Flood Insurance Program (NFIP) does not have any regulations for development within this area.
- Please note that the correct Flood Zone Designation for the project site according to the Flood Insurance Rate Map (FIRM) is _____.
- Please note that the project must comply with the rules and regulations of the National Flood Insurance Program (NFIP) presented in Title 44 of the Code of Federal Regulations (44CFR), whenever development within a Special Flood Hazard Area is undertaken. If there are any questions, please contact the State NFIP Coordinator, Ms. Carol Tyau-Beam, of the Department of Land and Natural Resources, Engineering Division at (808) 587-0267.

Please be advised that 44CFR indicates the minimum standards set forth by the NFIP. Your Community's local flood ordinance may prove to be more restrictive and thus take precedence over the minimum NFIP standards. If there are questions regarding the local flood ordinances, please contact the applicable County NFIP Coordinators below:

- Mr. Robert Sumimoto at (808) 523-4254 or Mr. Mario Shi Li at (808) 523-4247 of the City and County of Honolulu, Department of Planning and Permitting.
- Mr. Kelly Gomes at (808) 961-8327 (Hilo) or Mr. Kiran Emler at (808) 327-5530 (Kona) of the County of Hawaii, Department of Public Works.
- Mr. Francis Cerizo at (808) 270-7771 of the County of Maui, Department of Planning.
- Mr. Mario Antonio at (808) 241-6620 of the County of Kauai, Department of Public Works.

- The applicant should include project water demands and infrastructure required to meet water demands. Please note that the implementation of any State-sponsored projects requiring water service from the Honolulu Board of Water Supply system must first obtain water allocation credits from the Engineering Division before it can receive a building permit and/or water meter.
- The applicant should provide the water demands and calculations to the Engineering Division so it can be included in the State Water Projects Plan Update.

Additional Comments: _____

Other: _____

Should you have any questions, please call Mr. Andrew Mouden of the Planning Branch at 587-0229.

Signed: 
ERIC T. HIRANO, CHIEF ENGINEER

Date: 5/15/04

May 6, 2004

Thomas A. Fee, AICP
Principal
Heiber Hasfert & Fee
Pacific Guardian Center
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Dear Mr. Fee:

SUBJECT: Chapter 6E-42 Historic Preservation Review – Draft Environmental Assessment (DEA) Pre-Assessment Consultation, Kapolei West Development, Honouliuli Ahupua'a, Honouliuli, 'Ewa, O'ahu
TMK: (1)9-1-014: por. 033 9-1-015: por. 4 and por. 20

LOG NO: 2004.1394
DOC NO: 0405EJ01

Thank you for the opportunity to provide comment during the pre DEA phase of this project. The project master plan includes an 18-hole golf course with low and medium density residential uses as well as commercial use. The EA is being prepared in support of a State Land Use District Boundary Amendment petition to reclassify a portion of the project area from Agricultural District to Urban District and subsequent City and County of Honolulu Zone Change Application.

In January 2004 we reviewed two documents pertaining to certain parcels within the subject area, Hammatt & Shideler. 2003 Request for Status Clarification Regarding Historic Preservation Concerns at Certain Lands at Kapolei, Honouliuli Ahupua'a, 'Ewa District O'ahu TMK: 9-1-15:4 and 18, and Cordy & Hammatt. 2003 and Archaeological Assessment of an approximately 100-Acre Project Area at Kapolei, Honouliuli Ahupua'a, 'Ewa, District, O'ahu, TMK: 9-1-15:4 (McEldowney to Shideler, January 8, 2004 Log.2004.0037)

We commented that information provided in the document entitled Request for Status Clarification Regarding Historic Preservation Concerns at Certain Lands at Kapolei, Honouliuli Ahupua'a, 'Ewa District O'ahu TMK: 9-1-15:4 and 18 provided an accurate and complete summary of previous archaeological work and past review comments by the State Historic Preservation Division. We agreed with the finding that no further work would be necessary for the project area contained in this study with the exception of the historic flume and ditch plantation infrastructures which required further documentation. To date, we have not had the opportunity to review the documentation of these features.

The second document Archaeological Assessment of an Approximately 100-Acre Project Area at Kapolei, Honouliuli Ahupua'a, 'Ewa, District, O'ahu, TMK: 9-1-15:4, Cordy, D. and Hammatt 2003 indicated that the vast majority of these lands had been heavily impacted by either past sugar cultivation, grading and grubbing activities and that no pre-twentieth surface features with the

LINDA LINGLE
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
889 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

May 20, 2004

RODNEY K. HARAGA
DIRECTOR

Deputy Directors
BRUCE Y. MATSUI
LINDEN H. JOESTING
BRIAN H. SEKIGUCHI

IN REPLY REFER TO:

STP 8.1162

Mr. Thomas A. Fee, AICP
Page 2
May 20, 2004

STP 8.1162

Mr. Thomas A. Fee, AICP
Principal
Helber Hastert & Fee Planners, Inc.
Pacific Guardian Center
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Dear Mr. Fee:

Subject: Kapolei West
Draft Environmental Assessment, Pre-Assessment Consultation
TMK: 9-1-14; por. 33; 9-1-15; por. 4 and por. 20

Thank you for your letter of April 20, 2004, advising us of the proposed subject development project and environmental document. We have the following comments:

1. If highway improvements are being proposed, we would like to be apprised of such plans and schedules.
2. To facilitate our review of project and environmental documents, we request that four (4) copies of a full and standard-paged Traffic Impact Analysis Report (TIAR), including complete appendices showing calculation sheets and traffic counts, be provided, along with four (4) copies of any environmental assessment report. The TIAR should include a discussion on the linkages and connections the project's roadways will have with the overall integration of vehicle, transit, pedestrian and bikeway traffic for the area and, as necessary, contingent or interim mitigation measures as the project progresses in phases and/or increments.
3. Proposed plans for any road crossing of the OR & L right-of-way (ROW), easement rights or need for access into any of our highway ROW will need our review and approval, and may be subject to documentation and consideration of payment requirements.
4. Design of the Leeward Bikeway in the OR & L ROW between Ewa and Luualalei may begin within a year and construction may begin in 2007. Because the proposed subject development abuts the OR & L ROW, we request that the developer consider participating in improvements in and/or connecting to the ROW along their common boundary.

5. The proposed subject development will be subject to the impact fees under Chapter 33A, Revised Ordinances, City and County of Honolulu. The timetable of development, construction and occupancy for the project through full build-out should be outlined so that the project's contribution of its fair share for regional highway improvements can be reviewed.

The development will have an impact on the Kapolei-Ko'Olina Area, Ewa Region and adjacent communities connected by the H-1 corridor. As an interested party, we appreciate being informed in advance and for the opportunity to provide our comments.

We look forward to receive further information on the subject development.

Very truly yours,

RODNEY K. HARAGA
Director of Transportation

c: Mr. Anthony Ching, Land Use Commission
Mr. Eric Crispin, Department of Planning & Permitting



STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

235 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
PHONE: (808) 586-4186
FACSIMILE: (808) 586-4186
E-mail: oecq@health.state.hi.us

GENEVIEVE SALMONSON
DIRECTOR

PHONE (808) 594-1888

FAX (808) 594-1865

May 4, 2004

Mr. Thomas Fee
Helber Hastert & Fee
733 Bishop St., Suite 2590
Honolulu, HI 96813

Subject: Kapolei West, Ewa, Oahu, Pre-Assessment Consultation

Dear Mr. Fee,

We have received your letter dated April 20, 2004 for the proposed Kapolei West development. We have the following comments:

1. What is the total impact of this development with development in the Kapolei area?
2. How will the golf course be irrigated?
3. Have you involved the nearby community for comments?
4. How will the OR&L right of way be affected?

We have no further comments to offer at this time, but will reserve further comments when the documents are submitted.

Should you have any questions, please feel free to call our office at 586-4185.

Sincerely,

Genevieve Salmonson
Genevieve Salmonson
Director

HRD04-1374

April 23, 2004

Thomas A. Fee, AICP
Principal
Helbert, Hastert and Fee Planners
733 Bishop Street, Suite 2590
Honolulu, HI 96813
ATTN: Kapolei west

Subject: Aina Nui Corporation's (an affiliate of the Estate of James Campbell) Draft Environmental Assessment Pre-Assessment Consultation for the Proposed Kapolei West Development for the Reclassification of Approximately 162 Acres of Land from the Agricultural to the Urban District (for Consolidation with a 373-Acre Adjacent Parcel Urbanized in 1991), 'Ewa, O'ahu, Hawaii', TMK: (1) 9-1-14; Portion 33; and (1) 9-1-15; Portion 4 and Portion 20

Dear Mr. Fee:

Thank for your letter dated April 20, 2004 regarding Aina Nui Corporation's (an affiliate of the Estate of James Campbell) Draft Environmental Assessment (DEA) pre-assessment consultation for the proposed Kapolei West Development for the Reclassification of approximately 162 acres of land from the Agricultural to the Urban District (for Consolidation with a 373-Acre Adjacent Parcel Urbanized in 1991), located at 'Ewa, O'ahu, Hawaii', TMK: (1) 9-1-14; Portion 33; and (1) 9-1-15; Portion 4 and Portion 20. Your letter requests that the Office of Hawaiian Affairs (OHA) review and comment on the proposed project.

Groundwater Supply

OHA is concerned about the proposed project's impact on groundwater resources in the proposed project area. Pursuant to Chapter 15-15-18, Hawaii Administrative Rules (HAR), Standards for determining "U" Urban district boundaries, (2), "(B) Availability of basic services such as schools, parks, wastewater systems, solid waste disposal, drainage, water, transportation

systems, public utilities, and police and fire protection; and (C) Sufficient reserve areas for foreseeable urban growth," need to be considered prior to the LUC's reclassification of the subject parcel. The project should have a legal guarantee to all of the water that it needs for the proposed project, and Chapter 15-15-18, HAR is established to determine if sufficient water and wastewater systems will be present to support the project. It is not clear at that sufficient groundwater will be available to support the potential Urban District reclassification (particularly the golf course, which may require up to a million gallons per day in initial buildout phase).

Given the recent water supply shortage that the Board of Water Supply has identified on O'ahu on its website, *Water Conservation: Xeriscaping*:

"The island of Oahu sustains a population approaching one million people. Its primary potable water source is groundwater: fresh water that has infiltrated through mountain watersheds and is held within the porous volcanic rock of the island. Because these natural fresh water resources are limited, water planners project that – by the year 2020 – all groundwater sources on Oahu will be in full use."

The project developers need to secure legal water agreement(s) (guarantees from the Board of Water Supply-City and County of Honolulu); and need to provide additional review, documentation or a guarantee (a part of the Chapter 343, HRS process) that enough groundwater exists to support the project area on a sustainable basis in the long term without potentially financially impacting businesses and residents in the surrounding region if the project developers are forced to rely on (connect to) existing Board of Water Supply-City and County of Honolulu water wells/supply (mains/wells)². As a consequence, the U.S. Geological Survey, Hawaii District Office should have the opportunity to comment and review on this project. Please forward copies of the DEA to the U.S. Geological Survey, Hawaii District Office when the document is finalized.

Given the percentage of potable and non-potable water that project proposes to use (as a significant percentage of the total potable and non-potable water volume that the residents of the City and County of Honolulu use as a whole), the Constitutionally protected competing interests for water use in the area, the rights that Native Hawaiian practitioners have to access water for traditional and customary practices, please categorically demonstrate that the project will not have a negative impact on each of these impacted uses/interests.

¹Board of Water Supply Fact Sheet, *Water Conservation: Xeriscaping*, http://www.hbws.org/ia_conservation/ia01_ct01_mainpage.htm.

²As noted previously OHA is concerned that businesses and residents will have to finance an expensive water main hookup to support the proposed project.

Potential Archaeological and Burial Sites

Archaeological Inventory Survey

In accordance with HRS 6E-42 and 43 and their protections for prehistoric and burial sites, the Draft EA should include an archaeological inventory survey. Additionally, pursuant to Chapter 343, Hawaii Revised Statutes (HRS) and HAR §11-200-10, Contents of an environmental assessment, "the proposing agency or approving agency shall prepare any draft or final environmental assessment of each proposed action and determine whether the anticipated effects constitute a significant effect in the context of chapter 343, HRS, and §11-200-12", the project developers should consult with individuals with expertise on Hawaiian issues in the project area and Island of Hawaii in general.

Given the extensive grading and grubbing that has already occurred on the impacted portion of the site (quarrying, stockpiling), doesn't appear necessary to trigger the protections of Hawaii Revised Statutes (HRS), §6E-43.6 and Hawaii Administrative Rules (HAR), Title 13, Subtitle 13, Chapter 300, Rules of Practice and Procedure Relating to Burial Sites and Human Remains for the proposed project site at this time. However, as the project proceeds, if any significant cultural deposits or human burials are encountered on this portion of site³, work will cease in this particular area and the State Historic Preservation Division will be contacted.

Cultural Impact Statement

The Draft EA must include a substantive cultural impact statement (CIS) based on consultation with the Native Hawaiian community, as required by Act 50, Session Laws of Hawaii 2000.

The CIS must identify and describe the cultural practices located within the potentially affected area (particularly since the probable area of potential impact in the long-term is larger than what is described in the Draft EA); assess the impact on these practices; examine alternatives to the proposed action; and propose mitigation measures if needed.

It is also recommended that the project developers consult with Native Hawaiian practitioners (individuals and organizations) to determine the impact of the proposed project on cultural practices. As a consequence, despite the impacts to the project site and the area, in accordance with the Chapter 343, HRS and HAR §11-200-10, Contents of an environmental assessment, "the proposing agency or approving agency shall prepare any draft or final environmental assessment of each proposed action and determine whether

³OHA staff notes that during the grading, grubbing and the daily covering of waste with earthen material at the proposed site burials or buried archaeological sites could be found, particularly if the landfill expands into the coastal or mountain portions of the proposed parcel.

the anticipated effects constitute a significant effect in the context of chapter 343, HRS, and §11-200-12", the project developers should consult with the following individual with expertise on Hawaiian issues in the project area and Maui in general.

Conclusion

The Office of Hawaiian Affairs looks forward to your Draft EA for the proposed project, which should clarify the project scope, and provide a discussion of the legal guarantees that the project has for a sustainable water supply (potable and non-potable).

If you have questions or concerns please contact Matthew Myers, Policy Advocate at 594-1945 or matthewm@oha.org.

'O wau iho nō,



Clyde W. Nāmu'o
Administrator

cc: Peter T. Young, Chairperson, Commission on Water Resource Management and Department of Land and Natural Resources
Clifford Jamile, Manager and Chief Engineer, Board of Water Supply
Gordon Tribble, U.S. Department of the Interior, U.S. Geological Survey, Hawaii District Office

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HI 96843



JEREMY HARRIS, Mayor
EDDIE FLORES, JR., Chairman
CHARLES A. STED, Vice-Chairman
HERBERT S.K. KAOPUA, SR.
DAROLYN H. LENDIO

May 5, 2004

RODNEY K. HARAGA, Ex-Officio
LARRY J. LEOPARDI, Ex-Officio
CLIFFORD S. JAMILE
Manager and Chief Engineer
DONNA FAY K. KIYOSAKI
Deputy Manager and Chief Engineer

Mr. Thomas A. Fee, AICP
Helber, Haertel and Fee Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Attention: Kapolei West

Dear Mr. Fee:

Subject: Your Letter of April 20, 2004 on the Draft
Environmental Assessment for Kapolei West

Thank you for the opportunity to comment on the proposed development.

A water master plan should be submitted for our approval.

The availability of water will be confirmed when the building permits are submitted for our approval. When water is made available, the applicant will be required to pay our Water System Facilities Charges for resource development, transmission and daily storage.

The golf course and large landscaped areas should be irrigated using nonpotable water.

If you have any questions, please contact Joseph Kaakua at 748-5442.

Very truly yours,



CLIFFORD S. JAMILE
Manager and Chief Engineer

DEPARTMENT OF DESIGN AND CONSTRUCTION
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 11TH FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 523-4564 • Fax: (808) 523-4567
Website: www.cc.honolulu.hi.us



JEREMY HARRIS
MAYOR

TIMOTHY E. STEINBERGER, P.E.
DIRECTOR

59624

April 30, 2004

Mr. Thomas A. Fee, AICP
Principal
Helber Hastert and Fee
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Attention: Ms. Corlyn Olson Orr

Subject: Kapolei West, Ewa, Oahu, Hawaii

Thank you for your letter of April 20, 2004 soliciting comments in advance to preparing a draft environmental assessment (DEA) for the proposed Kapolei West development.

We urge representatives of the developer to meet with us at their earliest convenience to discuss how they propose to meet park dedication obligations to the City. The Park Dedication Ordinance requires that subdivisions on Residential-zoned land must dedicate 350 square feet of community-based park land per residential lot and 110 square feet per unit for Apartment-zoned land. We prefer to come to a preliminary agreement concerning how public or private parks will be provided to serve the area before the developer has finalized plans for development and published its DEA.

The City already operates under a year-to-year lease the nearly 6-acre Kamokila Community Park on land still owned by the Campbell Estate. We strongly recommend that dedication of park land, as per the City Ordinance, include the fee transfer of the Kamokila Community Park property to help meet the developer's obligations. Consideration might be given to further expand the park to 10 acres in size, which would meet the City's recommended minimum land area for a Community Park. Alternatively, the park might be expanded to 20 to 25 acres in size so that the City could develop a District Park to serve the larger Kapolei "Second City" area. The City could ultimately develop a District Park to include a gymnasium, additional lighted ball fields and play courts, and possibly a swimming pool if the City's operating and capital improvement budgets permit.

Mr. Thomas A. Fee, AICP
Page 2
April 30, 2004

If you have any questions, please contact Mr. Donald Griffin at 527-6324

Very truly yours,

Handwritten signature of Timothy E. Steinberger in black ink.

TIMOTHY E. STEINBERGER, P.E.
Director

TES:ei

cc: William D. Balfour, Jr., Department of Parks and Recreation

DEPARTMENT OF FACILITY MAINTENANCE
CITY AND COUNTY OF HONOLULU
1000 ULUOHIA STREET, KAPOLEI HALE, SUITE 215, KAPOLEI, HAWAII 96707
TELEPHONE: (808) 692-3054 FAX: (808) 692-5857



JEREMY HARRIS
MAYOR

LARRY J. LEOPARDI, P.E.
DIRECTOR AND CHIEF ENGINEER

ALVIN K. C. AU
DEPUTY DIRECTOR

IN REPLY REFER TO:
DRM 04-416

April 26, 2004

Helber, Hastert and Fee Planners, Inc.
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Gentlemen:

**Subject: Kapolei West, Ewa, Oahu, Hawaii
Draft Environmental Assessment Pre-Assessment Consultation**

As the draft Environmental Assessment progresses, the Department of Facility Maintenance suggests that the Kapolei West development consider the following:

- Contain all stormwater runoff within the confines of the project.
- If water quality basins/structures are considered, they should be designed as low maintenance facilities; and
- All water quality basins/structures should be owned and maintained by the properties and/or the association.

Thank you for giving us the opportunity to comment.

Should there be any questions, please contact me at 692-5054.

Very truly yours,

LARRY LEOPARDI, P.E.
Director and Chief Engineer

DEPARTMENT OF PARKS AND RECREATION
CITY AND COUNTY OF HONOLULU
1000 ULUOHIA STREET, SUITE 309 • KAPOLEI, HAWAII 96707
Phone: (808) 692-5561 • FAX: 692-5131 • Internet: www.co.honolulu.hi.us



JEREMY HARRIS
MAYOR

WILLIAM D. BALFOUR, JR.
DIRECTOR

EDWARD T. "SKIPPA" DIAZ
DEPUTY DIRECTOR

April 30, 2004

Mr. Thomas A. Fee, AICP, Principal
Helber, Hastert & Fee Planners, Inc.
Pacific Guardian Center
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Dear Mr. Fee:

**Subject: Kapolei West, Ewa, Oahu, Hawaii
Draft Environmental Assessment Pre-Assessment Consultation**

Thank you for the opportunity to review and comment on the Draft Environmental Assessment Pre-Assessment Consultation relating to Aina Nui Corporation's Kapolei West development.

The Department of Parks and Recreation has no comment at this time.

Should you have any questions, please contact Mr. John Reid, Planner, at 692-5454.

Sincerely,

WILLIAM D. BALFOUR, JR.
Director

WDB:cu
(59576)

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET • HONOLULU, HAWAII 96813
TELEPHONE (808) 523-4414 • FAX (808) 527-6743 • INTERNET: www.co.honolulu.hi.us



JEREMY HARRIS
MAYOR

ERIC G. CRISPIN, AIA
DIRECTOR

BARBARA KIM STANTON
DEPUTY DIRECTOR
KATHY SOKUGAWA
ACTING DEPUTY DIRECTOR

2004/ELOG-850 (MH)

May 5, 2004

Mr. Thomas A. Fee, AICP
Principal
Helber Hastert & Fee, Planners, Inc.
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Dear Mr. Fee:

Kapolei West, Ewa, Oahu, Hawaii
Draft Environmental Assessment Pre-Assessment Consultation

In response to your request regarding the pre-assessment consultation for Kapolei West, we have reviewed the proposal and offer the following comments:

1. The Draft Environmental Assessment (DEA) should include a section with discussions on how the proposed project is consistent with the objectives and policies of the City and County of Honolulu's General Plan.
2. The DEA should also include a section, which discusses how the proposed project is consistent with the Ewa Development Plan.
3. The DEA should also include how the proposed project is consistent with the surrounding zoning.
4. The DEA should provide a listing of other land use permits and/or approvals required.
5. With regard to infrastructure (transportation, water, wastewater and drainage), the DEA should include discussions on the adequacy of existing public facilities and services, and the necessity for new public facilities and services, to support the proposed project. These discussions should disclose potential regional impacts/mitigating measures in the context of the Ewa Development Plan area.

Mr. Thomas A. Fee, AICP, Principal
Helber Hastert & Fee, Planners, Inc.

Page 2
May 5, 2004

6. The DEA should further discuss the adequacy/need for parks, schools, police, fire, and emergency medical facilities and services. Again, these discussions should disclose potential regional impacts/mitigating measures in the context of the Ewa Development Plan area.

7. The DEA should discuss the desirability of industrial based traffic through residential areas of the project.

8. The Proposed Action indicates that the project also includes "a 373 acre adjacent parcel urbanized in 1991." It should reflect that the 373 acres are classified as urban.

Should you have any questions, please contact Matt Higashida of our staff at 527-6056.

Sincerely yours,

ERIC G. CRISPIN, AIA
Director of Planning and Permitting

EGC:js

cc: Aina Nui Corporation
State Land Use Commission
Office of Environmental Quality Control

P:\Planning\DivFunction\Ea-cis\2004\elog-850.doc

DEPARTMENT OF TRANSPORTATION SERVICES
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 3RD FLOOR • HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-4529 • FAX: (808) 523-4730 • INTERNET: www.co.honolulu.hi.us



JEREMY HARRIS
MAYOR

CHERYL D. SOON
DIRECTOR

GEORGE "KEOKI" MIYAMOTO
DEPUTY DIRECTOR

Helber, Hastert and Fee Planners
Page 2
May 19, 2004

4. Public transit access to the proposed development must be discussed in the draft environmental assessment (EA). This is related to the Smart Growth comment above.

May 19, 2004

TP4/04-59423R

Helber, Hastert and Fee Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

We look forward to reviewing the draft EA. In order to facilitate our review of the draft EA, please provide us with two copies of the document.

Should you have any questions regarding these comments, please contact Faith Miyamoto of the Transportation Planning Division at 527-6976.

Attention: Kapolei West

Sincerely,

Dear Sir:

Subject: Kapolei West

In response to the April 20, 2004 letter from Mr. Thomas A. Fee, we reviewed the project information provided.

First, we would like to express our position that serious attention should be given to the phasing of any new development due to its impact on the regional highway network and other infrastructure. This issue has been raised in the presently ongoing five-year review of the Ewa Development Plan. The development of Kapolei West should be phased in conjunction with the completion of Kapolei Parkway, Alinui Drive, and required regional highway improvements as well as other infrastructure being in place prior to the completion of additional development in Ewa.

Second, at the recent Smart Growth workshops, more walkable, mixed use neighborhoods and increased mobility options were discussed. The proposed development, if it is to proceed, should incorporate these concepts from the earliest stages of planning and design.

Finally, our comments specific to the project information provided are as follows:

1. The tax map keys listed on Page 1 do not appear to be correct.
2. The tax map keys identified in the first paragraph of Page 2 should be verified.
3. The project information provided stated that a traffic impact study would be conducted. This study should identify what roads will be constructed as part of the development and their impact on the surrounding City streets. Also, the study should state whether the streets would be dedicated to the City.

CHERYL D. SOON
Director

FIRE DEPARTMENT
CITY AND COUNTY OF HONOLULU

3375 KOAFAKA STREET, SUITE 1425 • HONOLULU, HAWAII 96819 • 1869
TELEPHONE: (808) 931-7761 • FAX: (808) 931-7750 • INTERNET: www.honolulufire.org



JEREMY HARRIS
MAYOR



ATTILIO K. LEONARDI
FIRE CHIEF
JOHN CLARK
DEPUTY FIRE CHIEF

Helber Hastert & Fee Planners, Inc.
Page 2
May 4, 2004

3. Submit civil drawings to the HFD for review and approval.

Should you have any questions, please call Battalion Chief Lloyd Rogers of our Fire Prevention Bureau at 831-7778.

Sincerely,

ATTILIO K. LEONARDI
Fire Chief

AKL/SK:jl

cc: Ms. Donna Goth, President,
Aina Nui Corporation
Mr. Anthony Ching, Executive Officer,
State of Hawaii, Department of Business, Economic Development & Tourism,
Land Use Commission

May 4, 2004

Helber Hastert & Fee Planners, Inc.
Pacific Guardian Center, Makai Tower
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813
Attn: Kapolei West

Dear Sir or Madam:

Subject: Kapolei West Development
Draft Environmental Assessment (DEA) Pre-Assessment Consultation
'Ewa, Oahu, Hawaii

In response to a letter from Thomas A. Fee dated April 20, 2004, requesting our comments on the above-mentioned DEA, the Honolulu Fire Department (HFD) requires that the following be complied with:

1. Provide a private water system where all appurtenances, hydrant spacing, and fire flow requirements meet Board of Water Supply standards.
2. Provide a fire department access road within 150 feet of the first floor of the most remote structure. Such access shall have a minimum vertical clearance of 13 feet 6 inches, be constructed of an all-weather driving surface complying with Department of Transportation Services (DTS) standards, capable of supporting the minimum 60,000-pound weight of our fire apparatus, and with a gradient not to exceed 20%. The unobstructed width of the fire apparatus access road shall meet the requirements of the appropriate county jurisdiction. All dead-end fire apparatus access roads in excess of 150 feet in length shall be provided with an approved turnaround having a radius complying with DTS standards.

POLICE DEPARTMENT
CITY AND COUNTY OF HONOLULU
801 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96813 - AREA CODE (808) 529-3111
<http://www.honolulu.police.org>
www.co.honolulu.hi.us

JEREMY HARRIS
MAYOR



LEE D. DONOHUE
CHIEF
GLEN R. KAJIYAMA
PAUL D. PUTZULU
DEPUTY CHIEFS

OUR REFERENCE CS-KP

April 28, 2004

Mr. Thomas A. Fee, AICP
Helber, Hastert and Fee Planners
Attention: Kapolei West
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Dear Mr. Fee:

Thank you for the opportunity to comment on the Draft Environmental Assessment, Pre-Assessment Consultation, for Kapolei West.

The proposed project is within the boundaries of District 8, which is headquartered at 1100 Kamokila Boulevard in Kapolei.

Based on the information provided, this project will have a major impact on the staffing and services that will need to be provided by this department. This project, when considered with other developments in the area, will require at least another police beat for adequate patrol services. In addition, there will be an overall negative impact on traffic and especially a cumulative negative impact on traffic on the H-1 Freeway.

If there are any questions, please call Captain Gregory Lefcourt of District 8 at 692-4253 or Ms. Carol Sodehani of the Support Services Bureau at 529-3658.

Sincerely,

LEE D. DONOHUE
Chief of Police

By 
KARL GODSEY
Assistant Chief of Police
Support Services Bureau

OAHU CIVIL DEFENSE AGENCY
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET
HONOLULU, HAWAII 96813
PHONE: (808)523-4121 FAX: (808)524-3439

JEREMY HARRIS
MAYOR



R. DOUG ATON
ACTING ADMINISTRATOR

April 29, 2004

Helber, Hastert and Fee Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813
Attention: Kapolei West

Dear Sir or Madam:

Thank you for your request for written comments on the proposed environmental assessment of the Kapolei West development. We have two suggestions as you consider the Master Plan:

- 1) The two designated hurricane shelters in the Kapolei area are not capable of handling the current population, let alone the additional 2,500 plus residents of the proposed Kapolei West community. We would like consideration for designing and building hurricane resistant facilities within the Kapolei West community (Recreation Building, Meeting Facility, etc.).
- 2) Kapolei West residents will have to travel to either Kapolei High School or Elementary School for hurricane sheltering. If these shelters are full they will have to try other hurricane shelters in Ewa Beach, Makalo or Nanakuli. This will require Kapolei West residents to travel vast distances during times of emergency and risk showing up at shelters already at capacity.
- 3) With the expansion of housing areas please consider Civil Defense Outdoor Warning Systems (Warning Sirens) to allow the notification of the families and businesses of impending manmade or natural disasters. With the size of the project and an effective range of less than 2,000 feet, it is highly recommended that at least two Warning Sirens be installed to cover the specified area shaded in gray.

Please call Mr. Peter Hirai, Plans and Operations Officer, at 523-4121 if you have any questions. Thank you for your consideration for the safety of the future residents of Kapolei West.

Sincerely,


R. Doug Aton
Acting Administrator
Oahu Civil Defense Agency



June 25, 2004

Helber Hastert and Fee Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Attention: Mr. Thomas A. Fee, AICP
Principal

Gentlemen:

Subject: Draft Environmental Assessment for
Kapolei West

Please be advised that The Gas Company, LLC, maintains underground utility gas mains in the project vicinity, which serves commercial and residential customers in the area and is interconnected with the utility network in Ewa. We would appreciate your consideration during the project planning and design process to minimize any potential conflicts with the existing gas facilities in the project area.

Thank you for the opportunity to comment on the Draft Environmental Assessment. Should there be any questions, or if additional information is desired, please call Chris Anderson at 594-5564.

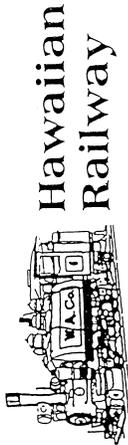
Sincerely,

The Gas Company, LLC

Charles E. Calvet, P.E.
Manager, Engineering

CEC:ks
04-192

P.O. Box 3000
Honolulu, Hawaii 96802-3000



April 29, 2004

Ms. Carolyn Olson Orr
Project Planner
HELBERT, HASTERT & FEE
Pacific Guardian Center
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Dear Ms. Olson Orr:

We have examined your proposed land use plan for Kapolei West and have concluded that this development will impact on our operation of a train on the historic OR&L right of way. We have the following comments:

It appears that three roads will cross the OR&L right of way where there are no crossings now (two from your project). This will affect both the railroad operation and use of the bikeway which the State intends to build in the right of way in the near future. These two additional crossings will add two or three stops to a train ride which already has four to seven, depending on road traffic. We request that you give consideration to the use of automated crossing guards at the major intersections which would be initiated by the approach of the train.

There appears to be a golf cart tunnel or bridge crossing the railroad. Interruption of the track should be limited to five working days. We assume that there may be drainage or utilities which would be laid under the track. Again the duration of any outage is a concern.

Certainly the vista for the train ride would be greatly improved by this development. Please keep in mind that we are required by federal law to blow the train horn four times at each grade crossing.

If you have any questions, please contact Ben Schlapak at 836-6533.

Sincerely,

ROBERT YATCHMENOFF
President

HAWAIIAN RAILWAY SOCIETY

A Chapter of the National Railway Historical Society

P. O. Box 60369 • Ewa Station, Ewa Beach, Hawaii 96706 • Ph: (808) 681-5461 • Fax: (808) 681-4860





Kenneth M. Williams
Vice President of Resort Operations

Ko Olina Community Association, Inc.

92-1480 Ali'iuni Drive
Ko Olina, Hawaii 96707

Phone: (808) 671-2512
Facsimile: (808) 671-3640

www.koolina.com

E-mail:
ken@koolina.com

FACSIMILE

Date: May 5, 2004
To: Helber, Hastert and Fee Planners
Attention: Thomas A. Fee
Fax No.: 545-2050
RE: **Kapolei West, Ewa, Hawaii, Draft Environmental Assessment Pre-Assessment Consultation**
Pages: 3 (including cover page)
Thank you.
Cc: Jeffrey R. Stone, KOCA President



May 4, 2004

Helber, Hastert and Fee Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813
Attn: Kapolei West

Re: Draft EA Pre-Assessment Consultation

Thank you the opportunity to comment on the Pre-Assessment Consultation. Our two key comments are: (i) we look forward to the opportunity to participate in this process and to review and comment on the Draft EA; and (ii) in light of the City and Campbell Estate's just completed Smart Growth conference, we believe that it is of utmost importance that the planning of this area and region be expertly done. As the project site sits adjacent to the Ko Olina Resort & Marina, we are very interested in the site's development and how this project will act as a transition between Ko Olina and the City of Kapolei. As you are aware, we spent significant time and resources examining and planning potential development of portions of the project site, and have studied the relationship between the City and the Resort. For these reasons, we believe that we may be able to provide helpful input into your process.

One concern that must be addressed in the overall process is a careful look at the impact on transportation, schools and infrastructure (such as sewer, drainage, electrical, water, etc) that this project will bring. As everyone is well aware, there have been many concerns from the community about these issues for all developments in the West Oahu region. As landowners and developers, we have taken a concerted approach to help deal with and solve many of these issues. Those efforts must continue.

Additionally, various development areas have been "rearranged" and traffic patterns altered from Campbell's original Master Plan and the original planning of the area. These changes bring significant impacts which must be addressed. This includes the change to bring residential development directly adjacent to the industrial deep draft harbor.

Finally, we raise the question of who must be given notice of this process. As you should be aware, Ko Olina Community Association ("KOCA") does not own any land. Like any other community association, KOCA manages the common areas of the Resort. Given that the project site is adjacent to the Resort, we hope the Resort's individual property owners have received your notice and will be included in your process.



Thank you again for the opportunity to provide these initial comments. We look forward to participating in the process to best plan the development of the West Oahu Region.

Sincerely,

Kenneth Williams

CC: Jeffrey R. Stone, KOCA President



THE OUTDOOR CIRCLE

1314 South King St., Suite 306 • Honolulu, HI 96814
Phone: 808-593-0300 Fax: 808-593-0525

May 4, 2004

Established 1912
A Non-profit Organization

BRANCHES

OAHU

Kaunohi
Lani-Kailua
North Shore
Wai'alea Kahala

HAWAII

Hilo

Ka'u

Kona

Waikoloa Village

Waimea

KAUAI

MAUI

GARDEN CIRCLE

Lani-Kailua

Re: Kapolei West, Ewa, O'ahu, Hawai'i
Draft Environmental Assessment Pre-Assessment Consultation

Dear Mr. Fee:

On behalf of The Outdoor Circle I would like to thank you for including our organization as a consulted party in the above referenced Draft Environmental Assessment Pre-Assessment Consultation.

Please note that the botanical survey should include the following information as part of the Draft Environmental Assessment:

- > Please itemize how many trees are located in the project area, how many will be removed, how many will remain, and how many will be relocated. Please also indicate species of every tree;
- > Please provide a map with specific locations of all trees in the project area and whether they will be saved, removed or relocated;
- > A qualified certified arborist must be obtained to perform a tree assessment based on the International Society of Arboriculture's guidelines to determine which trees are healthy and structurally sound and should be preserved;
- > The Outdoor Circle believes that no canopy cover should be lost due to construction. Please describe the tree replacement plan you will develop to restore the shade that is lost by removals, and
- > Please describe the steps that will be taken to protect trees that will remain on site during construction, i.e. a tree preservation and protection plan developed by a certified arborist.

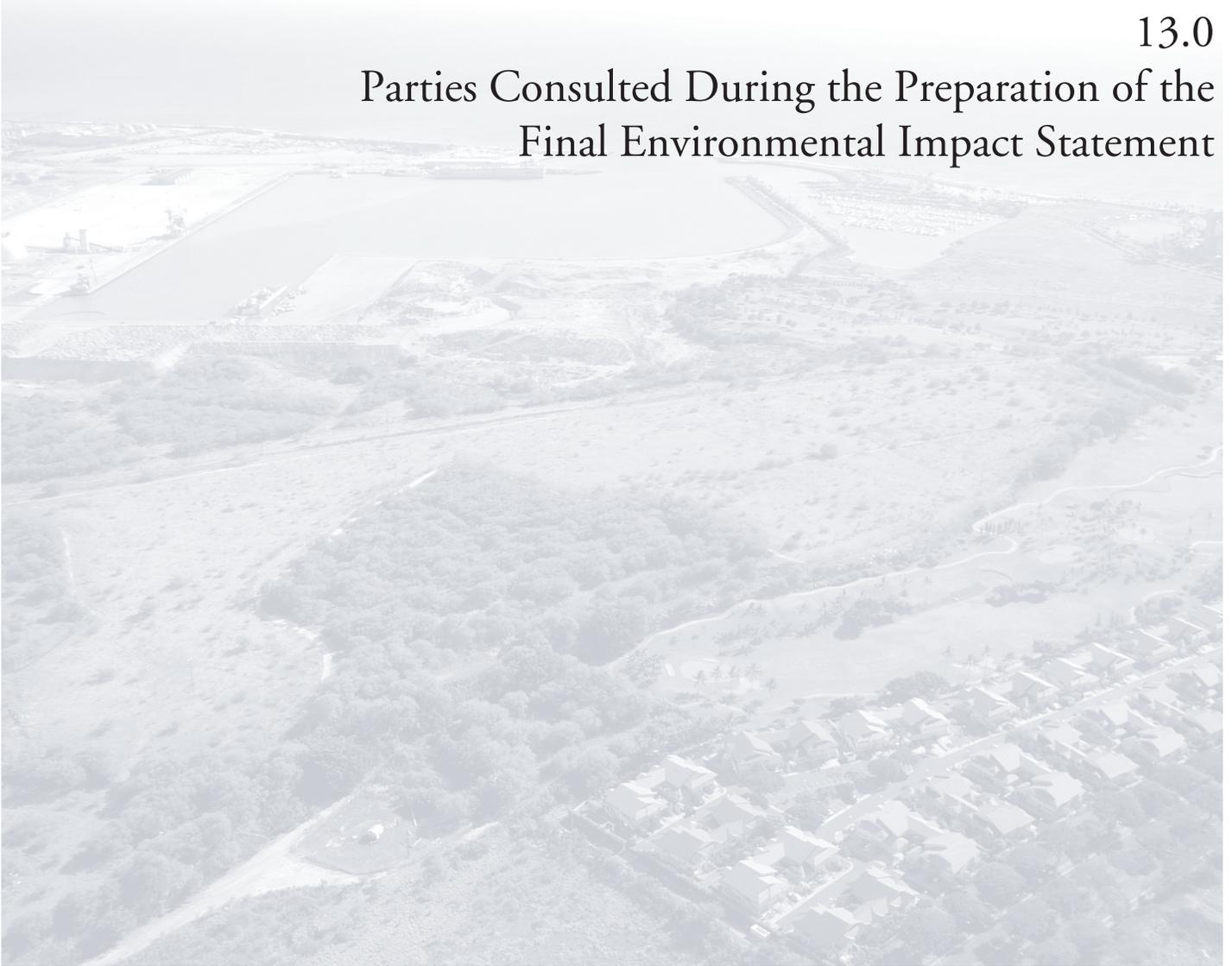
Thank you for the opportunity to comment. We look forward to reviewing the Draft Environmental Assessment.

Sincerely,

Kimberly Hillebrand
Certified Arborist
Landscape and Planting Project Manager

13.0

Parties Consulted During the Preparation of the Final Environmental Impact Statement



13.0 PARTIES CONSULTED DURING THE PREPARATION OF THE FINAL ENVIRONMENTAL IMPACT STATEMENT

13.1 PARTIES CONSULTED DURING THE PREPARATION OF THE FEIS

Notice of the Draft EIS was published in the March 23, 2005 edition of the *Environmental Notice*. Copies of the DEIS were distributed to 91 agencies, organizations, individuals and libraries. The deadline for public comments was May 6, 2005. A total of 29 written comments were received by the publication date of the FEIS (June 2005). The agencies, organizations and individuals who submitted written comments are identified below with an asterisk (*). In addition, written comments were received from Senator Colleen Hanabusa. Hawaiian Electric Company verbally informed the applicant that they would not be sending any written comments. Notice of the Draft EIS as published in the *Environmental Notice*, and comments and applicant response letters, are reprinted on the following pages.

Federal Agencies

- * Dept. of the Army, Army Corps of Engineers
Dept. of the Navy, Commander Navy Region Hawaii
U.S. Coast Guard
Dept. of Agriculture, Natural Resources Conservation Service
Dept. of the Interior, Fish and Wildlife Services
- * Dept. of the Interior, U.S. Geological Survey
Federal Aviation Administration
Federal Highway Administration

State Agencies

- Dept. of Accounting and General Services
- * Dept. of Agriculture
Dept. of Budget and Finance
Dept. of Business, Economic Development and Tourism
- * DBEDT, Strategic Industries Division
Dept. of Defense
- * Dept. of Education
Dept. of Hawaiian Home Lands
- * Dept. of Health
- * Dept. of Human Services, Housing and Community Development Corporation
Dept. of Labor and Industrial Relations
- * Dept. of Land and Natural Resources, Land Division
DLNR, Historic Preservation Division
- * Dept. of Transportation
Dept. of Transportation, Harbors Division

- * Land Use Commission
- * Office of Environmental Quality Control
Office of Hawaiian Affairs
- * Office of Planning
- * Public Utilities Commission

University of Hawai'i

- * Environmental Center
Water Resources Research Center

City and County of Honolulu

- * Board of Water Supply
Dept. of Community Services
- * Dept. of Design and Construction
- * Dept. of Environmental Services
- * Dept. of Facility Maintenance
- * Dept. of Parks and Recreation
- * Dept. of Planning and Permitting
- * Dept. of Transportation Services
- * Honolulu Fire Department
- * Honolulu Police Department
- * O'ahu Civil Defense Agency

Public Utilities

- Gas Company, Inc.
- Hawaiian Electric Company, Inc.
- * Hawaiian Telcom, Inc.

Other Agencies, Organizations and Individuals

- Envirowatch, Inc.
- 'Ewa Neighborhood Board No. 23
- Friends of the Pearl Harbor Historic Trail
- Hawai'i Audubon Society
- Hawai'i Building and Construction Trade Council
- Hawai'i Farm Bureau Foundation
- Hawai'i's Thousand Friends
- Hawaiian Civic Club
- * Hawaiian Railway Society
- Honokai Hale/Nanakai Gardens Community Association
- Kapolei Rotary Club

- * Ko Olina Community Association
- * Ko Olina Fairways Association of Apartment Owners
- Ko Olina Resort, LLC
- Land Use Research Foundation of Hawai'i
- League of Women Voters
- Leeward O'ahu Transportation Management Association
- Life of the Land
- Makakilo/Kapolei/Honokai Hale Neighborhood Board No. 34
- Makakilo-Kapolei Lions Club
- O'ahu Metropolitan Planning Organization
- Outdoor Circle
- Sierra Club, Hawai'i Chapter
- Waianae Coast Neighborhood Board No. 24
- West O'ahu Economic Development Association
- Councilmember Todd Apo
- Councilmember Nestor Garcia
- Councilmember Donovan M. Dela Cruz
- Representative Mark Moses
- Representative Michael Kahikina
- Senator Brian Kanno

Libraries

DBEDT Business Resource Center Library
Legislative Reference Bureau
UH Hamilton Library
Hawai'i State Library
'Ewa Beach Public and School Library
Kapolei Public Library
Waianae Public Library
Hawai'i Kai Regional Library
Hilo Regional Library
Kahului Regional Library
Kaimuki Regional Library
Kaneohe Regional Library
Lihue Regional Library
Pearl City Regional Library
Municipal Reference and Resources Center

Media

Honolulu Advertiser

Honolulu Star-Bulletin

O'ahu Notices

MARCH 23, 2005

Kapolei West Expansion Area (HRS 343 DEIS)

District: 'Ewa
TMK: (1) 9-1-14: por. 33; 9-1-15: por. 4, and por. 20
Applicant: Aina Nui Corporation
1001 Kamokila Blvd. Ste. 255, Kapolei, HI 96707
Contact: Donna Goth (674-3540)

Approving Agency: State of Hawaii Land Use Commission
P.O. Box 2359, Honolulu, HI 96804-2359
Contact: Anthony J.H. Ching (587-3822)

Consultant: Helber Hastert & Fee, Planners
733 Bishop St., Ste. 2590, Honolulu, HI 96813
Contact: Corlyn Olson (545-2055)

Public Comment

Deadline: May 6, 2005
Status: Draft environmental impact statement (DEIS) notice pending 45-day public comment. Address comments to the applicant with copies to the approving agency, consultant and OEQC.

Permits

Required: State Land Use District Boundary Amendment, Water Use, Zone Change, Special Management Area Permit, Project Water, Drainage, Wastewater, and Roadway Master Plans, Subdivision Approvals, Grading and Building.

Aina Nui Corporation, an affiliate of the Estate of James Campbell, has filed a petition for a State Land Use District Boundary Amendment to reclassify approximately 174.2 acres of land from the Agricultural District to the Urban District (referred to as the "Petition Area") with the State Land Use Commission. The Petition Area is located in 'Ewa, O'ahu and consists of Tax Map Key parcels 9-1-14: 33 (por.), 9-1-15: 4 (por.), and 9-1-15:20 (por.).



The Petition Area straddles the State-owned, historic O'ahu Railway & Land Company (OR&L) Railroad right-of-way (ROW). The Petition Area is surrounded by the 372.6-acre area formerly known as Ko Olina Phase II to the north (urbanized in 1991 under Docket A90-655), Ko Olina Resort to the west, Kalaeloa Barbers Point Harbor and the Kapolei Business Park to the south, and Kalaeloa Boulevard and the City of Kapolei to the east.

Development proposed for the Petition Area includes approximately 1,200 low and medium-density residential units, approximately 60 acres of golf course, and nearly 28 acres of park and open space (Proposed Action). Together with the former Ko Olina Phase II project area now in the State Land Use Urban District, the Petition Area is planned to be part of "Kapolei West," a 548-acre master-planned residential and golf community.

Beneficial impacts of the Proposed Action include provision of almost 1,200 homes; increased housing choices; creation of over 300 construction period and 260 operational period jobs annually; and net fiscal benefits for the County and State. Non-significant impacts include increased demands on existing infrastructure systems and public facilities and services. The Proposed Action would not pose long-term risks to human health and safety or impact threatened or endangered biological resources. The Proposed Action would not adversely impact significant historic sites or rights customarily and traditionally exercised for subsistence, cultural and religious purposes and would have minimal or no impact on Hawaiian culture, its practices and traditions. Potential traffic impacts would require mitigating measures including roadway and intersection improvements.





DEPARTMENT OF THE ARMY
U. S. ARMY ENGINEER DISTRICT, HONOLULU
FT. SHAFTER, HAWAII 96858-5440

REPLY TO:
ATTENTION OF

March 25, 2005



Regulatory Branch

Mr. Thomas A. Fee, A.I.C.P.
Principal
Helber, Hastert & Fee, Planners Inc.
733 Bishop Street, Suite 2590
Honolulu, HI 96813

Dear Mr. Fee:

This acknowledges receipt of the draft Environmental Assessment (dEA) which addresses activities and impacts of the proposed Kapolei West development, Kapolei, Oahu Island (existing 535 acres and TMS 9-1-14; por. 33 and 9-1-15; pors. 4, 20).

The dEA indicates that waters of the United States, as represented by perennial or intermittent streams, and wetlands are absent from the proposed project area. The dEA does state in appropriate sections that there is no potential for waters of the U.S. to be impacted by construction of project structures and associated ground disturbing activities within the proposed improvement area. Based upon this information it is our determination that a Department of Army (DA) permit for Section 404 activities of the Clean Water Act will not be required for the proposed Kapolei West development.

In the future, if changes in the development plan consider options for flood control which may require the construction of structures that provide a surface connection to the Pacific Ocean, your client should consult with this office regarding DA permit requirements. Thank you for your consideration of potential impacts to the aquatic environment of the Kapolei watershed. Please contact Mr. Farley Watanabe of my staff at 438-7701, or facsimile 438-4060, if you have any questions or need additional information. Please refer to **File Number POH-2005-216** in any future correspondence with us regarding this project.

Sincerely,

George P. Young, P.E.
Chief, Regulatory Branch



Helber Hastert & Fee
Planners, Inc.

June 2, 2005

Mr. George P. Young
Chief, Regulatory Branch
U.S. Army Engineer District, Honolulu
Department of the Army
Fort Shafter, Hawaii 96858-5440

Dear Mr. Young:

**Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawaii**

Thank you for your letter dated March 25, 2005 (File Number POH-2005-216) in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). We have reviewed your comments and offer the following responses.

1. We note that there are no perennial and intermittent streams or wetlands present within the project area, and that the proposed project will not require a Department of Army (DA) permit for Section 404 activities of the Clean Water Act.
2. While improvements within the project site will not connect to the ocean, offsite drainage improvements are planned in the future within adjacent developments that are proposed to serve the watershed. One of these improvements is a drainage channel that stretches from Malakole Road to the shoreline. Formerly known as the Kapolei Business Park Channel, the West Kalaeloa channel will require a Department of the Army Permit, a Conservation District Use Application and Permit, a Coastal Zone Management Permit and a Special Management Area Use Permit.

Applications for the Kapolei Business Park Channel had been prepared and filed previously with the applicable agencies but were allowed to expire due to the uncertainty of the implementation schedule. New applications will be submitted at the appropriate time and consultation with Department of the Army and other affected agencies will be scheduled.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

Helber Hastert & Fee
Planners, Inc.

George P. Young
June 2, 2005
Page 2

Sincerely,

HELBERT HASTERT & FEE, Planners



Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control



United States Department of the Interior

U.S. GEOLOGICAL SURVEY
PACIFIC ISLANDS WATER SCIENCE CENTER
677 Ala Moana Blvd., Suite 415
Honolulu, HI 96813

Phone: (808) 587-2400/Fax: (808) 587-2401

May 5, 2005



Ms. Donna Goth, President
Aina Nui Corporation
1001 Kamokila Boulevard, Suite 255
Kapolei, Hawaii 96707

Dear Ms. Goth:

Subject: Kapolei West Expansion Area
Oahu, Ewa District

Thank you for forwarding the subject Draft Environmental Impact Statement for review and comment by the staff of the U.S. Geological Survey, Pacific Islands Water Science Center. We regret however, that due to prior commitments and lack of available staff, we are unable to review this document.

We appreciate the opportunity to participate in the review process.

Sincerely,



Gordon Tribble
Director

Cc: The Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Bert Saruwatari, Planner
Land Use Commission, State of Hawaii
235 South Beretania St., Room 406
Honolulu, Hawaii 96813

Corlyn Olson Orr, Project Planner
Helbert Hastert & Fee, Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

LINDA LINGLE
Governor



SANDRA LEE KUNIMOTO
Chairperson, Board of Agriculture
DUANE K. OKAMOTO
Deputy to the Chairperson

Helber Hastert & Fee
Planners, Inc.

June 2, 2005

Mr. Gordon Tribble, Director
Pacific Islands Water Science Center
U.S. Geological Survey
677 Ala Moana Boulevard, Suite 415
Honolulu, HI 96813

Dear Mr. Tribble:

**Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawaii**

Thank you for your letter to Ms. Donna Goth, President of Aina Nui Corporation, dated May 5, 2005 in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). We note that your agency is unable to review the Draft EIS due to prior commitments and lack of available staff.

We appreciate your efforts to inform us of the status of your review. Your letter and this response will be included in the Final EIS.

Sincerely,

HELBERT HASTERT & FEE, Planners

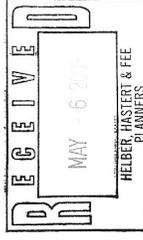
Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control



State of Hawaii
DEPARTMENT OF AGRICULTURE
1428 South King Street
Honolulu, Hawaii 96814-2512
Phone: (808) 973-9800 Fax: (808) 973-9813

May 2, 2005



Aina Nui Corporation
1001 Kamokila Boulevard
Suite 2555
Kapolei Hawaii 96707

Attention: Ms. Donna Goth, President

Dear Ms. Goth

Subject: Draft Environmental Impact Statement – Kapolei West Expansion Area
The Department of Agriculture has reviewed the subject document and finds the proposed project will not adversely impact the agricultural activities and resources of the area or the programs, activities, and plans of the Department.

Should you have any questions, please call Earl Yamamoto at 973-9466 or email him at earl.i.yamamoto@hawaii.gov.

Sincerely,

Sandra Lee Kunimoto
Chairperson, Board of Agriculture

c: OEQC
State Land Use Commission
Helber Hastert and Fee, Planner

kapoleiwest2.e05





LINDA LINGLE
GOVERNOR
THEODORE E. LIU
GOVERNOR
MARK K. ANDERSON
ACTING DEPUTY DIRECTOR

**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

Strategic Industries Division
235 South Beretania Street, Liliopapa A Kamahameha Bldg., 5th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2389, Honolulu, Hawaii 96804

Telephone: (808) 587-3807
Fax: (808) 587-3820
Web site: www.hawaii.gov/dbedt/isd



Helber Hastert & Fee
Planners, Inc.

June 2, 2005

Ms. Sandra Lee Kumimoto
Chairperson
Board of Agriculture
State of Hawaii
1428 South King Street
Honolulu, HI 96814-2512

Dear Ms. Kumimoto:

**Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawaii**

Thank you for your letter to Ms. Donna Goth, President of Aina Nui Corporation, dated May 2, 2005 in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). We note that the proposed project will not adversely impact the agricultural activities and resources of the area, or the programs, activities and plans of the Department.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

Sincerely,

HELBERT HASTERT & FEE, Planners

Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control



March 31, 2005

Donna Goth, President
Aina Nui Corporation
1001 Kamokila Boulevard, Suite 255
Honolulu, Hawaii 96707

Dear Ms. Goth:

Subject: Draft Environmental Impact Statement (DEIS)
Kapolei West Expansion Area

Thank you for the opportunity to comment on the DEIS for Kapolei West, a residential, golf course, and park project in Oahu, Ewa District. We have no further comments to those of November 28, 2004, on the EISP.

Sincerely,

Maurice H. Kaya
Chief Technology Officer

c: State Land Use Commission
Helber Hastert & Fee, Planners
OEQC

LINDA LINGLE
GOVERNOR



PATRICIA HAMAMOTO
SUPERINTENDENT

Helber Hastert & Fee

Planners, Inc.

June 2, 2005

Mr. Maurice H. Kaya, Chief Technology Officer
Strategic Industries Division
Department of Business, Economic Development and Tourism
State of Hawaii
P.O. Box 2359
Honolulu, HI 96804

Dear Mr. Kaya:

**Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawaii**

Thank you for your letter to Ms. Donna Goth, President of Aina Nui Corporation, dated March 31, 2005 in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). This letter is to acknowledge your response indicating that your agency has no further comments.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

Sincerely,

HELBER HASTERT & FEE, Planners

Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control



OFFICE OF THE SUPERINTENDENT

April 13, 2005

Ms. Donna Goth, President
Aina Nui Corporation
1001 Kamokila Boulevard, Suite 255
Kapolei, Hawaii 96707

Dear Ms. Goth:

Subject: Kapolei West Expansion Area - Ewa, Oahu
Draft Environmental Impact Statement
TMK: 9-1-14; por. 33; and 9-1-15; por. 4 and por. 20

The Department of Education (DOE) has reviewed the Draft Environmental Impact Statement Preparation Notice (DEIS) for the 535-acre, master-planned golf and residential community located between the Ko Olina Resort and the City of Kapolei.

The DOE would like to correct an error in Section 6.7.1 Affected Environment of the DEIS, page 6-38. The section states that enrollments at Kapolei Middle and Kapolei High schools were presently over their 2003 facility capacity. The DEIS says both schools would be under capacity in 2009. Unfortunately, as shown in Table 21, on page 6-38. Both schools are currently over capacity and will remain over capacity according to projections for 2009.

An error was made in our November 30, 2004, memorandum to Mary Lou Kobayashi of the Office of Planning with comment on the Environmental Impact Statement Preparation Notice for the Kapolei West Expansion Area. The memo overstates the number of students projected to reside in multi-family housing. The error was corrected in Table 23, on page 6-39 of the DEIS.

To summarize, the enrollment in schools in the Kapolei area is close to or already exceeding facility capacity numbers. In the next five years, the enrollment is expected to increase further. A planned new elementary school will relieve some enrollment growth but there is a significant need for a new middle school in the area.



**STATE OF HAWAII
DEPARTMENT OF EDUCATION**

P.O. BOX 2360
HONOLULU, HAWAII 96804

Ms. Donna Goth
Page 2
April 13, 2005

The DOE has been in discussions with Aina Nui Corporation and The Estate of James Campbell (Applicants) concerning our need for a middle school site to serve West Kapolei and its surrounding area. A donation of land for a middle school campus would address the DOE's school fair-share contribution amount for a project of roughly 2,370 new homes.

The decision and order by the State Land Use Commission in 1991 for the West Kapolei lands already in the urban district contains a school condition that requires Aina Nui to provide a contribution for school facilities. It would be beneficial to the DOE to have a similarly worded standard school fair-share condition placed on any new lands to be added to the West Kapolei project. We request use of the following standard fair-share language:

The Applicant shall contribute to the development, funding, and/or construction of school facilities, on a fair-share basis, as determined by and to the satisfaction of the Department of Education. Terms of the contribution shall be agreed upon in writing by the Applicant and the Department of Education prior to obtaining county rezoning.

The DOE appreciates the opportunity to express our concerns and requests a school fair-share contribution. If you have any questions, please call Rae Loui, Assistant Superintendent of the Office of Business Services, at 586-3444 or Heidi Meeker of the Facilities and Support Services Branch at 733-4862.

Very truly yours,



Patricia Hamamoto
Superintendent

PH:hy

c: Rae Loui, Asst. Supt., OBS
Mamo Carreira, CAS, Campbell/Kapolei/Waianae Complex Area
Genevieve Salimonsen, Office of Environmental Quality Control
Bert Saruwatari, State Land Use Commission
Corlyn Olson Orr, Helber Hastert & Fee

Helber Hastert & Fee
Planners, Inc.

June 2, 2005

Ms. Patricia Hamamoto, Superintendent
Department of Education
State of Hawaii
P.O. Box 2360
Honolulu, HI 96804

Dear Ms. Hamamoto:

**Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawaii**

Thank you for your letter to Ms. Donna Goth, President of Aina Nui Corporation, dated April 13, 2005 in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). We have reviewed your comments and offer the following responses.

The student capacity and enrollment projections described in the Final EIS have been corrected to accurately represent the information presented in Table 21. Section 6.7.1 of the Final EIS states that Kapolei Elementary and Middle Schools will be over capacity in 2009, and that Barbers Point Elementary School is currently under capacity and will remain under capacity according to projections for 2009. In addition, the Final EIS includes a summary statement that enrollment in Kapolei area schools is close to or already exceeding facility capacity and that enrollment is expected to increase further within the next five years, resulting in a significant need for a middle school in the area.

A new section (Section 6.7.3 Mitigation) has been added to the Final EIS to describe proposed mitigation measures. Proposed mitigation measures include dedication of a 15.5-acre site for a DOE Middle School to fulfill the project's fair share obligation. Aina Nui Corporation is committed to contributing to the development, funding and/or construction of school facilities, on a fair-share basis, as determined by, and to the satisfaction of the DOE. We note that the 10-acre middle school site proposed in the Draft EIS has been expanded to 15.5 acres in the Final EIS as you requested.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

Sincerely,

HELBER HASTERT & FEE, Planners



Thomas A. Fee, AICP
President



MPY-11-2005 14:33 FROM:HI DEPT OF HEALTH 808 586 4370 TO:808 545 2050 P.1/1

Ms. Patricia Hamamoto
June 2, 2005
Page 2

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control



LINDA LINGLE
GOVERNOR OF HAWAII

CHYONE L. FLORNO, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. Box 3378
HONOLULU, HAWAII 96801-3378

In reply, please refer to:
EPO-04-091a

May 11, 2005

Ms. Corlyn Olson Orr
Helber Hastert & Fee
Pacific Guardian Center
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Dear Ms. Orr:

SUBJECT: Draft Environmental Impact Statement
Kapolei West Expansion Project
Ewa, Oahu, Hawaii

Thank you for allowing us to review and comment on the subject document. We have no comment at this time and please refer to our website for the Standard Comments (<http://www.state.hi.us/health/environmental/env-planning/landuse/landuse.html>). If there are any questions about these standard comments please contact Jiacai Liu with the Environmental Planning Office at 586-4346.

Sincerely,

JUNE F. HARRIGAN-LUM, MANAGER
Environmental Planning Office

- c: SDWB
- EPO
- SHWB
- CWB
- WWB
- CAB
- HEER

Helber Hastert & Fee
Planners, Inc.

June 2, 2005

Ms. June F. Harrigan-Lum, Manager
Environmental Planning Office
Department of Health
State of Hawaii
P.O. Box 3378
Honolulu, HI 96801-3378

Dear Ms. Harrigan-Lum:

**Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawaii**

Thank you for your letter dated May 11, 2005 in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). We note that you have no comments to offer at this time and that we should refer to the Standard Comments.

We note that the Final EIS has been re-organized to separate the discussion of probable impacts and mitigation. Resource areas in Chapters 4.0 and 6.0 have been replaced with new sections that describe the proposed mitigation measures. A new section, Section 4.5.3 Mitigation, states that the golf course would be operated in compliance with Conditions No. 13 (The Eight Conditions Applicable to this Golf Course Development prepared by the State Department of Health dated April, 1990) and No. 14 (employment of a qualified golf course manager to oversee golf course irrigation and maintenance) established by the Land Use Commission Docket No. A90-655/West Beach Estates Decision and Order.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

Sincerely,

HELBER HASTERT & FEE, Planners



Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control

Pacific Guardian Center • 733 Bishop Street, Suite 2590 • Honolulu, Hawaii 96813
Tel. 808.545.2055 • Fax 808.545.2050 • www.hhf.com • e-mail: info@hhf.com

LINDA LINGLE
GOVERNOR



STATE OF HAWAII

DEPARTMENT OF HUMAN SERVICES
HOUSING AND COMMUNITY DEVELOPMENT CORPORATION OF HAWAII

677 QUEEN STREET, SUITE 300
Honolulu, Hawaii 96813
FAX: (808) 587-3600

April 28, 2005

Ms. Donna Goth, President
Aina Nui Corporation
1001 Karmokila Boulevard, Suite 255
Kapolei, Hawaii 96707

Dear Ms. Goth:

Subject: Kapolei West Expansion Area, Ewa, Oahu, Hawaii
Draft Environmental Impact Statement

The Housing and Community Development Corporation of Hawaii (HCDC) has reviewed the Draft Environmental Impact Statement (DEIS) dated March 2005 for the subject Petition Area. We note that the Petition Area is projected to provide 1,150 residential units, of which 510 is generally oriented to the primary residential market and 640 units generally oriented toward second/second homebuyers. We note that the development would provide affordable housing opportunities in accordance with applicable City and County of Honolulu affordable housing requirements.

There is currently a great need for affordable housing in the state, and we certainly welcome the opportunity for the development of affordable housing by the private sector. The DEIS has not quantified the number of housing units that qualify as affordable housing units under the City and County of Honolulu affordable housing requirements and therefore, we suggest that the final environmental impact statement consider the inclusion of any discussion with the City and County of Honolulu on the potential number of affordable housing units that will be contributed by this development.

Thank you for the opportunity to comment.

If there are any questions regarding this matter, please call Leo Domingo, Project Coordinator, at 587-3170.

Sincerely,



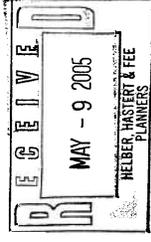
Stephanie Aveiro
Executive Director

c: The Office of Environmental Quality Control
Land Use Commission, State of Hawaii
✓ Helber Hastert & Fee, Planners

STEPHANIE AVEIRO
EXECUTIVE DIRECTOR

PAMELA Y. DODSON
EXECUTIVE ASSISTANT

IN REPLY REFER TO:
05.DEV/0193



Helber Hastert & Fee
Planners, Inc.

Ms. Stephanie Aveiro
June 2, 2005
Page 2

June 2, 2005

Ms. Stephanie Aveiro, Executive Director
Department of Human Services
Housing and Community Development Corporation of Hawai'i
State of Hawaii
677 Queen Street, Suite 300
Honolulu, HI 96813

Dear Ms. Aveiro:

**Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawai'i**

Thank you for your letter to Ms. Donna Goth, President of Aina Nui Corporation, dated April 28, 2005 (05:DEV/0193) in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). We appreciate your general comments regarding the need for affordable housing in the State of Hawai'i and specific suggestions that the Final EIS document discussions with the City and County of Honolulu regarding the quantity of affordable housing that will be contributed by the subject project. Your letter refers to the text of Draft EIS Section 5.2.2 Housing-Probable Impacts. Section 5 is reorganized in the Final EIS to address impacts and mitigation separately. The following language is added as part of the new subsection, Section 5.2.3 Mitigation:

"In developing the Petition Area, the Petitioner agrees to provide affordable housing opportunities for low and moderate income residents of the State of Hawai'i to the satisfaction of the City and County of Honolulu. The location and distribution of the affordable housing or other provisions for affordable housing shall be under such terms as are mutually agreeable between Petitioner and the City and County of Honolulu."

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

Sincerely,

HELBER HASTERT & FEE, Planners



Thomas A. Fee, AICP
President



cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control

PETER T. YOUNG
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

AKAHIKI RESOURCES
BUREAU OF CONSERVATION
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND AND NATURAL RESOURCES
STATE PARKS



LINDA LINGLE
GOVERNOR OF HAWAII

RECEIVED
2005 APR -1 A 10:41



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

March 28, 2005

Suspense Date: 4/7/05

LD/NAV
KAPOLEIWESTEISP.CMT4

MEMORANDUM:

TO: ✓ XXX Engineering Division
XXX Division of Forestry and Wildlife
XXX Commission on Water Resource Management
XXX Conservation and Coastal Lands
XXX Land-Oahu District Land Office

FROM: Warren F. Wegesend Jr.
Land Division

SUBJECT: Draft Environmental Impact Statement
Kapolei West Expansion Project

Please review the attached document pertaining to the subject matter and submit your comment (if any) on Division letterhead signed and dated by the suspense date.

Should you need more time to review the subject matter, please contact Nick Vaccaro at 587--0384.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

() We have no comments. *Additional comments attached to the document.*
Date: 4/1/05
Signed: *Eric T. Hirono*

Division: *Engineering* Name: ERIC T. HIRONO, CHIEF ENGINEER

05 MAR 30 AM 09:29 ENGINEERING

PETER T. YOUNG
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

AKAHIKI RESOURCES
BUREAU OF CONSERVATION
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND AND NATURAL RESOURCES
STATE PARKS



LINDA LINGLE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

April 26, 2005



KAPOLEIWESTEISP.RCM4
LD-NAV

Helber Hastect & Fee, Planners, Inc.
Corlyn Olson Orr, Project Planner
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Dear Ms. Orr:

SUBJECT: Draft Environmental Impact Statement for the Proposed Kapolei West Project, Island of Oahu, Hawaii

Thank you for the opportunity to review and comment on the subject matter

A copy of the document pertaining to the proposed project was transmitted or made available to the following Department of Land and Natural Resources' Divisions for their review and comment.

- Division of Forestry & Wildlife
- Engineering Division
- Commission on Water Resource Management
- Office of Conservation and Coastal Lands
- Land-Oahu District Land Office

Enclosed please find a copy of the Engineering Division response and Commission on Water Resource Management comment.

Based on the attached responses, the Department of Land and Natural Resources has no other comment to offer on the subject matter.

Should you have any questions, please contact Nicholas A. Vaccaro of the Land Division Support Services Branch at 587-0384.

Very truly yours,

Nicholas A. Vaccaro
NICHOLAS A. VACCARO
Acting Administrator

C: ODLO

1773

LINDA LINGLE
GOVERNOR OF HAWAII



PETER T. YOUNG
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

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LAND DIVISION

2005 APR - b A 11: 03



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

PETER T. YOUNG
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

LINDA LINGLE
GOVERNOR OF HAWAII



PETER T. YOUNG
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

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LAND DIVISION

2005 APR - 4 A 10: 01



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

LD/NAV
KAPOLEIWEESTEISP.CMT4

Suspense Date: 4/7/05

March 28, 2005

MEMORANDUM:

TO: XXX Engineering Division
 XXX Division of Forestry and Wildlife
XXX Commission on Water Resource Management
XXX Conservation and Coastal Lands
 XXX Land-Oahu District Land Office

FROM: Warren F. ^WWegesend Jr.
Land Division

SUBJECT: Draft Environmental Impact Statement
Kapolei West Expansion Project

Please review the attached document pertaining to the subject matter and submit your comment (if any) on Division letterhead signed and dated by the suspense date.

Should you need more time to review the subject matter, please contact Nick Vaccaro at 587--0384.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

We have no comments. () Comments attached.

Date: APR 4 2005

Division _____

Signed: Paul J Conry
Name: PAUL J. CONRY, ADMINISTRATOR
DIVISION OF FORESTRY AND WILDLIFE

LD/NAV
KAPOLEIWEESTEISP.CMT4

Suspense Date: 4/7/05

March 28, 2005

MEMORANDUM:

TO: XXX Engineering Division
XXX Division of Forestry and Wildlife
XXX Commission on Water Resource Management
XXX Conservation and Coastal Lands
 XXX Land-Oahu District Land Office

FROM: Warren F. ^WWegesend Jr.
Land Division

SUBJECT: Draft Environmental Impact Statement
Kapolei West Expansion Project

Please review the attached document pertaining to the subject matter and submit your comment (if any) on Division letterhead signed and dated by the suspense date.

Should you need more time to review the subject matter, please contact Nick Vaccaro at 587--0384.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

We have no comments. () Comments attached.

Date: 4/4/05

Division LAND - OAHU

Signed: Cecil Santos
Name: CECIL SANTOS
W

RECEIVED
LINDA LINGLE LAND DIVISION
GOVERNOR OF HAWAII

2005 APR -7 A 9:54



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P.O. BOX 621
HONOLULU, HAWAII 96809
COMMISSION ON WATER RESOURCE MANAGEMENT

PETER T. YOUNG
CHIEF
MEREDITH J. CHING
CLAYTON W. DELA CRUZ
JAMES A. FRAZIER
CHYOMIE L. FUKINO, M.D.
LAWRENCE H. MIKE, M.D., J.D.
STEPHANIE A. WHALEN
DEAN A. NAKANO
ACTING DEPUTY DIRECTOR

April 6, 2005

Ref: Kapolei West.deis.dr

TO: Mr. Warren Wegesend, Jr., Administrator
Land Division

FROM: Dean A. Nakano, Acting Deputy Director
Commission on Water Resource Management (CWRM)

SUBJECT: Draft Environmental Impact Statement, Kapolei West Expansion Project

Thank you for the opportunity to review the subject document. Our comments related to water resources are marked below.

In general, the CWRM strongly promotes the efficient use of our water resources through conservation measures and use of alternative non-potable water resources whenever available, feasible, and there are no harmful effects to the ecosystem. Also, the CWRM encourages the protection of water recharge areas, which are important for the maintenance of streams and the replenishment of aquifers.

- We recommend coordination with the county government to incorporate this project into the county's Water Use and Development Plan.
- We recommend coordination with the Engineering Division of the State Department of Land and Natural Resources to incorporate this project into the State Water Projects Plan.
- We are concerned about the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.
- A Well Construction Permit and/or a Pump Installation Permit from the Commission would be required before ground water is developed as a source of supply for the project.
- The proposed water supply source for the project is located in a designated water management area, and a Water Use Permit from the Commission would be required prior to use of this source.
- Groundwater withdrawals from this project may affect streamflows, which may require an instream flow standard amendment.
- We are concerned about the potential for degradation of instream uses from development on highly erodible slopes adjacent to streams within or near the project. We recommend that approvals for this project be conditioned upon a review by the corresponding county's Building Department and the developer's acceptance of any resulting requirements related to erosion control.

Mr. Warren Wegesend
Page 2
April 6, 2005

If the proposed project includes construction of a stream diversion, the project may require a stream diversion works permit and amend the instream flow standard for the affected stream(s).

If the proposed project alters the bed and banks of a stream channel, the project may require a stream channel alteration permit.

OTHER:

Regarding the granting of new water use permits (Section 4.5.1, pg. 4-11). There are actually 7 criteria that must be met in order to obtain a new water use permit, one of which is water availability. There is a typographical error in the same section; current allocations in Ewa-Kunia total 15,457 mgd, not 15,547 mgd. (We realize that this is probably the result of the typographical error made in our comments to the EIS Preparation Notice, for which we apologize.) Also, current allocations in the Waipahu-Waiawa Aquifer System total 82,91 mgd.

The report indicates that potable water will be obtained from the Board of Water Supply (BWS). BWS has the authority to allocate the use of water from their system within the limits approved by the CWRM for municipal purposes. However, it should not be assumed that any unused municipal allocation will be available for this project's needs. The developer should first consult and coordinate with BWS.

The Commission supports the viable and appropriate reuse of reclaimed water, particularly over the Ewa Caprock Aquifer that has been declared a nonpotable water resource by the Commission, in so far as it does not compromise beneficial uses of existing water resources. The use of non-potable alternatives, such as wastewater reuse from the Honolulu Wastewater Reclamation Facility, is highly encouraged and an analysis of such alternative use would be required should water use permits from be required or modified to supply developments on these parcels.

The statement in Section 6.2.1 that "groundwater in the Waianae Aquifer does not meet potability standards..." is overly broad and should be clarified because there are numerous municipal supply wells that tap the Waianae Aquifer.

The total estimated demands in Section 4.5.2 (1.02 mgd potable and 1.11 mgd nonpotable) appear to be slightly inconsistent with the demand estimates given in Section 6.2.2 (1.24 mgd potable and 1.00 mgd nonpotable).

If there are any questions, please contact Lenore Y. Nakama at 587-0218.

LINDA LINGLE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

PETER T. YOUNG
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

AQUATIC RESOURCES
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAPUOLANI SUBSISTENT COMMISSION
LAND
STATE PARKS

March 28, 2005

LD/NAV
KAPOLEIWEI@SP.CMT4

Suspense Date: 4/7/05

MEMORANDUM:

TO: XXX Engineering Division
XXX Division of Forestry and Wildlife
✓ XXX Commission on Water Resource Management
XXX Conservation and Coastal Lands
XXX Land-Oahu District Land Office

FROM: Warren F. Wegesend Jr.
Land Division

SUBJECT: Draft Environmental Impact Statement
Kapolei West Expansion Project

Please review the attached document pertaining to the subject matter and submit your comment (if any) on Division letterhead signed and dated by the suspense date.

Should you need more time to review the subject matter, please contact Nick Vaccaro at 587--0384.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

() We have no comments.

(X) Comments attached.

Date: 4-4-05

Signed: Warren F. Wegesend

Division LD/NAV

Name: Warren F. Wegesend

Helber Hastert & Fee
Planners, Inc.

June 2, 2005

Mr. Harry M. Yada, Acting Administrator
Land Division
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, HI 96809

Dear Mr. Yada:

Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawaii

Thank you for your letter dated April 26, 2005 in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). We note that the Engineering Division, the Division of Forestry and Wildlife, and the Oahu District Land Office had no additional comments, and that their previous comments on the EIS Preparation Notice were attached to the Draft EIS.

We offer the following comments in response to specific comments from the Commission on Water Resource Management (Commission).

1. The project will continue to coordinate its efforts with the Honolulu Board of Water Supply (BWS). As the Kapolei West project proposes to combine the Petition Area with the former Ko Olina Phase II project area, an updated water master plan will be submitted to the BWS for review and approval.
2. It is expected that the project will be served by existing water sources. However, if it is determined that additional well or pump improvements would be necessary, the Commission will be notified and the appropriate permits would be applied for.
3. Section 4.5.1 of the Draft EIS (page 4-11) states that the project area overlies the Waianae Basalt Aquifer, which is "included in the Ewa-Kunia Aquifer System that comprises the Pearl Harbor Groundwater Management Area." The need for a water use permit from the Commission is indicated in the summary of necessary permits and approvals on page 1-8 of the Draft EIS.
4. The Final EIS has been corrected to report the current allocation of the Ewa-Kunia Aquifer System at 15,457 mgd and the current allocation of the Waipahu-Waiawa Aquifer System at 82.91 mgd.

Helber Hastert & Fee
Planners, Inc.

Harry M. Yada
June 2, 2005
Page 2

5. Water requirements will continue to be coordinated with the BWS and the Commission. The following language has been added to Section 4.5.2 of the Final EIS to address your concern that the project should not assume that the Board of Water Supply's (BWS) unused municipal allocation would be available to meet project demands.

"The BWS has the authority to allocate the use of water from their system within the limits approved by the Commission for municipal purposes. The source of potable water for the project would be coordinated with the BWS and the Commission, and the availability of water for the project would be confirmed by the BWS when building permits are approved."

6. The use of reclaimed water for irrigation purposes is currently being planned for. The Draft EIS states that non-potable water would be used for landscaping and golf course irrigation, and that the source of non-potable water may be Pump 10 or reclaimed wastewater supplied by BWS. We thank you for pointing out that the Commission would require an analysis of non-potable alternatives prior to the approval or modification of water use permits in support of the project.

7. We note that numerous municipal supply wells tap the Waianae Aquifer, and that Section 6.2.1 of the Draft EIS inaccurately states that "groundwater in the Waianae Aquifer does not meet potability standards." The Final EIS has been revised to clarify that "groundwater in the Waianae Aquifer in the vicinity of the project site does not meet potability standards."

8. The total estimated water demands in Section 4.5.2 of the Final EIS have been revised. The aggregate potable water demand for the Kapolei West project (Petition Area and Urbanized Area) is estimated to be 1.24 mgd and the aggregate non-potable water demand is 1.00 mgd, resulting in a total aggregate water demand (potable and non-potable) for the Kapolei West project of 2.24 mgd.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

Sincerely,

HELBER HASTERT & FEE, Planners



Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii

Helber Hastert & Fee
Planners, Inc.

Harry M. Yada
June 2, 2005
Page 3

Genevieve Salmonson, Office of Environmental Quality Control

LINDA LINGLE
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
859 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

May 20, 2004

RODNEY K. HARAGA
DIRECTOR

Deputy Directors
BRUCE Y. MATSUI
LINDEN H. JOESTING
BRIAN H. SEKIGUCHI

IN REPLY REFER TO:

STP 8.1162

Mr. Thomas A. Fee, AICP
Page 2
May 20, 2004

STP 8.1162

Mr. Thomas A. Fee, AICP
Principal
Helber Hastert & Fee Planners, Inc.
Pacific Guardian Center
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Dear Mr. Fee:

Subject: Kapolei West
Draft Environmental Assessment, Pre-Assessment Consultation
TMK: 9-1-14; por. 33; 9-1-15; por. 4 and por. 20

Thank you for your letter of April 20, 2004, advising us of the proposed subject development project and environmental document. We have the following comments:

1. If highway improvements are being proposed, we would like to be apprised of such plans and schedules.
2. To facilitate our review of project and environmental documents, we request that four (4) copies of a full and standard-paged Traffic Impact Analysis Report (TIAR), including complete appendices showing calculation sheets and traffic counts, be provided, along with four (4) copies of any environmental assessment report. The TIAR should include a discussion on the linkages and connections the project's roadways will have with the overall integration of vehicle, transit, pedestrian and bikeway traffic for the area and, as necessary, contingent or interim mitigation measures as the project progresses in phases and/or increments.
3. Proposed plans for any road crossing of the OR & L right-of-way (ROW), easement rights or need for access into any of our highway ROW will need our review and approval, and may be subject to documentation and consideration of payment requirements.
4. Design of the Leeward Bikeway in the OR & L ROW between Ewa and Luualalei may begin within a year and construction may begin in 2007. Because the proposed subject development abuts the OR & L ROW, we request that the developer consider participating in improvements in and/or connecting to the ROW along their common boundary.

5. The proposed subject development will be subject to the impact fees under Chapter 33A, Revised Ordinances, City and County of Honolulu. The timetable of development, construction and occupancy for the project through full build-out should be outlined so that the project's contribution of its fair share for regional highway improvements can be reviewed.

The development will have an impact on the Kapolei-Ko'Olina Area, Ewa Region and adjacent communities connected by the H-1 corridor. As an interested party, we appreciate being informed in advance and for the opportunity to provide our comments.

We look forward to receive further information on the subject development.

Very truly yours,

RODNEY K. HARAGA
Director of Transportation

- c: Mr. Anthony Ching, Land Use Commission
Mr. Eric Crispin, Department of Planning & Permitting

To	CORLYN ORS
Co./Dept.	DOT
Phone #	
Fax #	545-2050



STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 869 PUNCHBOWL STREET
 HONOLULU, HAWAII 96813-5097

RODNEY K. HARAGA
 DIRECTOR
 Deputy Director
 BRUCE Y. MATSUI
 BARRY FUKUNAGA
 BRIAN H. SERKOUCH
 IN REPLY REFER TO:

STP 8,1498

December 14, 2004

TO: MARY LOU KOBAYASHI, ADMINISTRATOR
 OFFICE OF PLANNING
 DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

FROM: RODNEY K. HARAGA
 DIRECTOR OF TRANSPORTATION

SUBJECT: AINA NUI CORPORATION, PETITION FOR AMENDMENT TO
 STATE LAND USE DISTRICT BOUNDARIES, DOCKET NO. A04-753 -
 KAPOLEI WEST
 TMK: 9-1-14; por. 33; 9-1-15; por. 4 and por. 20

In reply to your request for our review of the subject petition, we have the following comments on the proposed development project presented in the petition:

- 1 Our transportation facilities will be affected by the project and our earlier comments provided to the petitioner's consultant in our letter STP 8.1162 dated May 20, 2004 (copy attached), are still valid and applicable. We are awaiting submittal of a traffic impact analysis report (TIAR); and anticipate that we will have additional comments after we have an opportunity to review the TIAR.
2. The project is not within the airport noise contours of our airports on Oahu, which would require noise mitigation or aviation easements. However, the project site is subject to aircraft overflights and the petitioner should disclose and advise occupants of such occurrences by aircraft.
3. In addition to our departmental review and approval, we understand that work within the OR & L railroad right-of-way will need prior review by the Railroad Society and Historic Preservation Office.
4. Use and occupancy agreements will be required for all project utilities within our highway right-of-ways and the railroad right-of-way.
5. Storm and surface water drainage from the area has already affected our harbor at Barbers Point. The drainage systems will need to prevent and/or control further runoff and flooding into the harbor. The drainage plans for the subject project should be submitted for our review and approval.

Ms. Mary Lou Kobayashi
 Page 2
 December 14, 2004
 STP 8,1498

6. The petitioner's placement of a portion of its residential units directly next to our harbor will subject the residences and occupants to dust, noise, fumes and lights from the maritime and related activities associated with the harbor's industrial activities. In particular, the residences will be in close proximity to a coral stockpile site. While our Harbors Division plans to develop a buffer zone around the coral stockpile, the petitioner should address this issue and provide for additional mitigation to protect its residents from dusty conditions.

7. The subject project is one of several developments proposed in the area. While this project and the other projects will each need their individual review and examination, there is need to review the collective and cumulative impact from all of these projects. Their timing and the placement and schedule of necessary transportation improvements that would be needed to accommodate the projects must be considered. The phasing of projects and improvements is a key matter requiring careful and thorough evaluation.

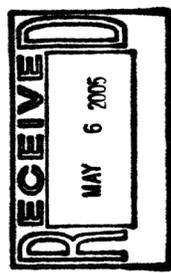
We appreciate the opportunity to provide our comments.

Attach.

c: Genevieve Salmonson, Office of Environmental Quality Control
 Bert Sanuwatari, Land Use Commission
 Donna Goth, Aina Nui Corporation

PostNet® Fax No. 7671	Date 5/6/05	# of Pages 1
To DONNA GOUGH	From PAUL S. J. O'NEILL	
Country	Co. DOT	
Phone #	Phone # 587-6304	
Fax # 674-3111	Fax #	

LINDA LINGLE
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
860 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5087

JNEY K. HARAGA
DIRECTOR

Deputy Director
BRYAN T. MATSUI
BARBARA M. HARRIS
BRENNON T. MOROOKA
BRIAN H. SENGBUCH

DIR 1.10108
DIR 0585

May 6, 2005

ADVANCE COPY

Ms. Donna Goth
President
Aina Nui Corporation
1001 Kamokila Boulevard, Suite 255
Kapolei, HI 96707

Dear Ms. Goth:

Subject: Aina Nui Corporation, Kapolei West Expansion Area
Draft Environmental Impact Statement, March 2005
(includes Traffic Impact Assessment Report dated November 2004)

In response to the request for our review of the subject Draft EIS, which include a traffic impact assessment report (TIAR), this is to advise you that the prior comments in our letters STP 8.1162 dated May 20, 2004 and STP 8.1498 dated December 14, 2004 (copies attached) are still applicable. The following supplements and updates our earlier comments:

- The Draft EIS indicates that a drainage channel from the project is planned to drain into Kalaeloa Barbers Point Harbor. We were unaware that a channel connecting to the surrounding land owners and developers that runoff into the harbor was creating problems. You need to explore alternatives to the proposed channel. Please keep our Department apprised of your drainage plans; you may submit preliminary plans for our early input.
- We remain concerned that the plans for the proposed project, at its southern most end, reflect developing residences next to Kalaeloa Barbers Point Harbor. Residential units that close to the harbor will be impacted by noise, odors, fumes, dust and industrial-security lights from the harbor. Related commercial or industrial uses are more compatible to the site because of its proximity to the harbor. If, however, the plans

remain as a residential development, (a) mitigation measures, including special materials in the design and construction of improvements will be needed, (b) the developer/seller should provide proper disclosure to prospective occupants and users of this area and (c) a covenant, running with the land, indemnifying the State of harbor impacts on the project, should be incorporated into the ownership, use or lease agreement and evidence of the indemnification should be provided to our Department.

3. While the TIAR and Draft EIS describe impacts and identify recommended highway improvements, there is need to update and revise the documents. Ongoing work and meetings, between the State/County agencies and your staff/consultants have been conducted, to cover the integration and coordination of our Department's highway facilities with the internal roadways and connecting road linkages to adjacent land developments. For example, our department and the local FHWA office staffs recently met with your representatives on road project funding and a design/planning adjustment to a ramp connection and resulting traffic changes. The roadway changes should be documented in an update.

With regard to the TIAR itself, we have the following additional technical comments that also need to be addressed when revising the traffic report:

- Various roadway improvements are being assumed to be in place by the project opening, e.g. Kalaeloa Boulevard widened to six lanes; completion of Kapolei interchange. This is overly optimistic, and alternative interim improvements should be identified which will accommodate the traffic.
- Table 2-1 shows the analysis of intersections. It would be helpful to have the table or portions of it duplicated in later sections of the report when discussions of an intersection occur so that referencing and correlating information can be easier.
- Existing Traffic Conditions Chapter - (1) The report states that at the Makakilo Drive/Farrington Highway intersection congestion is a result of long cycle lengths and the number of signal phases. The evaluation should include a discussion of other factors; (2) A speed study or other evidence is needed to support the statement that "...field observations indicate that a substantial portion of drivers exceed this speed."
- Supporting analysis or separate evaluation of the ramps was not included in the traffic report. Such ramp analysis should be included with the necessary mitigation.
- Use of the Specialty Retail Center category for trip generation is not recommended. Shopping Center trip rates should be used.

Ms. Donna Goth
Page 2
May 6, 2005

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3

Ms. Donna Goth
Page 3
May 6, 2005

f. Drawings, diagrams or illustrations of roadway and intersection improvements being recommended or required by the traffic report should accompany the descriptions in the text. Having the written text and an image of the improvements facilitates reviewing and comparing the existing situation and proposed remedies.

g. Intersections should be designed to avoid "split-phased" operation.

We appreciate the opportunity to provide our comments.

Sincerely,

RODNEY K. HARAGA
Director of Transportation

Attachment

cc: OEQC (G. Salmonson)
LUC (A. Ching; B. Saruwatari)
OP (L. Thielert; M.L. Kobayashi)
Helber, Hastert & Fee (C. Olson-Orr)

Helber Hastert & Fee
Planners, Inc.

June 2, 2005

Mr. Rodney K. Haraga, Director
Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, HI 96813-5097

Dear Mr. Haraga:

**Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawaii**

Thank you for your letter to Ms. Donna Goth, President of Aina Nui Corporation, dated May 6, 2005 (DJR 1.10108) in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). This letter is to acknowledge your comments, which includes previous letters dated May 20, 2004 (STP 8.1162) and December 14, 2004 (STP 8.1498). We have reviewed your comments and offer the following responses.

1. A portion of the project site is planned to discharge into the existing Ko Olina drainage facilities with the remaining areas to be conveyed to a drainage channel running through the proposed West Kalaieoa development makai of Kapolei West. The West Kalaieoa drainage channel is planned to be located east of Kalaieoa Harbor, running along the western boundary of the existing Chevron, USA facility. Consequently, runoff from the project would be routed around the harbor.
 2. We note your concerns that the proposed residential uses next to Kalaieoa Barbers Point Harbor may be incompatible with the industrial activities of the harbor, and that this southernmost parcel of the Petition Area should be reserved for commercial or industrial uses. Although commercial and industrial uses were considered during the initial planning for this area due to its proximity to the harbor, residential uses were favored due to the existing and planned resort uses bordering the parcel's western edge. The proposed residential development would maintain a western orientation (i.e., towards the Ko Olina Golf Course and Marina) to minimize noise, air quality and nuisance impacts associated with the harbor's industrial activities. Landscape screening and fencing would be provided along the boundary with the harbor.
- The following statements have been added to Sections 4.11.3 Mitigation and 4.12.3 Mitigation of the Final EIS to address your concerns. We also note that the Final EIS format has been modified to include a separate "mitigation" section for resource areas that warrant mitigation.

"Appropriate landscape screening would be constructed along the south and eastern perimeter of Parcel K to minimize noise, odor, dust and security lighting impacts from

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Helber Hastert & Fee
Planners, Inc.

Rodney K. Haraga
June 2, 2005
Page 2

the nearby deep draft harbor. The Petitioner would provide proper disclosure to prospective occupants and users of the possible odor, air, noise, dust and light pollution resulting from surrounding harbor activities, industrial uses and aircraft overflights. Ownership, use or lease agreements would incorporate permanent covenants indemnifying the State of Hawaii and the U.S. Government of impacts on the project, with evidence of the indemnification provided to the SDOT.

3. Comments on the TIAR

As noted, Engineering Concepts Inc. has been meeting with State DOT concerning the configuration of new ramp connections to the H-1 Freeway in Kapolei, including the planned Westbound On-Ramp at the Makakilo Interchange and potential modifications to Palalailai Interchange. The Kapolei West TIAR addressed the potential changes to the future Hanua Street ramp connections that were proposed by the developer to mitigate impacts at the Kalaeloa Boulevard intersections with the Kapolei Parkway and the regional commercial center driveways since these were part of the mitigative actions proposed for the development. The traffic study did not reflect the planned Westbound On-Ramp due to its distance from the Project and the uncertainty regarding the configuration and timing of the ramp. The absence of the on-ramp provides a more conservative assessment of traffic conditions at the Kalaeloa Boulevard intersection with Farrington Highway since the on-ramp would reduce the Waianae-bound through traffic on Farrington Highway at the intersection by an estimated 150 or more vehicles in each peak hour.

3a. Additional turn lanes will be provided at the Kapolei Parkway intersection with Kalaeloa Boulevard by the developer as part of the Kapolei West and Kapolei Commons developments. These will include the construction of double left-turn lanes on the maka-bound Kalaeloa Boulevard approach and on both approaches of the Kapolei Parkway. Right-turn lanes will be constructed on both Kalaeloa Boulevard approaches and on both approaches of the Kapolei Parkway. These should accommodate the traffic increases during the initial years until the Kalaeloa Boulevard widening and eastbound Kapolei Interchange on-ramps are constructed.

3b. The tables summarizing intersection conditions will be revised as requested to show existing and future year background traffic conditions for comparative purposes.

3c. The discussion of conditions at the Farrington Highway-Makakilo Drive intersection will be modified to also address level of conflicting traffic flows. The statement concerning driver speeds on the H-1 Freeway will be deleted from the TIAR.

3d. The key ramp affected by the Kapolei West development will be the weaving section for the Kalaeloa Boulevard eastbound on-ramp and the eastbound off-ramp to Farrington Highway. An assessment of this weaving section will be added as an appendix to the TIAR.

Helber Hastert & Fee
Planners, Inc.

Rodney K. Haraga
June 2, 2005
Page 3

3e. Shopping Center trip rates were used for the Kapolei West regional commercial development. The Specialty Retail rates were used for a number of other area commercial developments where the uses could be a mix of retail, services, and small office uses. Based on recent developer proposals, several of these appear likely to be developed with uses more reflective of a shopping center. These changes will be reflected in a TIAR currently being prepared for the Kapolei Commons development which is planned for the Kapolei West regional center and the adjacent parcel between that development and Kalaeloa Boulevard.

3f. Diagrams of proposed intersection improvements will be included in the TIAR.

3g. Intersections will be designed to avoid split-phased operation.

4. Comments from letters dated December 14, 2004 and May 20, 2004:

4a. Regarding your comment that the Petitioner should disclose and advise occupants of aircraft overflights, Section 4.12.2 Probable Impacts of the Draft EIS (page 4-24) includes the following language.

“The Petition Area is outside the 55 Ldn noise contours for the Honolulu International Airport and the Kalaeloa Airport. Although aircraft noise from occasional aircraft flyovers may be audible, the project meets HUD’s “acceptable” rating for aircraft noise and is compatible with the Federal Aviation Administration and State of Hawaii Department of Transportation, Airports Division land use compatibility guidelines for residential uses.”

New language similar to that described in item #2 on the previous page has been added to Section 4.12.3 of the Final EIS to address noise impacts of aircraft overflights.

4b. Proposed crossings of the OR&L railroad right-of-way (ROW) include three roadway crossings and two golf cart crossings. Proposed improvements and construction activities planned within the OR&L ROW will be coordinated with the Hawaiian Railway Society and the State of Hawaii Historic Preservation Division. Section 4.9.2 of the Final EIS has been revised to state that proposed OR&L ROW road and golf cart crossings would require review and approval by the SDOT.

4c. We thank you for your comments noting utility system improvements and roadway connections within State-owned highway ROWs or within the OR&L ROW may require easement rights or plan review and approval from the SDOT, and may be subject to documentation and consideration of payment requirements. We have revised Section 1.7 of the Final EIS to include construction plan approval and construction and use/occupancy permits from the SDOT in the summary of possible government permits and approvals required for development.

Helber Hastert & Fee
Planners, Inc.

Rodney K. Haraga
June 2, 2005
Page 4

4d. The Kapolei West master plan includes multipurpose pathways and a network of pedestrian and bicycle friendly roadways intended to encourage the use of alternative transportation. Given that pedestrian and bicycle components are planned as part of the project, we concur that the proposed Leeward Bikeway project should be incorporated into Kapolei West's transportation network. We ask that you and your consultants consult with Aina Nui Corporation and its representatives as the design and construction phases progress. References to the proposed Leeward Bikeway and how the two Petition Area parks and the proposed mauka/makai greenbelt corridor would complement public access to the bikeway have been incorporated into several sections of Chapter 3 of the FEIS discussing consistency with the Ewa Development plan to address your concerns.

4e. Per your letters dated May 20, 2004 and December 14, 2004, we note that the proposed development will be subject to the impact fees under Chapter 33A, Revised Ordinance, City and County of Honolulu. Project phasing is discussed in Section 2.5 of the Draft EIS. The timing and placement of transportation improvements is discussed in Section 6.1 of the Draft EIS.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

Sincerely,

HELBER HASTERT & FEE, Planners



Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control

LINDA LINGLE
GOVERNOR



ANTHONY J.H. CHING
EXECUTIVE OFFICER

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
STATE OF HAWAII
LAND USE COMMISSION

P.O. Box 2158
Honolulu, Hawaii 96804-2359
Telephone: 808-587-3822
Fax: 808-587-3827

April 28, 2005



Ms. Donna Goth
Aina Nui Corporation
1001 Kamokila Boulevard, Suite 255
Kapolei, Hawaii 96707

Dear Ms. Goth:

Subject: LUC Docket No. A04-753/Aina Nui Corporation
Draft Environmental Impact Statement (DEIS)
Kapolei West Expansion Area
Ewa, Oahu, Hawaii
Tax Map Keys: 9-1-14; por. 33; 9-1-15; por. 4 and por. 20

We have reviewed the DEIS for the subject project and have the following comments:

- 1) We note that in its discussion of faunal resources, the DEIS references an avifaunal and feral mammal survey conducted in August 1989 by Phillip L. Bruner for the Kapolei Business-Industrial Park Final Environmental Impact Statement (FEIS). The survey, however, is not included as an appendix in the DEIS. We request that the survey be included in the FEIS along with a written determination from the consultant to substantiate the validity of the findings in the 16-year-old survey.
- 2) Based on the project phasing, development of the Petition Area is anticipated to commence in the 2008 timeframe. Given that Hawaiian Cement's lease agreement to mine sand within the Petition Area is scheduled to expire in 2010, the impacts, if any, of the proposed development upon Hawaiian Cement's operation up to the expiration of its lease should be fully assessed.
- 3) To the extent that the Petition Area will include a portion of the 18-hole championship golf course that was approved under LUC Docket No. A90-655/West Beach Estates, a discussion as to how the golf course will operate in compliance with the applicable conditions of the Decision and Order (i.e., Condition Nos. 3, 13, and 14) should be provided.

Ms. Donna Goth
April 28, 2005
Page 2

- 4) We note that in chapter 4.0 entitled *Assessment of Affected Environment, Probable Impacts and Mitigation: Physical Environment* and chapter 6.0 entitled *Assessment of Affected Environment, Probable Impacts and Mitigation: Public Facilities and Services*, the discussion on impacts for several of the resources/facilities and services concludes that no mitigation is necessary. While this statement may be applicable to certain areas of the environment, we believe that it is misleading in cases where the DEIS clearly acknowledges that adverse impacts are probable and mitigative measures would be necessary.
- 5) Pursuant to section 11-200-20(d), HAR, the original copy of the DEIS or FEIS should be signed and dated by the applicant indicating that the statement and all ancillary documents were prepared under the signatory's direction or supervision and that the information submitted, to the best of the signatory's knowledge, fully addresses document content requirements as set forth in sections 11-200-17 and 11-200-18, HAR, as appropriate. We note that the DEIS is signed by the consultant, Helber Hastert & Fee, not the applicant as is required. This should be corrected when the FEIS is filed.
- 6) Pursuant to section 11-200-17(h), HAR, the status of each identified governmental approval required for the proposed action should be described.

We have no further comments to offer at this time. Please feel free to contact Bert Saruwatani of my office at 587-3822, should you require clarification or any further assistance.

Sincerely,


ANTHONY J. H. CHING
Executive Officer

c: Office of Environmental Quality Control
Corlyn Olson, Helber Hastert & Fee, Planners

Helber Hastert & Fee
Planners, Inc.

June 2, 2005

Mr. Anthony J.H. Ching, Executive Officer
Land Use Commission
Department of Business, Economic Development and Tourism
State of Hawaii
P.O. Box 2359
Honolulu, HI 96804-2359

Dear Mr. Ching:

**Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawaii**

Thank you for your letter to Ms. Donna Goth, President of Aina Nui Corporation, dated April 28, 2005 in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). We have reviewed your comments and offer the following responses.

1. Faunal Resources

The avifaunal and feral mammal survey conducted in August 1989 by Phillip L. Bruner for the Kapolei Business-Industrial Park has been appended to the Final EIS as Appendix E. Also included in Appendix E is a written determination from Mr. Bruner to substantiate the validity of his previous findings. Sections 4.8.1 and 4.8.2 of the Final EIS have been revised to reference Mr. Bruner's written statement and address his findings.

2. Status of Hawaiian Cement Lease

Negotiations are underway between the Estate of James Campbell and Hawaiian Cement to terminate those portions of the option agreements that allow Hawaiian Cement to mine sand in the petition area earlier than the scheduled 2010 date. These option areas are not critical to Hawaiian Cement operations in the area.

3. Golf Course Conditions

Land Use Commission Docket No. A90-655 West Beach Estates Decision and Order establishes conditions for golf course operations, including community benefits which may include adequate golf tee times at affordable rates for public play as determined by the Office of State Planning and the City and County of Honolulu (Condition No. 3); compliance with "The Eight Conditions Applicable to This Golf Course Development; prepared by the State Department of Health dated April, 1990 (Condition No. 13); and employment of a qualified golf course manager to oversee golf course irrigation and maintenance (Condition No. 14). Discussion regarding the project's compliance with these conditions has been added to Section 4.5.3 and Section 6.8.3.



Helber Hastert & Fee
Planners, Inc.

Mr. Anthony Ching
June 2, 2005
Page 2

4. Mitigation Measures

The Final EIS has been re-organized to separate the discussion of potential impacts and mitigation. Previous statements that concluded no mitigation is necessary have been deleted from the applicable resource areas in Chapters 4.0 and 6.0, and replaced with new sections that describe the proposed mitigation measures (discussed in the DEIS under Probable Impact).

5. Applicant Signature

Pursuant to section 11-200-20(d), Hawaii Administrative Rules, Ms. Donna Goth, President of Aina Nui Corporation, will sign the Final EIS.

6. Governmental Approvals

Section 1.7 (page 1-7) has been revised to note that permits and governmental approvals required for the Proposed Action would be pursued following approval of the Land Use District Boundary Amendment Petition.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

Sincerely,

HELBER HASTERT & FEE, Planners



Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control

LINDA LINGLE
GOVERNOR OF HAWAII



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May 6, 2005

Ms. Donna Goth
Aina Nui Corporation
1001 Kamokila Boulevard, Suite 255
Kapolei, Hawaii 96707

Mr. Anthony J. Ching
Land Use Commission, State of Hawaii
P.O. Box 2359
Honolulu, Hawaii 96804-2359

Ms. Corlyn Olson
Helber Hastert and Fee, Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Dear Mesdames Goth and Olson, and Mr. Ching:

The Office of Environmental Quality Control has reviewed the draft environmental impact statement for the Kapolei West Expansion Area project, Tax Map Keys, 1st 9-1-14, portion 33; 9-1-15, portion 4 and portion 20, in the judicial district of Ewa, and offers the following comments.

CUMULATIVE AND SECONDARY IMPACT ANALYSES: In Section 7.2, please include the planned roadways found on pages 6-6 and 6-7 of the draft environmental impact in your analyses of secondary and cumulative impacts for the region.

- SUSTAINABLE BUILDING GUIDELINES:** Please refer to the Office of Environmental Quality Control Internet Site at <http://www.state.hi.us/health/oecq/index.html> for sustainable building design guidelines for sustainable building design guidelines in your planning of the Kapolei West Expansion Area.

Thank you for the opportunity to comment. If there are any questions, please contact Mr. Leslie Segundo, Environmental Health Specialist, at (808) 586-4185.

Sincerely,



GENEVIEWE SALMONSON
Director

GENEVIEWE SALMONSON
DIRECTOR



Helber Hastert & Fee
Planners, Inc.

June 2, 2005

Ms. Genevieve Salmonson, Director
Office of Environmental Quality Control
State of Hawaii
235 Beretania Street, Suite 702
Honolulu, HI 96813

Dear Ms. Salmonson:

**Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawaii**

Thank you for your letter dated May 6, 2005 regarding your review of the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). Our responses are listed below under the subject headings in your letter.

1. Cumulative and Secondary Impact Analyses

The planned roadways described on pages 6-6 and 6-7 of the Draft EIS are not specified in Section 7.2 because they are considered to be necessary infrastructure improvements required to accommodate the proposed developments.

2. Sustainable building techniques

Thank you for referring us to "Guidelines for Sustainable Building Design in Hawaii." Aina Nui Corporation and its developers will consult this resource as the planning and design process continues. As much as is practical, the Kapolei West development will incorporate sustainable building design measures and implement energy and water conservation and recycling design measures and methods. In order to maintain adequate flexibility to be able to use the most current technologies and practices at the time of design and construction, it is impractical to commit to specific sustainable building techniques at this time.

We have added the following statements to the Final EIS to address the sustainable building design guidelines.

Section 3.1.1 Hawaii State Plan

Section 226-15 Objectives and policies for facility systems – solid and liquid wastes.

Discussion: "Design strategies and, construction technologies that support the use of recycled materials and conservation and recycling practices would be incorporated as appropriate."

Helber Hastert & Fee
Planners, Inc.

Ms. Genevieve Salmonson
June 2, 2005
Page 2

Section 226-16 Objectives and policies for facility systems – water.

Discussion: "Appropriate design and landscaping measures to encourage water conservation and minimize water consumption would be incorporated as appropriate."

Section 6.2.3 Mitigation

"It is also anticipated that the development would incorporate appropriate design and landscaping measures to encourage water conservation and minimize water consumption."

Section 6.5.3 Mitigation

"The development would implement design strategies and technologies that support the use of recycled materials and conservation and recycling practices when feasible."

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

Sincerely,

HELBER HASTERT & FEE, Planners



Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control



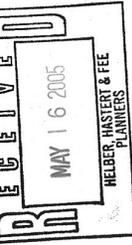


**DEPARTMENT OF BUSINESS,
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Ref. No. P-10932

May 13, 2005

Ms. Donna Goth, President
Aina Nui Corporation
1001 Kamokila Boulevard, Suite 255
Honolulu, Hawaii 96707

Dear Ms. Goth:

Subject: Kapolei West Expansion Area Draft Environmental Impact Statement (DEIS)

We have reviewed Aina Nui Corporation's DEIS supporting a Petition before the Land Use Commission (LUC) to reclassify 174.2 acres (Petitioner Area) from the State Land Use Agricultural District to the Urban District. The landowner intends to consolidate the Petitioner Area with a 372.6-acre land area reclassified to the Urban District in 1991 for the development of Phase II of the Ko Olina Resort. The combined acreages (546.8) will be used to develop a master planned residential and golf community that will include land uses consistent with the Hawaii State Plan, the Ewa Development Plan, and the initial Ko Olina Phase II plan.

The Ewa-Kapolei region has become Oahu's prime growth area in terms of population and development. This rapid growth is expected to continue well beyond 2020, and with or without the project, proposed roadway improvements will provide little relief to traffic congestion and traffic issues within this region unless employment traffic patterns change.

The DEIS Traffic Impact Assessment Report is not clear about the assessment of traffic conditions for the section of H-1 Freeway east of Makakilo and does not address the project's traffic impact on the rest of the freeway system beyond this intersection. The report relies on a number of transportation projects that have been planned for the Ewa District to accommodate projected increase in traffic to and within the Kapolei Area.

The traffic study determined the Level of Service (LOS) based on the ratio or the traffic volume to capacity (v/c), and the average delay per vehicle in seconds (ADPV) for existing and planned intersections within and outside of the project area. As noted on pages 6-12 of the DEIS, planned development between 2003 and 2014 will result in a nearly evenly split for congested travel patterns between Honolulu and Kapolei via the H-1 freeway. According to the

Ms. Donna Goth
Page 2
May 13, 2005

information provided in the DEIS, at build-out by 2020, improvements/mitigation at most of the 10 key intersections analyzed in the traffic study will improve average delays per vehicle scenarios. Morning and afternoon peak-hour conditions at most of these intersections will be operating at LOS D.

We recommend that the FEIS include descriptions of the characteristics that define each of the six levels of service (LOS). These descriptions more readily convey the impact that project build-out will have on the quality of travel on the roads, and may be more comprehensible to the lay reader. For example at LOS D, traffic approaches unstable flow, with tolerable operating speeds, and fluctuations in volumes and temporary restrictions to flow may cause substantial drops in operating speeds. Providing the reviewer a description associated with each level of service category (A, B, C, D, E, F) improves the reader's understanding of existing and anticipated traffic conditions.

In the traffic report, "peak hour" describes Monday to Friday morning and afternoon traffic when work hours dictate or control when people will be using the roadways to and from work. We recommend the FEIS and future traffic studies include a section that examines existing conditions on a Saturday when traffic congestion may not be necessarily reserved to "peak hours", but at constant levels throughout the day. These conditions should be projected and described for build-out at (2020) as well.

The Project Area transit center is described as a use that will facilitate public transit and usage. The FEIS should discuss whether park and ride areas for both motor vehicles and bicycles would be provided at the transit center.

We recommend that while the project is still within its conceptual stage, that discussions begin with City and County transit officials to coordinate the developer's intention to design convenient pedestrian linkages from each residential parcel to city designated bus stops.

Why is the word "should" used instead of "will" as in *A network of bicycle lanes and greenways should link the residential area to the middle school and nearby elementary school?* Stating that lanes and greenways will link these areas implies a commitment on the part of the developer to develop the project to meet those objectives. As well as linking residential areas to the middle and elementary schools, we recommend that the bikeway network also be designed to link to the transit, commercial and park areas within the project, and the existing Ko Olina Resort.

More recently, bikeways and roadways shared with bicycles are being evaluated according to LOS ratings to determine the bicycle compatibility index (BCI) of certain roads and the comfort levels of bicyclists using those roads. We recommend that the FEIS include ratings of bikeways proposed within and around the Project Area at build-out. We recommend the following publication from the Federal Highway Administration - *Development of the Bicycle Compatibility Index* Publication No. FHWA-RD-98-072.

Ms. Donna Goth
Page 3
May 13, 2005

We have begun to observe a repetitive conclusion on the part of developers to state that some of the residences within their proposed developments will only be of interest to, or more marketable to part-time residents, and that this segment of the population would generate significantly fewer trips to and from the development. The Final EIS should look at similar developments that have purported to include residences marketable to a segment of the population identified as generating fewer trips, and if measurable, provide data from those developments to determine if part-time residents within those developments do generate fewer trips.

We recommend that the FEIS include a figure that illustrates and identifies by name the 2014/2020 roadway network superimposed on the Kapolei West master plan. For example, we note that the Traffic Impact Assessment Report Appendix J includes figure 1-1 that labels/names the existing and proposed road system in relation with the project. This figure, with the existing and proposed roadways clearly readable, should be included in the body of the FEIS to enable the reviewer to see the relationship of the proposed road system with the proposed land uses.

The OR&L ROW was placed on the National Register of Historic Places in 1975. The Petition Area straddles the Oahu Railway and Land Company Railroad Right of Way (OR&L ROW). From the information provided in the DEIS, it appears that the ROW extends from the proposed transit/mixed-use parcel to northeast of the 7th hole. According to the DEIS, the OR&L ROW and other significant historic sites identified within the Petition Area would not be affected by the proposed development.

It is our understanding that the train operates on Sundays only. The rides leave the station located at the end of Renton Road in Ewa at 12:30 pm and 2:30 pm. The ride crosses the Petition Area to Paradise Cove at Ko Olina and back in about 90 minutes. We encourage the landowner to enter into a discussion with the operators of the train to incorporate the Oahu Railway into the Kapolei West Community transportation options.

Thank you for including us in the Draft Environmental Assessment Pre-Assessment Consultation process. If you have any questions, please contact Judith Henry at 587-2803.

Sincerely,



Laura H. Thielen
Director

c: Anthony Ching, Land Use Commission
✓ Ms. Corlyn Olson Orr, Helber Hasert & Fee, Planners
Office of Environmental Quality Control

Helber Hasert & Fee Planners, Inc.

June 2, 2005

Ms. Laura H. Thielen, Director
Office of Planning
Department of Business, Economic Development and Tourism
State of Hawaii
P.O. Box 2359
Honolulu, Hawaii 96804

Dear Ms. Thielen:

Kapolei West Expansion Area Draft Environmental Impact Statement Kapolei, Ewa District, O'ahu, Hawaii

Thank you for your letter to Ms. Donna Goth, President of Aina Nui Corporation, dated May 13, 2005 in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). We have reviewed your comments and offer the following responses.

1. Traffic Conditions east of Makakilo

The combined residential units in the current plan for both the urbanized portion and the petition portion of the Kapolei West development total substantially less than those in the portion previously indicated for urban development in the Ewa Development Plan (2,370 current plan versus 3,500 previous plan). Given the relative reduction in regional impacts as compared to the previously anticipated development, the assessment of regional impacts east of Kapolei area was limited to the section of the H-1 Freeway west of the Makakilo Interchange.

2. Description of Traffic Levels of Service

A description of the characteristics that define each of the levels of service will be incorporated into the TIAR and reprinted in the FEIS.

3. Saturday Traffic Conditions

The regional commercial development will generate more traffic on a Saturday than during weekday peak commute hours. A separate TIAR is currently being prepared for the proposed Kapolei Commons development, which will include both the regional commercial development and the adjacent parcel between the regional commercial parcel and Kālaeoa Boulevard. The TIAR for this combined commercial development will include traffic forecasts and analyses for year 2010 Saturday peak hour conditions, as well as weekday peak hours, along the adjacent roadways.



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Planners, Inc.

Ms. Laura H. Thielen, Director
June 2, 2005
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4. Project Area Transit Center

The Project Area Transit Center will include waiting and boarding facilities for TheBus, as well as bicycle storage facilities for bus patrons. It is uncertain as to whether park-and-ride facilities will be included, or the number of spaces that may be available. We look forward to working with the City and County Department of Transportation Services (DTS) to identify the components that will comprise the transit center.

5. Coordination with City and County Transit Officials

We will review our plans with City DTS public transportation staff and their inputs regarding potential routes and stops for the fixed-route bus services. We will also solicit their input concerning potential locations for pedestrian linkages to the bus stops.

6. Bikeway Network

The sentence has been changed as follows: A network of bicycle lanes and greenways would link the residential areas to the proposed middle school. Access to the nearby elementary school within the Ko Olina Resort would involve use of the Resort's bicycle and pedestrian facilities.

7. Bicycle Compatibility Index

We will investigate the use of a bicycle compatibility index to assess the appropriateness of routes for shared bicycle facilities and incorporate the findings into the site and infrastructure planning for the Project.

8. Trip Generation Rates

The trip generation rates used in the TIAR are from the current Trip Generation manual published by the Institute of Transportation Engineers, which reflect available nationwide information of this residence category. We will further investigate the availability of non-resident rates for Hawaii.

9. Roadway Network Figure

Figure 3 in the DEIS will be edited to include project roadway names provided in Figure 1-1 in the TIAR (Appendix J).

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Planners, Inc.

Ms. Laura H. Thielen, Director
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10. Hawaiian Railway Society Consultation

The landowner maintains a working relationship with the Hawaiian Railway Society and intends to work with them to minimize disturbances to railway operations.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

Sincerely,

HELBER HASTERT & FEE, Planners



Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control



STATE OF HAWAII
 PUBLIC UTILITIES COMMISSION
 DEPARTMENT OF BUDGET AND FINANCE
 465 S. KING STREET, #1103
 HONOLULU, HAWAII 96813

April 29, 2005

CARLITO P. CALIBOSO
 CHAIRMAN
 WAYNE H. KIMURA
 COMMISSIONER
 JANET E. KAWELO
 COMMISSIONER



Donna Goth
 President
 Aina Nui Corporation
 1001 Kamokila Boulevard, Suite 255
 Kapolei, Hawaii 96707

Dear Ms. Goth:

Re: Kapolei West Expansion Area Project ("Kapolei West Project") – Draft Environmental Impact Statement ("EIS") submitted pursuant to Hawaii Revised Statutes Chapter 343 and Hawaii Administrative Rules, Title 11, Chapter 200

In response to the draft EIS for the Kapolei West Project, particularly relating to **Section 6.6 POWER AND COMMUNICATIONS**, we offer the following comments:

1. **Section 6.6.1 Affected Environment** states, in relevant part, that "[Hawaiian Electric Company, Inc. ("HECO")] is also in the process of planning and design of a new substation in the Ko Olina development, immediately west of the Petition Area." It is our understanding that this new substation, described in Section 6.6.1, pertains to Docket No. 05-0056 that is currently pending before the Hawaii Public Utilities Commission ("HPUC"). In this proceeding, HECO requests, among other things, that the HPUC determine that the proposed construction of two (2) forty-six (46) kilovolt ("kV") subtransmission lines to feed the new Ko Olina substation be constructed above and below the surface of the ground, pursuant to HRS § 269-27.6(a). Pursuant to HRS § 269-27.5, the HPUC also conducted a public hearing on Wednesday, April 27, 2005 at Kapolei Elementary School Cafeteria to hear public comments, if any, for the overhead construction of 46kV subtransmission lines through a residential area.

Donna Goth
 April 29, 2005
 Page 2

2. **Section 6.6.2 Probable Impacts** states, in relevant part, that "[i]t is anticipated that HECO and Hawaiian Telephone Company (HTCO) would provide the necessary electrical and telephone service to the Petition Area." We note that Hawaiian Telephone Company is now known as Verizon Hawaii Inc. Pursuant to Decision and Order No. 21696, filed on March 16, 2005, in Docket No. 04-0140, the HPUC conditionally approved, among other things, a merger transaction which, upon closing, Verizon Hawaii Inc. will be replaced by Hawaiian Telcom, Inc.

We appreciate the opportunity to provide comments on the draft EIS for the Kapolei West Project. Should you have any questions, please do not hesitate to contact me directly at 586-2180.

Sincerely,

Kris N. Nakagawa
 Chief Legal Counsel

KNN:eh

- c: Robert Alm, HECO
 William Bonnet, HECO
 Darcy Endo-Ormoto, HECO
 Joel Matsunaga, Verizon Hawaii Inc.
 Alan Oshima, Hawaiian Telcom, Inc.
 John Cole, Division of Consumer Advocacy
 OEQC
 Bert Saruwatari, LUC
 Coryn Olson Orr, Helber Hastert & Fee

Helber Hastert & Fee
Planners, Inc.

Kris Nakagawa
June 2, 2005
Page 2

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control



Helber Hastert & Fee
Planners, Inc.

June 2, 2005

Kris Nakagawa, Chief Legal Counsel
Public Utilities Commission
Department of Budget and Finance
State of Hawaii
465 S. King St. #103
Honolulu, HI 96813

Dear Mr. Nakagawa:

**Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawaii**

Thank you for your letter to Ms. Donna Goth, President of Aina Nui Corporation, dated April 29, 2005 in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). We have reviewed your comments which are specific to Section 6.6 Power and Communications of the Draft EIS and offer the following responses.

1. The Draft EIS refers to Hawaiian Electric Company (HECO) plans for a new substation in the Ko Olina development. We appreciate the additional detail and status provided in your letter regarding HECO's request for a new Ko Olina substation and two 46 kilovolt (kV) subtransmission lines (Docket No. 05-0056) pending before the Hawai'i Public Utilities Commission. Aina Nui Corporation and its affiliates will continue to coordinate regional electrical improvements, including the 46 kV lines, with HECO.
2. We acknowledge that Hawaiian Telephone Company (HTCO) is now known as Verizon Hawai'i Inc and pending closure of a merger transaction will be known as Hawaiian Telecom, Inc. All references to HTCO have been changed to Hawaiian Telecom, Inc. in the Final EIS.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

Sincerely,

HELBER HASTERT & FEE, Planners

Thomas A. Fee, AICP
President

Ms. Donna Goth
May 6, 2005
Page 2 of 9

UNIVERSITY OF HAWAII

Environmental Center

May 6, 2005
RE: 0747

Aina Nui Corporation
Ms. Donna Goth
1001 Kamokila Boulevard, Suite 255
Kapolei, Hawaii 96707

Dear Ms. Goth:

Draft Environmental Impact Statement
Kapolei West Expansion Area
Ewa, O'ahu

Aina Nui Corporation, an affiliate of the Estate of James Campbell, has filed a petition for a State Land Use District Boundary Amendment to reclassify approximately 174.2 acres of land from the Agricultural District to the Urban District (referred to as the "Petition Area") with the State Land Use Commission. The Petition Area is located in Ewa, O'ahu. The Petition Area straddles the State-owned, historic O'ahu Railway & Land Company (OR&L) Railroad right-of-way (ROW).

The Petition Area is surrounded by the 372.6-acre area formerly known as Ko Olina Phase II to the north (urbanized in 1991 under Docket A90-655), Ko Olina Resort to the west, Kalaeloa Barbers Point Harbor and the Kapolei Business Park to the south, and Kalaeloa Boulevard and the City of Kapolei to the east.

Development proposed for the Petition Area includes approximately 1,200 low and medium-density residential units, approximately 60 acres of golf course, and nearly 28 acres of park and open space (Proposed Action). Together with the former Ko Olina Phase II project area now in the State Land Use Urban District, the Petition Area is planned to be part of "Kapolei West," a 548-acre master-planned residential and golf community.

This review was conducted with the assistance of Adrian Ricardo Archilla, Civil Engineering; Kimberly Burnett, Economics; William Chapman, American Studies; Peter Flachsbart, Urban and Regional Planning; Peter Rappa, Sea Grant; and Landin Johnson of the Environmental Center.

2500 Dole Street, Krause Annex 19, Honolulu, Hawaii 96822
Phone: (808) 956-7361
An Equal Opportunity/Affirmative Action Institution

General Comments

While the Draft Environmental Impact Statement (DEIS) for Kapolei West Expansion Area appears reasonably comprehensive in its preparation and touches on many important issues, our reviewers observed that some areas require further analysis and discussion.

The applicant is petitioning to reclassify 174.2 acres from agricultural to urban use in the Ewa Plain. The petitioner wants to combine this acreage with an adjoining parcel of 372.6 acres and develop the resulting 546.8 acre site as a master-planned residential and golf community. Dividing the areas throughout the Draft EIS (i.e., referring to the "Petition Area") causes confusion when reading as to what parcel is being addressed (i.e., the 174.2 acre parcel or the 372.6 acre parcel). For ease of public reviewing, our reviewers recommend that the Final EIS should address analyses, impacts, and mitigation to the entire project area of 546.8 acres for simplification purposes.

Specific Comments

Cumulative Impacts (§1.3, Table 1 & §7.0)

A "No Impact" determination for Water Supply, Wastewater, Solid Waste, and Power (p. 1-5) does not appear justified. Cumulative impacts may require HECO to build additional generation facilities; water supply is an issue of concern, as is wastewater facilities' capacity, as well as landfill and H-POWER resources. By definition, cumulative impacts are the culmination of many separate actions that have an impact when summed; Kapolei West Expansion Area is no exception. There will undoubtedly be cumulative impacts, given all the other development projects in Central and west O'ahu (e.g., Castle & Cooke's Koa Ridge, Gentry's Waiaawa, Mehana at Kapolei, Kapolei Mauka, Makakilo, Kapolei Villages & Knolls, Ko Olina, Makiwa Hills, etc.) and the Cumulative Impacts section should, at a minimum, account for all projects in west and central O'ahu, if not the entire island of O'ahu. Clearly, significant impacts are anticipated from this development, as it has warranted preparation of a Draft EIS. On the basis of the foregoing discussion of cumulative impacts, it seems apparent that water resources, power, and waste management impacts to the region as a whole will rise to a level of significance.

Alternatives Considered §1.4

Why is the Petition Area "not particularly suited for agricultural production" (p. 1-7)? Please explain as this appears to be an unfounded assertion given the existing cultivation of sugar cane crops in the area. If this statement is, in fact, founded solely on the basis of the

Ms. Donna Goth
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Physical Environment (§4.0)

This section fails to mention the impacts on water quality due to an increase in impervious surfaces. Research has shown that there is a relationship between impervious surfaces and a decline in coastal water quality when impervious surfaces reach about 10% of the watershed area. This issue should be discussed in this section.

Soil Erosion (§4.3.2)

Given of all the Best Management Practices (BMP) proposed to control soil erosion, this statement that "no mitigation is necessary" (p. 4-5) is not accurate as BMPs are a mitigation measure.

Historic, Cultural and Archeological Resources (§4.9, Appendix E & I)

From the historical and archaeological information provided, it appears that the proposed development area will not have a significant impact on cultural resources. The Draft EIS identified four prehistoric sites that lie within the area subject to the survey. These appear not to be affected by the project, as long as mitigation as described does occur. The Hawai'i Railway Society educational facility and railway yard do in fact fall within the petition area. This facility includes running stock and also rail lines which may be affected and certainly need to be regarded in the course of future developments in the area.

A final concern on this topic is the growing importance of plantation sites among historical archaeologists and scholars. This area appears to have been used for housing in the early 20th century. Some further understanding of historic development by Ewa Plantation and subsequent owners/esses of the site would seem to be called for, as would some recording of existing sites of buildings, roads and past usage.

Plantation archaeology is a relatively new field but has recently been the subject of a field school held on the island of Hawai'i by UH Hilo archaeologist Peter Mills. Our reviewers suggest that this aspect of the historic use of the area deserves further inquiry.

Air Quality (§4.11 & Appendix F)

Figure 1 of the Draft EIS shows that the proposed residential development would be located about 1.5 miles directly north of the James Campbell Industrial Park (CIP). CIP includes the Applied Energy Services (AES) coal-fired power plant, Chevron and BHP refineries, Hawaiian Cement, and the City and County of Honolulu's H-Power plant. The proposed development is about 3 miles southeast of Hawaiian Electric Company's Kahe

Ms. Donna Goth
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surrounding urban area, then why would it not be viable for small scale agricultural production or even for a community gardens site?

Summary of Unresolved Issues (§1.5)

The statement that "[n]o unresolved issues have been identified" is contradictory to statements made in §6.6.2 that "[d]iscussions between the Estate of James Campbell and its affiliates and HECO are ongoing" (p. 6-37) and §6.7.1 that "the high school is intended to relieve the enrollment pressure on Kapolei High School; however, its location and timing are yet to be determined" (p. 6-38). This section should be corrected to reflect the "ongoing" and "yet to be determined" issues.

Necessary Permits and Approvals (§1-7)

"Water [Water] Plan" and "Drainage [Water] Plan" are misspelled and should read as "Master." This spelling error should be corrected.

Project Description (§2.4)

If the "low density homes would range from 1.0 - 8.7 dwelling units per acre (du/acre)," then how can the average density be calculated as "9.4 du/acre" (p. 2-9)? This should be corrected.

Our reviewers recommend including mixed use in the commercial retail area. Given the description of the Commercial Center (p. 2-10), is there a reason why mixed use would not be viable?

In regards to the statement on page 2-11 that "[n]o direct roadway connections would be made between Kapolei West and the adjacent communities of Honokai Hale and Nanakai Gardens in deference to strong community sentiment against adding additional traffic to their internal streets," our reviewers believe this would be a mistake. This would reduce connectivity, ensuring that feeder streets and arterials will be congested during morning and evening rush hours. The lack of inter-connectivity of residential roads is a problem, as local and Honolulu-bound commuter traffic is funneled into feeder roads and arterials, causing a bottle-neck effect. For example, when people are driving to Starbucks for morning coffee or dropping off their children at school, then this traffic has to compete with Honolulu-bound commuter traffic for the same roadway space. Increased inter-connectivity can divert local school and "coffee" traffic from the feeder roads and arterials being occupied by commuters.

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provision for future revisiting of changing wind patterns should be discussed in the Final EIS.

Table 1 of Appendix F shows that the NAAQS for SO₂ is 365 µg/m³ averaged over 24 hours and 1300 µg/m³ averaged over 3 hours. Footnote c of Table 1 indicates that neither of those two standards for SO₂ is to be exceeded more than once per year. The consultant's report states that "acute air pollution levels have occurred in areas within and adjacent to CIP," but it doesn't report specific concentrations during so-called "upset conditions," nor the frequency of occurrence (Appendix F, p. 28). However, the Draft EIS issues this word of caution:

Perhaps the greatest concern is the coincidence of industry malfunctions in conjunction with southerly-wind periods. Even if industry operators are very diligent in operating and maintaining their facilities, occasional malfunctions that result in air pollution incidents in nearby areas are probably unavoidable (Appendix F, p. 29).

In our opinion, the consultant's concern is valid, but it is not recognized or stated in the air quality section on page 4-21 of the Draft EIS.

To the consultant's credit, the air quality study quantified the incremental air pollutant emissions of five regulated pollutants caused by the project's incremental demand for electrical power and from the project's incremental generation of solid waste that would be burned at the nearby H-Power facility. The study did not and probably could not estimate the incremental concentrations of these emissions on ambient air quality.

The study did not determine current or future population exposure to air pollutants from the Kahe power plant. Such exposure may worry future residents of the proposed site, because the frequency of low wind speeds (i.e., 0-3 knots) from the northwest direction, including the west northwest and north northwest directions, is a combined 1.1% of total wind measurements. The study did not address this issue, because the Department of Health (DOH) requires industrial sources to demonstrate compliance with state and national air quality standards. Here are our questions: Was the Kahe source permitted by DOH on the assumption that the Petition Area would remain in agricultural use rather than residential use? What are the projected concentrations of air pollutants emitted by the Kahe plant at the Petition Area according to HECO's permit application?

The Department of Health was a consulted party during the scoping process. In a letter, the DOH expressed concerns with construction and demolition involving asbestos and control of fugitive dust, but said nothing about potential population exposure to emissions from industrial sources.

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power plant. The CIP and Kahe power plant are major industrial sources of air pollutants in west O'ahu.

The Draft EIS states: "Prevailing winds from the east or northeast carry these emissions away from the site most of the time" (p. 4-21). While this statement is generally true, it lacks comprehension of what constitutes a violation of the National Ambient Air Quality Standards (NAAQS). The NAAQS for both sulfur dioxide (SO₂) and carbon monoxide (CO) each permit only one exceedance of specified maximum concentrations per year. The maximum concentration for each air pollutant varies with averaging time as shown in Table 1 of Appendix F: Air Quality Study. SO₂ is typically emitted by power plants that have coal and oil-fired boilers and by waste incinerators such as H-Power, and CO is typically emitted by motor vehicles (Bisom, 1996, p. 35). The air quality study reports that there were no violations of the NAAQS for four criteria air pollutants (SO₂, PM-10, CO, and NO₂) between 1999 and 2003 at the Kapelei air quality monitoring station, and no violation of the ozone (O₃) NAAQS at the Sand Island station.

Appendix F of the Draft EIS describes the air quality study performed by B. D. Neal and Associates. It states:

As indicated in Section 4, the prevailing winds are in the northeast quadrant, which will carry emissions from CIP away from the project site more than 70 percent of the time. Winds from the south, which could carry emissions toward the site, occur less than about 5 percent of the time. While estimating specific air pollution levels at the project site is beyond the scope of the present study, it is unlikely that concentrations exceed air quality standards during normal operations. (Appendix F, pp. 28-29)

Table 2 of Appendix F provides annual wind frequency for Honolulu International Airport. The source of the table is a report dated 1978 from the National Climatic Center (NCC) in Asheville, North Carolina. The table shows that the frequency of winds of all speeds from the south is 2.7% of all measurements, and from a south-southeast direction is 2.4% for a combined total of 5.1%. The frequency of worse case wind speeds (i.e., 0-3 knots) from these two directions is only 0.2%. These are admittedly low, but not zero percentages. Hence, there is some risk that the Petition Area will be downwind of industrial sources in west O'ahu at some time during the year.

The wind measurements in the NCC report appear to be from the late 1970s. Our reviewers suspect that Hawai'i's trade winds will grow weaker in the future due to global climate change. Professor Tom Schroeder of the UH Department of Meteorology stated that possibility a few years ago at a local conference. If Dr. Schroeder's statement is true, the consultant should use an updated wind frequency table in the future to determine risk of population exposure to air pollutants from nearby industrial and mobile sources. We don't think the current air quality study needs to be redone with more recent wind data, but some

Ms. Donna Goth
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Honolulu Direction of Transportation Services (DTS), and the O'ahu Metropolitan Planning Organization (OMPO) as well as with reasonable assumptions about future conditions.

The mitigation measures consist mostly of directional lanes at several intersections that our reviewers find quite reasonable, particularly because this agrees with the current State and City policies about the location of O'ahu's secondary urban center.

Consequently, our reviewers find no major objections to the conclusions about the described traffic issues. Nevertheless, our reviewers have some comments about certain aspects of the report, particularly for the H-1 impacts.

First, the analysis of the H-1 freeway impacts is based on the HCM extended freeway segment methodology. Our reviewers find that this analysis alone may ignore possible system effects at downstream interchanges. For example, as mentioned on page 6-19 of the report, the estimated Waianae-bound afternoon peak-hour traffic is approximately 84% of the estimated freeway capacity. At this traffic level, any incident in the traffic stream cannot be absorbed easily, and traffic becomes unstable. Consequently, our reviewers would have liked to see a more complete freeway analysis for the Waianae-bound traffic or a justification of why such analysis is not needed.

In addition, our reviewers do not favor the following statement on page 6-18: "The project traffic would have a minimal effect on average freeway speeds, with speeds estimated at about 61 to 62 mph with the project versus 62 mph without the project." Our reviewers' criticism of this statement is that in the new HCM (2000) extended freeway segment analysis procedures the speed is assumed constant for up to 1450 passenger cars per hour per lane (pphpl) (for the assumed free flow speed of 65 mph) and above 1450 pphpl, the speed decrease rate with flow rate is still relatively mild. Therefore, the minimal effect on speed resulting from the analysis is to be expected unless the traffic flow was extremely close to capacity. In a sense, our reviewers find this statement is a bit misleading for the casual reader. For HCM 2000, density is the parameter that determines LOS, and even though speed may be still relatively high, any incidents would not be easily absorbed at the projected traffic level.

The estimated LOS for Honolulu-bound traffic is better than the LOS in the opposite direction. However, the additional traffic would certainly add to the congestion already occurring on the H-1 corridor, which may have an impact on the whole system. In an already congested system, it takes only a marginal increment of traffic to create significantly more congestion. Consequently, the potential effects of the proposed project on other parts of the system should be addressed so that appropriate mitigation measures can be planned. (Of course, these impacts should be compared with other city growth scenarios that may cause similar impacts in the system. This may have already been taken into account in the OMPO models and if so, our reviewers would consider that just simply making a reference to the relevant documentation would be an adequate response). Our reviewers do not believe section 8.0 addresses this issue.

Ms. Donna Goth
May 6, 2005
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Socio-Economic Environment (§5.0, §7.3.2 & Appendix H)

Our reviewers note that contrary to section 5.0's title, there appears to be an outright lack of economic analysis in this section, or in the Draft EIS altogether. The Draft EIS expounds repeatedly regarding migration and population growth, but what does that mean? There is no real benefit-cost analysis or projected impact on social welfare to be found anywhere in this section. Just because population expands, more houses are built, and more jobs move in does not imply higher welfare. Yes, the Draft EIS states that revenues will exceed "operating costs," however there are many more costs that would need to be accounted for (e.g., congestion costs, opportunity costs, lost jobs in other areas, environmental costs, etc.) Furthermore, all of the Draft EIS's stated "benchmark years" of analysis are close together (2010, 2015, and 2020), and the latest year analyzed is only 15 years from today. What does that say about future generations? This raises a concern that maybe when the analysis is projected farther out into the future, net present value actually goes negative. Does in fact the *net present value* turn negative beyond 15 years from present? Please expand on these issues.

Again, in section 7.3.2 (cumulative impacts, socio-economic environment), there is discussion regarding housing, population, and employment impacts, but zero translation into impacts on *social welfare*. The fact that traffic will worsen and environmental quality will likely decline is not even mentioned, much less quantified. This issue should be revisited and addressed in the Final EIS.

Revenues (§5.4.2.1)

The Draft EIS claims that majority of the potential residents of the project will be existing O'ahu residents. In view of this, please explain how there will be a net gain in excise tax. The analysis in this section appears either inadequate or inaccurate.

Transportation (§6.1, 7.0, & Appendix J)

The Draft EIS analyzes existing traffic conditions, future traffic conditions with and without the development of the petition area in 2014 and future traffic conditions with project build-out in 2020 and describes mitigating measures recommended for the 2014 and 2020 timeframes.

In general, the methodologies used for traffic analysis in this Draft EIS are based on nationally accepted practices, such as the use of trip generation rates published by the Institute of Transportation Engineers for trip generation or the use of the Highway Capacity Manual 2000 (HCM2000) for Level of Service (LOS) assessment of intersections and basic freeway segments. These methodologies have been used, together with information provided by developers, the State Department of Transportation (DOT), the City and County of

Ms. Donna Goth
May 6, 2005
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All the mitigation measures proposed at intersections seem reasonable. Finally, as for the public transit and bicycle travel, the recommendations are also reasonable. However, our reviewers would have liked to see some more specific details about mitigation measures.

Thank you for the opportunity to review this Draft EIS.

Sincerely,

John T. Harrison, Ph.D.
Environmental Coordinator

Cc: Helber, Hastert, and Fee
LUC
OEQC
James Moncur, WRRC
Adrian Ricardo Archilla
Kimberly Burnett
William Chapman
Peter Flachsbart
Peter Rappa
Landon Johnson

Reference:
Elsom, Derek. 1996. *Smog Alerts: Managing Urban Air Quality*. Earthscan, London, England.

Helber Hastert & Fee
Planners, Inc.

June 2, 2005

John T. Harrison, Ph.D.
Environmental Coordinator
University of Hawaii
Environmental Center
2500 Dole Street, Krauss Annex 19
Honolulu, HI 96822

Dear Mr. Harrison:

**Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawaii**

Thank you for your letter to Ms. Donna Goth, President of Anna Nui Corporation, dated May 6, 2005 in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). We have reviewed your comments and offer the following responses.

1. General

The Proposed Action for which the EIS is being prepared is the reclassification of the Petition Area (174.2 acres) from the Agricultural to the Urban District. Once urbanized, the Petition Area would be combined with an adjacent 372.6-acre parcel (Urbanized Area) for the development of the Kapolei West project. After considering your concerns, we have decided that the distinction between the Petition Area and the Urbanized Area will be maintained in the Final EIS since development of the Urbanized Area is not part of the Proposed Action nor subject to approval by the State Land Use Commission. The larger project is included in the discussion of cumulative impacts.

2. Cumulative Impacts

To address several reviewer comments, the FEIS impact conclusions have been reformatted, redefining planned improvements and construction procedures as "mitigation." For example, best management practices to reduce soil erosion during the construction period, described in the Draft EIS under Probable Impact, have been moved to a new Mitigation section; water and wastewater system improvements described under Probable Impacts, have been moved to a new Mitigation section, etc. As part of this reformatting, the conclusion of probable direct and indirect impact for several resource areas has been changed from no impact to adverse impact (without mitigation). The summary provided in Section 1.3 (Summary of Probable Impacts and Mitigation Measures) has been updated to reflect these changes. The Cumulative Impact section of the Draft EIS defined a comprehensive evaluation of potentially affected resources. Each resource area was defined by a unique region of influence (ROI). For example, groundwater ROI corresponded with the aquifers that could potentially be affected by the Proposed Action and/or provide needed



Helber Hastert & Fee
Planners, Inc.

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June 2, 2005
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water supply. The wastewater ROI was confined to the City and County of Honolulu's Honolulu tributary area. The Ewa Development Plan Area was identified as the appropriate ROI to discuss housing and development related impacts.

From a cumulative perspective, the Draft EIS conclusion that groundwater resources have sufficient unallocated and unused capacity to support the Proposed Action indicates that there would be no cumulative effect on this renewable resource. The City and County of Honolulu is charged with managing the regional wastewater system. It requires all new development to submit master plans and applications for service. Based on this information, it evaluates the capacity of its system to determine if it can provide service. Based on information provided in the Draft EIS, the Petitioner believes the system has sufficient capacity to meet project demands, forming the basis for the no cumulative effect conclusion. The actual commitment for service, however, rests with the City and County of Honolulu. Cumulative effects for power and solid waste systems have been revised from no effect to no significant effect.

3. Alternatives Considered

The Draft EIS states in Section 1.4 that "The Petition Area is not particularly suited for agricultural production." This is a summary statement based on the small percentage of the Petition Area that has "good" soil quality. The description of the soils and their suitability for cultivation are described in Chapter 4.3 Soils and 4.4 Agricultural Capability of the Draft EIS. Section 4.4.2 acknowledges that 15 to 20 acres of good agricultural land would be committed to non-agricultural uses. Many of the residential units will have yards that could be used for gardening. There is a passive park identified in the Petition Area that could potentially be used for a community garden if so desired by the future residents of the community. The Final EIS Section 1.4 sentence is rewritten as follows:

"Only 15 acres of the Petition Area consist of soil classified as "good" for cultivation and these 15 acres exist as three noncontiguous irregularly-shaped areas along the Petition Area boundary. The remaining 126 acres of the Petition Area are characterized as Coral Outcrop, and are classified as "poor" soils for crop cultivation. Most of the former sugar cane and pineapple land remains fallow; therefore, there is no shortage of agricultural land available on O'ahu for diversified crops. The pockets of irregularly shaped areas of good soil are a challenge to efficient farming."

4. Summary of Unresolved Issues

We concur that there are unresolved issues and the Final EIS Section 1.5 is revised to include the following issues in the Summary of Unresolved Issues:

- Density of regional commercial space
- State review and approval of the archaeological inventory survey, including data recovery and testing of Site 50-80-12-4893

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Page 3

- Identification of proposed mitigation to address impacts to the O'ahu Railroad and Land right-of-way
- Extension of electrical and telephone service to the project
- Timing of the West Kalaheoa drainage channel

The high school location and timing is not project related and is not included in the list of unresolved issues.

5. Necessary Permits and Approvals:

The spelling errors (mater to Master) in Section 1-7 are corrected in the Final EIS.

6. Project Description

- a. The average density of low density homes has been corrected in the Final EIS. The revised text reads as follows: "The low density homes would range from 1.2 to 8.7 dwelling unit per acre, with an average density of 7.4 du/acre." We note that the low density and medium density residential unit counts and corresponding acreages presented in Table 5 Kapelei West Land Use Summary, as well as the accompanying text on page 2.9, have been revised to reflect the corrected density and to accommodate a larger 15.5-acre middle school site.
- b. We concur that mixed use is appropriate in the commercial retail area. The developer likely will seek mixed-use zoning for the commercial retail area, which is outside the Petition Area.
- c. Your point that interconnectivity of residential roads would alleviate traffic on arterials and feeder roads is well taken; however, contrary community opinion will guide the development. Multipurpose pathways, a network of bike lanes and pedestrian/bicycle friendly roadways are planned to link Honokai Hale and Nanakai Gardens and the proposed residential neighborhoods, commercial areas and park space. The planned pedestrian/bicycle amenities are intended to encourage residents to leave their cars at home and use alternative transportation.

7. Physical Environment

The following language is included in Section 4.5.2 Probable Impacts of the Final EIS to address your concerns regarding the relationship between impervious surfaces and coastal water quality:

"Impervious surfaces may affect the hydrology in two ways. 1) by reducing infiltration into the underlying aquifer, and 2) by increasing overland flow to the coast. Denying natural drainage into the limestone caprock by replacing the natural surface with impervious surfaces may have an effect on coastal waters because seepage of groundwater at the coast may decrease. However, the effects are likely to be too small to be measurable. Increasing overland

runoff will add fresh water and potential contaminants that may diminish the quality of the coastal waters. However, runoff from the impervious surfaces is expected to be relatively minor. The Petition Area has an average annual rainfall of about 20 inches. Of the 174.2 acres, a golf course will account for 60 acres and another 28 acres will be devoted to parks and open spaces, leaving about 86 acres for the residential area. The annual average rainfall of 20 inches on 86 acres amounts to 47 million gallons per year (128,000 gallons per day), but of this amount only a fraction would reach the coast as runoff."

8. Soil Erosion

We concur that BMPs can be considered mitigation and the Final EIS has been changed to reflect this. The Final EIS format has been modified to include a separate "mitigation" section for resource areas that warrant mitigation (see related response in paragraph No. 2).

9. Historic Cultural and Archaeological Resources

- a. According to our records, the Hawaiian Railway Society educational facility and railway yard are located at 91-1001 Renton Road, which is located more than 3 miles east of the Petition Area. The proposed development would have no impact on these facilities.
- b. The Honolulu *aihupua'a* has the reputation for being the most archaeologically studied place in Polynesia. Appendix E of the Draft EIS includes the *Documentation of Plantation Infrastructure at Kapolei*, prepared by Cultural Surveys Hawai'i in 2004. Two sites were identified within the Petition Area: remnants of an irrigation system and a drainage canal. The plantation infrastructure sites were regarded as significant for their information content only and no further work was recommended. The State Historic Preservation Division has concurred with the findings of the report. Appendix E of the Draft EIS is Appendix F in the Final EIS.

10. Air Quality

B.D. Neal & Associates, the project air quality consultants, provided the following response to your comments:

- a. In regards to your concern that the trade winds might be growing weaker due to global climate change and your specific request on page 6 of your letter that "some provision for future revisiting of changing wind patterns should be discussed in the Final EIS": Wind data included in the Draft EIS was collected during the 1960's and 1970's. Weather data at any location is generally cyclical over a period of many years. Insofar as changing wind patterns in the project area are concerned, a review of wind summary data for Honolulu Airport for the past 50 years shows that any changes that have

occurred are very subtle. Based on National Weather Service (NWS) records, the annual mean wind speed at Honolulu Airport between 1965 and 1974 was 11.6 mph. More recent longer-term data for the period 1961-90 show a mean annual speed of 11.3 mph, a decrease of about 2.5 percent. Data reported by NWS for a couple of recent years, 1999 and 2004, show a mean speed of 11.0 mph and 9.7 mph, respectively.

While wind data for recent years does tend to lend some support to the theory that the trade winds might be weakening, the evidence is not clear whether this is a trend or just a cycle. Some of the apparent decrease in speeds might simply be due to development, which would tend to increase surface roughness and reduce surface wind speeds. Also, changes in wind instruments and exposure have occurred over time, which could bias conclusions about long-term wind data. In any case, lighter wind speeds do not necessarily portend poor or reduced air quality for the project area. However, if weaker trade winds do occur over time, and if this means more periods of winds from a southerly direction, it is probable that areas to the north of Campbell Industrial Park (CIP), including the proposed project, may be more affected by air pollution. Nevertheless, state and federal air quality standards must be met in all areas where the public has access, including the existing downwind areas that are offshore from CIP.

If exceedances of the standards did begin to occur in the project area over time due to changing wind patterns, then regulatory agencies would be obligated to correct the situation. It is likely that the offending facilities would find it necessary to reduce impacts by reducing emissions: increasing stack heights, relocating or closing. Changing circumstances over a long period of time, such as a change in the wind pattern or a change in land use, could very well lead to changes in where and how industries operate.

- b. The air quality study in Appendix F of the Draft EIS mentions the concern that industry malfunctions combined with the occurrence of southerly winds could cause air pollution incidents in the project area, but this is not stated in the air quality section of the Draft EIS. A statement to this effect has been added to Section 4.11.2 of the FEIS.

- c. The air quality study did not determine the current or future population exposure to air pollutants from the Kahe Power Plant. Two questions were asked:

1) Was the Kahe source permitted by DOH on the assumption that the Petition Area would remain in agricultural use rather than residential use?

2) What are the projected concentrations of air pollutants emitted by the Kahe plant at the Petition Area according to HECO's permit application?

In answer to the first question, land use generally has no relevance to compliance with air quality standards. Any areas where the public has access must meet air quality standards. This usually means that industries, such as

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power plants, must not cause or contribute to a violation of air quality standards at any location outside of their own controlled boundaries.

With regard to the second question, it is doubtful that HECO's permit application for the Kahe Power Plant includes information concerning air pollution concentrations in the Petition Area. This is because air quality permit applications usually focus only on the areas of maximum impact. In the case of Kahe Power Plant, the areas of maximum impact are probably either on the adjacent mountainsides or in the prevailing downwind (offshore) direction from the plant.

11. Socio-Economic Environment

Economic impacts were discussed in Section 5.3 of the Draft EIS. The benefit cost analysis is presented with a conclusion that the project would result in positive net fiscal benefits throughout the development of the project. At the reviewers request, the period after project buildout (i.e., beyond 2020) was analyzed. For the Petition Area only, net operating revenue to expenditure ratios are anticipated as 4.1 for Honolulu County and 0.9 for State government. The slight potential "loss" for the State within the Petition Area is nominal and corresponds with State fiscal policy which generally does not seek to "profit" from primary residences. For the project as a whole, net operating revenue to expenditure ratios are anticipated to remain breakeven or better, representing 8.2 for Honolulu County (some \$5.2 million per year in additional operating revenues, largely real property taxes compared to some \$0.6 million per year in additional operating costs) and 1.0 for State government (some \$2.1 million in additional operating revenues against an equivalent \$2.1 million in additional operating costs).

Social welfare is discussed within the context of changes in population, housing, employment and with regard to traditional customs and practices. The attitudes and opinions of Kapolei Area residents have recently been characterized in a vote to endorse the Kapolei West project by the Makakilo/Kapolei/Honokai Hale Neighborhood Board. Discussion presented during the Neighborhood Board's deliberations indicate a range of opinions (e.g., support of public policy objectives to push growth to Kapolei while at the same time concern over the consequences of that growth such as school overcrowding and traffic congestion). The fulfillment of Kapolei as the second city will provide new employment and housing opportunities, and investments in schools and other civic facilities, and ultimately reduce traffic congestion as jobs are added to the region.

12. Revenues

Net additional excise taxes supported by the project would come from expenditures on its development, salaries and fees associated with its sales and marketing, an in-State spending by part-time residents or investors who are attracted to the islands because of residential units at Kapolei West.

Helber Hastert & Fee
Planners, Inc.

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13. Transportation

We generally agree that increased roadway connectivity is a desirable feature of development, however, in this instance, residents of Honokai Hale and Nanakai Gardens communities have made it clear that they do not wish to have any direct roadway connections with Kapolei West out of concern that an interconnected roadway system would overwhelm their quiet neighborhoods. It may be possible to design a connection which would permit Honokai Hale and Nanakai Gardens residents direct vehicle access to Kapolei West that would not result in Kapolei West residents "short cutting" through to Farrington Highway. Alternative connections between the existing communities and Kapolei West will be considered to improve accessibility to the areas

developing along the Kapolei Parkway/Alii Nui Drive corridor and minimize the current dependence on Farrington Highway. We will consult with community representatives and the City concerning where such potential future connection points should be located in the event such connections are sought in the future.

Regarding your comments on the H-1 Freeway analysis: As noted in your comments, the methodology used in the TIAR represents a traditional approach to assessing the comparative impact of the Project on the H-1 Freeway, with the limitations as described in your comments. This methodology was used for the following reasons:

- The Project represents a substantial reduction in the number of residential units from that identified in the Ewa Development Plan. Thus the Project is expected to result in a net decrease in traffic flow on the H-1 Freeway to/from the Honolulu area as compared to the volumes that would be generated if the Project site had been developed to the levels included in the City's plans.
- As part of the planning work for the Kapolei Interchange, we are now beginning the development of a CORSIM traffic simulation model that will be used to provide a more detailed assessment of the effects of the planned ramp connections along the H-1 Freeway in the City of Kapolei area with the forecast traffic volumes. This model will assist in identifying the effect of future traffic increases on the mainline freeway traffic flow and at the freeway ramp connections, as well as allow the testing of alternative interchange ramp configurations and spacing along the section from Koloa Road to the Makakilo Interchange.
- A straight-forward method was desired to provide some indication of the traffic increases for incorporation into this TIAR, which led to the use of the Highway Capacity Manual 2000 method.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

Helber Hastert & Fee
Planners, Inc.

John T. Harrison, Ph.D.
June 2, 2005
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Sincerely,

HELBER HASTERT & FEE, Planners



Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HI 96843



May 4, 2005

- MUFI HANNEMANN, Mayor
- EDDIE FLORES, JR., Chairman
- HERBERT S. K. KAPOUA, SR.
- DAROLYN H. LENDINO
- RANDALL Y. S. CHUNG
- SAMUEL T. HANA
- RODNEY K. HARAGA, Ex-Officio
- LAVERNE HIGA, Ex-Officio
- CLIFFORD S. JAMILE
Manager and Chief Engineer
- DONNA FAY K. KIYOSAKI
Deputy Manager and Chief Engineer



Ms. Donna Goth, President
Aina Nui Corporation
1001 Kamohia Boulevard, Suite 255
Kapolei, Hawaii 96707

Dear Ms. Goth:

Subject: Your Letter Received March 31, 2005 Regarding a
Draft Environmental Impact Statement (DEIS) for the Kapolei West
Expansion Area. TMKs: 9-1-014: 033, 9-1-15: 004 and 020

Thank you for the opportunity to comment on the proposed development in the Kapolei area.

We have the following comments:

1. The developer should submit a water master plan showing the water requirements for the proposed developments and proposed additional infrastructure requirements.
2. We request a confirmation and a firm commitment from Campbell Estate regarding the alignment of our proposed 24-inch R-1 recycled water main from the City of Kapolei through Kapolei West to the Barbers Point 215 non-potable reservoir.
3. The development plan should be approved by the Department of Planning and Permitting (DPP) before the Board of Water Supply processes the building permit on the proposed development. The availability of water will be confirmed when the building permit is approved.
4. The developer is subject to pay the applicable Water System Facilities Charges (WSFC), however, we reserve comments at this time until development plans are finalized.
5. The golf course and large landscaped areas shall be irrigated with non-potable water. This development should maximize the use of R-1 recycled water when it is available and as appropriate.
6. Please be advised the proposed development is subject to the Board of Water Supply's Cross-Connection Control and Backflow Prevention requirements prior to issuance of the Building Permit.

If you have any questions, please contact Joseph Kaakua at 748-5442.

Very truly yours,



KEITH S. SHIDA
Principal Executive
Customer Care Division

cc: B. Usagawa, OEQC, Bert Saruwatari-Land Use Commission,
Corlyn Olson Orr, Helber Hastert & Fee, Planners

Water for Life ... Ka Wai Ola

Helber Hastert & Fee
Planners, Inc.

Keith S. Shida
June 2, 2005
Page 2

Sincerely,

HELBER HASTERT & FEE, Planners



Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control



Helber Hastert & Fee
Planners, Inc.

June 2, 2005

Mr. Keith S. Shida, Principal Executive
Customer Care Division
Board of Water Supply
City and County of Honolulu
630 South Beretania Street
Honolulu, Hawaii 96843

Dear Mr. Shida:

**Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawaii**

Thank you for your letter to Ms. Donna Goth, President of Aina Nui Corporation, dated May 4, 2005 in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). We have reviewed your comments and offer the following responses.

1. A water master plan for the project will be prepared and submitted to the BWS for review and approval.
2. Aina Nui Corporation and its affiliates are committed to the use of recycled water and will work with the BWS to coordinate the alignment of the proposed 24-inch R-1 recycled water main from the City of Kapolei to the Barbers Point 215 non-potable reservoir through Kapolei West.
3. We note that the BWS will not process building permits for the project until the Department of Planning and Permitting grants the necessary approvals, and that the availability of water will be confirmed when the building permits are approved.
4. We note that the project is subject to the applicable Water System Facilities Charges and that you reserve comments until development plans are finalized.
5. Section 4.5.2 and Section 6.2 of the Draft EIS states that the golf course, park spaces and large landscaped areas are planned to be irrigated with non-potable water.
6. Cross-Connection Control and Backflow Prevention requirements will be addressed prior to issuance of the building permit.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

DEPARTMENT OF DESIGN AND CONSTRUCTION
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 11TH FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 523-4564 • Fax: (808) 523-4567
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MUFI HANNEMANN
MAYOR

WAYNE M. HASHIRO, P.E.
DIRECTOR
EUGENE C. LEE, P.E.
DEPUTY DIRECTOR

98525



April 29, 2005

Ms. Donna Goth,
Aina Nui Corporation
1001 Kamokila Boulevard, Suite 255
Kapolei, Hawaii 96707

Dear Ms. Goth:

Subject: Kapolei West Expansion Area, Ewa District, Oahu

Thank you for the opportunity to review and provide comments to the referenced draft environmental assessment (DEA). We offer the following comments.

We urge representatives of the developer to meet with us at their earliest convenience to discuss in greater detail how they propose to meet park dedication obligations to the City.

We note that the DEA report makes some statements about the intent of the developer to provide public and private parks and recreational land and facilities. The DEA also states that the developer intends to transfer the land title for the Kamokila Community Park to the City in partial fulfillment of park dedication obligations. We are generally in support of the plans proposed thus far for parks and recreational facilities. However, there may need to be more thought given to more specific park dedication requirements at this time.

Consideration might be given to expand the nearly 6-acre Kamokila Community Park to ten acres, which would meet the City's recommended standard of ten acres in size for a community park. Alternatively, the park might be expanded to become a district park, 20 to 25 acres in size, and serving a population within a radius of two miles or more.

We generally desire that dedicated parks be roughly rectangular or square in shape so that their open space can be efficiently used. We often attempt to collocate district parks adjacent, or near to a public high school, and community or neighborhood parks near elementary or middle schools.

Ms. Donna Goth
Page 2
April 29, 2005

Should there be any questions, please contact Terry Hildebrand, Facilities Division, at 523-4696.

Very truly yours,

FOR WAYNE M. HASHIRO, P.E.
Director

WMH:ci

c: Genevieve Salmonson, Office of Environmental Quality Control
Bert Saruwatari, Land Use Commission
✓Corlyn Olson Orr, Helber Hastert & Fee, Planners
Department of Parks and Recreation

Helber Hastert & Fee
Planners, Inc.

Wayne Hashiro
June 2, 2005
Page 2

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control



Helber Hastert & Fee
Planners, Inc.

June 2, 2005

Mr. Wayne Hashiro
Director
Department of Design and Construction
City and County of Honolulu
650 South King Street, 11th Floor
Honolulu, HI 96813

Dear Mr. Hashiro:

**Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawaii**

Thank you for your letter to Ms. Donna Goth, President of Aina Nui Corporation, dated April 29, 2005 in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). We appreciate your request to meet with Aina Nui Corporation to discuss details on park dedication obligations to the City.

Our responses to your specific suggestions are as follows:

- 1) Expansion of the 6-acre Kamokila Community Park to 10 acres, or to a 20 or 25-acre district park, is not feasible because of the steep topographic gradient beyond the existing park boundary. Extensive earth moving activity would be required to create a useable flat active recreation area.
- 2) Although the 14.3-acre active park has a slightly irregular shape, there is sufficient acreage to efficiently position two regulation playing fields, associated parking and restroom facilities.
- 3) Locating parks adjacent or near public schools would provide an opportunity for shared use; however, the State Department of Education has indicated a preference for separate recreation facilities. Security and maintenance concerns were raised.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

Sincerely,

HELBERT HASTERT & FEE, Planners

Thomas A. Fee, AICP
President

DEPARTMENT OF ENVIRONMENTAL SERVICES
CITY AND COUNTY OF HONOLULU
1000 ULUOHIA STREET, SUITE 308, KAPOLEI, HI 96707
TELEPHONE: (808) 982-5159 FAX: (808) 982-5113 WEBSITE: <http://www.co.honolulu.gov>



MUJI HANNEMANN
Mayor



Ms. Donna Goth, President
Aina Nui Corporation
1001 Kamokila Blvd., Suite 255
Kapolei, Hawaii 96707

ERIC S. TAKAMURA, Ph.D., P.E.
Director

KENNETH A. SHIMIZU
Deputy Director

PRO 05-011

May 5, 2005

Helber Hastert & Fee
Planners, Inc.

June 2, 2005

Mr. Eric S. Takamura, P.E.
Director
Department of Environmental Services
City and County of Honolulu
1000 Uluohia Street, Suite 308
Kapolei, HI 96707

Dear Mr. Takamura:

**Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawaii**

Thank you for your letter to Ms. Donna Goth, President of Aina Nui Corporation, dated May 5, 2005 in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). We have reviewed your comments and offer the following responses.

1. We acknowledge the limitation of solids handling and will continue to coordinate with the Department as the project progresses.
2. The sewer master plan will place sewer mains within the roadways, however, the use of a few easements may be required since the existing Ko Olina interceptor line is within an easement. To mitigate this condition, the development will be planned to facilitate access and maintenance of sewer lines within the easements.
3. Detailed drainage plans will be included in the drainage master plan for the project. In general, runoff is routed around Kalaeloa Harbor.
4. Runoff from the project site will be routed around Kalaeloa Harbor and should not impact the water quality of the harbor. It is intended that the routing of onsite runoff through open space, landscaped areas and the golf course will reduce sediment transport downstream. Water quality requirements for the project site will meet the requirements of the City and County of Honolulu through the use of detention, flow-through or structural means.

The drainage master plan for the area will include the entire watershed within which this project sits. Water quality requirements will be addressed individually by the separate developments for short-term and long-term impacts.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

cc: OEOC

Land Use Commission
✓ Helber Hastert & Fee, Planners

Subject: Kapolei West Expansion Area, Draft Environmental Impact Statement (EIS)

We have reviewed the subject Draft EIS, dated March 2005, and have the following comments:

1. In Section 6.3, Wastewater, on p. 6-29, there is a statement that the Honouliuli Wastewater Treatment Plant (WWTP) currently has a capacity of 38 mgd. Please note that although the capacity of the liquid treatment side of the WWTP is up to 38 mgd, the capacity of the solids handling side is limited to about 27 to 29 mgd. This limit of 27 to 29 mgd is only slightly more than the current flow. A City project to increase the solids handling capacity of the WWTP is being planned.
2. When developing the sewer master plan for this area, please ensure that all sewer mains are placed in roadways, not easements, to appropriately allow for future maintenance work by City crews.
3. Page 6-52, Figure 16: Provide either additional drainage maps or include runoff areas for Kapolei West in Fig. 16, including the coast line and Kalaeloa Harbor. Show the direction of flow from the development to the receiving waters, either the ocean or Kalaeloa Harbor.
4. Please address the impact on water quality of Kalaeloa Harbor. There is a need to implement measures to avoid having Kalaeloa Harbor added to the State's Clean Water Act Section 303(d) list of impaired water bodies, which already includes Honolulu Harbor, Pearl Harbor, and Kewalo Basin. Addressing drainage problems only locally is insufficient. There is a need for developments to master plan for drainage and pollution control over the complete area, including mitigation of sediment deposition and other pollution to Kalaeloa Harbor both during construction and after full development.

Should you have any questions, please call Jack Pobuk, Program Coordinator, at 692-5727.

Sincerely,

Dr. Eric S. Takamura, P.E.
Director

Pacific Guardian Center • 733 Bishop Street, Suite 2590 • Honolulu, Hawaii 96813
Tel. 808.545.2055 • Fax 808.545.2050 • www.hbf.com • e-mail: info@hbf.com

Helber Hastert & Fee
Planners, Inc.

Mr. Eric S. Takamura, P.E.
June 2, 2005
Page 2

Sincerely,

HELBER HASTERT & FEE, Planners



Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control

DEPARTMENT OF FACILITY MAINTENANCE
CITY AND COUNTY OF HONOLULU
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MUFI HANNEMANN
MAYOR

LAVERNE HIGA, P.E.
DIRECTOR AND CHIEF ENGINEER
GEORGE K. MIYAMOTO
DEPUTY DIRECTOR

IN REPLY REFER TO:
DRM 05-425

May 4, 2005



Ms. Donna Goth, President
Aina Nui Corporation
1001 Kamokila Boulevard, Suite 255
Kapolei, Hawaii 96707

Dear Ms. Goth:

Subject: **Kapolei West Expansion Area - Draft Environmental Impact Statement**

Thank you for the opportunity to review and comment on the Draft Environmental Impact Statement (DEIS) dated March 2005 for the subject project.

The DEIS indicates police, fire and emergency services would need to be expanded to provide services to the project area. The DEIS should also address the need to expand City and County maintenance resources for the additional infrastructure improvements that will be constructed within the Petition Area and proposed Kapolei West. The Ewa region has experienced tremendous growth the past years putting a strain on resources that maintain the accompanied improvements.

Accordingly, we request the DEIS include a detailed maintenance analysis which anticipates the labor, equipment and materials needed to maintain the proposed infrastructure to a recognized standard.

Also maintenance jurisdiction of the proposed pedestrian and bikeway pathway connections linking neighboring communities via an internal greenbelt trail should be addressed in the DEIS. The greenbelt connections should be privately owned and maintained by the community association.

Should you have any questions, please call Charles Pignataro of our DIVISION of Road Maintenance, at 484-7697.

Very truly yours,



LAVERNE HIGA, P.E.
Director and Chief Engineer

cc: The Office of Environmental Quality Control
Land Use Commission, State of Hawaii
Helber Hastert & Fee, Planners

Road
98857

HELBERT & FEE
ROAD DIVISION
DEPARTMENT OF
TRANSPORTATION

2005 MAR 29 PM 3:17
2005 MAR 23 A 7:12



Dear Participant:

Attached for your review is a Draft Environmental Impact Statement (DEIS) that was prepared pursuant to the EIS law (Hawaii Revised Statutes, Chapter 343) and the EIS rules (Administrative Rules, Title 11, Chapter 200).

Title Of Project: Kapolei West Expansion Area
Location: Oahu, Ewa District
Tax Map Key Nos.: _____
Agency Action: _____ Applicant Action: X

YOUR COMMENTS MUST BE RECEIVED OR POSTMARKED BY: MAY 6, 2005

Please send original comments to:

Applicant: Aina Nui Corporation
Address: 1001 Kamokila Boulevard, Suite 255, Kapolei, HI 96707
Contact: Donna Goth, President Phone: (808) 674-3540

Copies of the comments should be sent to:

The Office of Environmental Quality Control
Address: 235 South Beretania Street, Suite 702, Honolulu, HI 96813

Accepting Authority: Land Use Commission, State of Hawaii
Address: 235 South Beretania Street, Room 406, Honolulu, HI 96813
Contact: Bert Saruwatari, Planner Phone: (808) 587-3822

Consultant: Helber Hastert & Fee, Planners
Address: 733 Bishop Street, Suite 2590, Honolulu, HI 96813
Contact: Coryn Olson Orr, Project Planner Phone: (808) 545-2055

Thank you for your participation in the EIS process. We look forward to receiving your comments, questions and suggestions.

Sincerely,

HELBERT & FEE, PLANNERS

Thomas A. Fee, AICP
President

Enclosure

Pacific Guardian Center • 733 Bishop Street, Suite 2590 • Honolulu, Hawaii 96813
Tel. 808.545.2055 • Fax 808.545.2050 • www.hbf.com • e-mail: info@hbf.com

Helber Hastert & Fee
Planners, Inc.

June 2, 2005

Ms. Laverne Higa, P.E.
Director and Chief Engineer
Department of Facility Maintenance
City and County of Honolulu
1000 Uluohia Street, Suite 215
Kapolei, HI 96707

Dear Ms. Higa:

**Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawaii**

Thank you for your letter to Ms. Donna Goth, President of Aina Nui Corporation, dated May 4, 2005 in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). We have reviewed your comments and offer the following responses.

1. Maintenance Analysis

We believe it is premature to speculate what the labor, equipment and material requirements for facility maintenance would be in advance of the infrastructure planning and design process.

2. Maintenance responsibility of the proposed pedestrian/bicycle pathway connections

Pedestrian and bicycle facilities associated with dedicated roadways would fall under the City's maintenance responsibility. On-site facilities would likely fall under community association maintenance responsibility.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

Sincerely,

HELBERT & FEE, Planners

Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control

Pacific Guardian Center • 733 Bishop Street, Suite 2590 • Honolulu, Hawaii 96813
Tel. 808.545.2055 • Fax 808.545.2050 • www.hbf.com • e-mail: info@hbf.com



DEPARTMENT OF PARKS AND RECREATION

CITY AND COUNTY OF HONOLULU

1000 ULUOAHIA STREET, SUITE 309 • KAPOLEI, HAWAII 96707
PHONE: (808) 692-5561 • FAX: 692-5131 • INTERNET: www.honolulu.gov

MUJI HANNEMANN
MAYOR



LESTER K. C. CHANG
DIRECTOR
DANA L. TAKAHARADIAS
DEPUTY DIRECTOR

May 9, 2005

Ms. Donna Goth, President
Aina Nui Corporation
1001 Kamokila Boulevard, Suite 255
Kapolei, Hawaii 96707



Dear Ms. Goth:

Subject: Draft Environmental Impact Statement
Kapolei West Expansion Area

Thank you for the opportunity to review and comment on the Draft Environmental Impact Statement relating to Kapolei West Expansion Area.

The Department of Parks and Recreation is pleased that the proposed development incorporates significantly more land dedicated to park use than is required under the City's Park Dedication Ordinance, however, we generally recommend that as much of the dedicated park lands, as feasible, be combined into one contiguous property capable to supporting as many active recreational facilities as possible.

Before finalizing our comments, we would appreciate you providing us with a site plan of the proposed 2.78 acre passive park reflecting its location in relation to the proposed surrounding improvements and any comments you may have regarding how this small park will be serving the new community.

Should you have any questions, please contact Mr. John Reid, Planner, at 692-5454.

Sincerely,
Lester K. C. Chang
LESTER K. C. CHANG
Director

LKCC:mk
(98774)

cc: The Office of Environmental Quality Control
Mr. Bert Saruwatari, Land Use Commission, State of Hawaii
Ms. Corlyn Orr, Helber, Hastert & Fee

Helber Hastert & Fee
Planners, Inc.

June 2, 2005

Mr. Lester K.C. Chang
Director
Department of Parks and Recreation
City and County of Honolulu
1000 Ulukouia Street, Suite 309
Kapolei, Hawaii 96707

Dear Mr. Chang:

**Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawaii**

Thank you for your letter to Ms. Donna Goth, President of Aina Nui Corporation, dated May 9, 2005 in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). I followed up with Mr. John Reid and discussed the passive park referred to in your letter, and parks in general. Mr. Reid suggested that I summarize our discussion in our response.

As presented in the DEIS, the Petition Area includes two parks: a 14.3-acre active park and a 2.8-acre passive park. The parks are located in a generally flat area south of, and adjacent to the OR&L right-of-way (see enclosed map). Both parks are readily accessible (i.e., within ¼ mile) to Petition Area homes (1,154 units). The larger, active park includes an approximately four-acre cultural preserve in the southeast corner. The balance of about ten acres is large enough to accommodate two soccer or baseball fields, associated parking and restroom facilities. Uses for the passive park are still under consideration, but could include parking, seating areas and landscaping.

The larger park area is at the makai terminus of a proposed pedestrian corridor that extends through Kapolei West up to the makai end of Laaloa Street in the neighboring Honokai Hale community, which should make it easier for residents of nearby communities to enjoy the park facilities.

As noted in Table 25 of the Draft EIS (p. 6-40), the Petition Area park dedication requirement is estimated at three acres and the entire Kapolei West project requirement is estimated at 10.8 acres.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

Helber Hastert & Fee
Planners, Inc.

Lester K. C. Chang
June 2, 2005
Page 2

Sincerely,

HELBERT HASTERT & FEE, Planners



Thomas A. Fee, AICP
President

Enclosure (map)

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control



DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

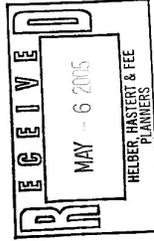
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
TELEPHONE: (808) 525-4432 • FAX: (808) 522-4432
DEPT. INTERNET: www.honolulu.gov • IT@PERMITTING.HONOLULU.GOV



MUHI HANNEMANN
MAYOR

HENRY ENG, FAICP
DIRECTOR
DAVID K. TANIGUE
DEPUTY DIRECTOR

2005/ELOG-641 (RYS)



May 5, 2005

Mr. Thomas A. Fee, AICP
President
Helber Hastert & Fee, Planners, Inc.
Pacific Guardian Center
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Attn: Corlyn Olson Orr, Project Planner

Dear Mr Fee:

Kapolei West Expansion Area Project, Ewa, Oahu, Hawaii
Draft Environmental Impact Statement (DEIS)
TMK: 9-1-014; por.033; 9-1-15; por. 004, and por. 20

This is in response to your request (received on March 24, 2005) for comments on the Draft Environmental Impact Statement (DEIS) dated March 2005 for the proposed Kapolei West Expansion Area Project, which you are preparing in support of Aina Nui Corporation's petition to the Land Use Commission to reclassify approximately 174.2 acres of land from the State Agricultural Land Use District to the Urban District, and in support of zone change application to P-2 General Preservation and A-1 Low Density Apartment districts. We have reviewed the DEIS and offer the following comments for your review and consideration for inclusion in the Final Environmental Impact Statement (FEIS):

1. Section 1.9 Purpose and Need for This EIS on page 1-9: The applicant's stated intent to use this EIS "to satisfy the City and County of Honolulu's 'significant' zone change requirement" is noted. However, the DPP reserves the right to require additional information with the zone change application that may not be necessary for the impact statement.
2. Section 2.4 Project Description.
 - Low and Medium Density Residential on page 2-9: A graphic showing the location of the proposed low and medium density residential dwelling units

Mr. Thomas A. Fee AICP, President
Helber Hastert & Fee, Planners, Inc.
May 5, 2005
Page 2

described in the narrative on the bottom of page 2-9; and the justification of the low density of the residential development where densities as low as 1 unit/acre are being proposed in the secondary urban center where growth is being directed should be included.

- Parks on page 2-10: The text describes two parks in the Petition area – a 14.3-acre park south of the OR&L Right-of-Way (ROW) and a 2.8-acre passive park adjacent to the golf course south of the OR&L ROW. However, the discussion of community-based parks on page 3-29 and in Section 6.8.3 Mitigation Measures on page 6-41 refers to only one neighborhood-park. The discussion of proposed park(s) in the FEIS should be consistent. The Department of Parks and Recreation park classification (e.g. neighborhood, community, district) for each of the two parks proposed and for the existing Kamokila Park should be included.
- Vehicular/Pedestrian Access on page 2-11: The pedestrian corridor described in the second paragraph should be shown graphically, as well as the other proposed pedestrian routes and designated bike facilities.
- Since Kapolei Parkway is planned to connect to Ali'i Nui Drive, the Final EIS should address how the different street names will be resolved as the City does not usually approve different names for the same length of right-of-way.
- The DEIS states that no direct roadway connections would be made between Kapolei West and the adjacent communities of Honokai Hale and Nanakai Gardens in deference to strong community sentiment against adding additional traffic to their internal streets. Although these communities are outside the petition area, roadway connections to Kapolei West should be further studied in the FEIS.
- Adherence to the "Smart Growth" connectivity principle of a collector/connector road approximately every quarter mile would suggest that additional east-west road links would be warranted. One possibility is a connector from Koio Drive east to Road "D" south of Nanakai Gardens/Honokai Hale. An additional east-west road link to Ko Oline and Kalaeloa Harbor (f.k.a. Barbers Point Harbor) should be considered since nearly 49 percent of Kapolei West residential development is planned to occur within the petition area, and the Traffic Impact Analysis Report clearly indicates the capacity of the Kalaeloa Boulevard/ Kapolei Parkway intersection will be exceeded at build out of both the Urbanized and the Petition areas of the planned Kapolei West development.

- The proposed residential area at the end of Road D appears inappropriate. It is “sandwiched” between the I-3 waterfront industrial district of Kalaeloa Harbor and the resort area of Ko Olina. Alternate uses should be considered.
- 3. Section 2.5 Project Phasing on page 2-12: The phasing plan description needs better details and should be coordinated with the roadway improvement schedule. A graphic showing what segments of proposed roadway within and without the project, along with estimated completion times, should be included as part of the traffic analysis. This would allow the reader to better understand how the project phasing is being coordinated with the roadway improvements.

Since the Kapolei Parkway extension to Ali'i Nui Drive is the region's and the development's principal east-west connector (for both the Urbanized Area and the petition area), DPP strongly believes that it should have a high priority for full and early completion rather than being completed in increments over a longer period.

- 4. Section 3.2.1. General Plan on pages 3-20 and 3-21: Please add the following updates to the discussion of GP policies:
 - Policy 4 of Population Objective C: According to the City's *Annual Report on the Status of Land Use on Oahu for Fiscal Year 2003* (published September 2004), the 2025 residential population for the Ewa development plan area is projected to increase to 164,462, representing 15.3 percent of the island wide population. The FEIS should reflect that the updated estimate for the Ewa region's share will exceed the General Plan population distribution of 13 percent cited in Policy 4 of Objective C. The *Annual Reports* for FY 2000, 2002, and 2003 are posted on the DPP website at <http://honolulu.dpp.org/planning/>.
 - Policy 1 of Economic Activity Objective G: According to DPP's projections, the number of Ewa jobs is projected to increase from 17,000 jobs in 1990 to 49,500 and 65,000 in 2020 and 2030 respectively. The projections, which include military and construction workers on the job site in Ewa, will be posted on DPP's website under “Research and Statistics”, shortly.
 - Policy 3 of Housing Objective C: According to DPP's projections, over 33,400 new housing units are estimated for the Ewa DP area in 2020, and 48,700 additional units in 2030 (increase from 11,700 units in 1990 to 45,100 and 60,400 in 2020 and 2030, respectively).

- 5. Section 3.2.2.2 The Vision For Ewa's Future.
 - Open Space and Greenways on page 3-25: Although parks and open space, including the golf course and multi-purpose pathways account for nearly 50 percent of the proposed uses, the location of the two parks south of the OR&L ROW do not support the Ewa DP guideline regarding the siting of parks at the center of neighborhoods to maximize accessibility (Section 3.3.2.1 on page 3-17 of the Ewa DP). These parks are located at the edge of Kapolei West adjacent to the golf course. The OR&L ROW may restrict access to these parks. The location of the parks within the Petition area should be justified.
 - Communities Designed to Support Non-Automotive Travel on page 3-27: DPP is concerned with the apparent lack of connections between the several residential areas. The proposed residential communities should incorporate design measures for their internal circulation systems to support pedestrian, bicycle and transit use. This will enable a true network to develop that will support non-automotive travel. DPP looks forward to seeing these linkages incorporated in the more detailed zoning and community development proposals as they emerge. Of special concern will be the proposed zoning near (i.e. within walking distance) the transit node at the southeast corner of the Urbanized Area.
 - We note the decrease in proposed residential units from 3,500 to 2,370, which represents a departure from the Ewa DP. However, the geographic distribution and impact of this reduction in terms of how it impacts the quality, location, cost, densities, style, size and number of unit types (i.e. resident units compared to vacation units), delivery rate, and especially any impacts on required affordable units should be indicated.
- 6. Section 3.2.2.3 Land Use Policies, Principles and Guidelines.
 - Residential Development on page 3-30 and 3-31: The DEIS should indicate how the proposed medium density housing units (10-15 units/acre) would relate to the major rapid transit line, or to the creation of transit oriented districts.
 - Non-Residential Development on page 3-31: Given the petition area's strategic location in close proximity to Ko Olina Resort, Kalaeloa Harbor, the commercial center of the City of Kapolei, Kalaeloa and Campbell Industrial Park, it is critical that the proposed development have convenient linkage and access to these important job centers.

- School Facilities on page 3-35: The DEIS notes that the proposed middle school has not been co-located with a neighborhood or community park, and that siting focused on providing convenient access for regional traffic. An alternative approach would be to expand the residential area south of the OR&L ROW into the park area and to expand the proposed middle school site to include a community park in the residential area. This should not result in any loss of residential units.

7. Section 3.2.4 Special Management Area on page 3-38: Any development within the SMA with a valuation of \$125,000 or which may have a substantial adverse environmental or ecological effect must obtain approval of a Major Special Management Area Use Permit (SMP) from the Honolulu City Council before other permits and project construction may begin (Section 205A-22, HRS). The SMP for any uses not permitted by zoning must follow the rezoning needed.

We suggest you contact Nelson Armitage of our Land Use Permits Division, Zoning Regulations and Permits Branch, at 527-6274 if you have any questions about the SMP process.

- 8. Soils - Section 4.3.2 Probable Impacts on page 4-4:
 - We suggest adding the following to the proposed additional erosion control best management practices: Sodding and plantings "shall be established on disturbed areas which are at final grade or will not be worked for longer than 14 days." (DPP Rules Relating to Soil Erosion Standards and Guidelines).
 - Grading and erosion control plans shall be performed in accordance with Chapter 14 (Public Works Infrastructure Requirements Including Fees and Services) of the ROH instead of Chapter 23 (Shoreline Setbacks) as listed on page 4-5.
- 9. Groundwater Resources - Section 4.5.2 Probable Impacts on page 4-12: Add the anticipated date for the filing of the "Application for Water Use Permit" with the Commission on Water Resource Management to the narrative, to confirm the adequacy of the potable water supply for the petition area.
- 10. Section 6.1 Transportation on pages 6-1 to 6-25:
 - Many of the intersections analyzed will be operating at LOS E or F even with mitigation measures. Additional connectivity or improvements to the roadway/transit system should be considered to maintain a LOS of D or better. Perhaps, additional vertical connections to Farrington Highway would improve overall circulation during peak periods.

- There are two existing traffic signals at Farrington Highway along the Honokai Hale and Nanakai Gardens residential subdivisions. The signal at Nanakai Gardens is located near the Koto Road/Farrington Highway intersection. We suggest that emphasis be placed on signalizing Koio and eliminating the Nanakai Gardens signal to allow unlimited traffic movements from Koio. Unlimited access to Farrington Highway from Nanakai Gardens is available from the existing signal at Honokai Hale.
- An extension to Farrington Highway and an associated traffic signal should be considered for Road D as a temporary measure to help relieve congestion in the project as planning for the new Makaiwa Interchange proceeds to design.

11 Section 6.3 Wastewater:

- Section 6.3.1 Affected Environment on page 6-29: While the Honouliuli Wastewater Treatment Plant has a liquid treatment capacity of up to 38 mgd, the solids handling capacity is limited to about 27 to 29 mgd. The solids handling limit is only slightly more than the current flow into the facility. The solids handling capacity will be increased under the proposed "Honouliuli Wastewater Treatment Plant Solids Handling System" project, which is tentatively scheduled for completion in 2007.
- Section 6.3.2 Probable Impacts on page 6-30: Approvals of a wastewater master plan, sewer connection, and plan review are all required. Include the entire Kapolei West area and an offsite sewer study in the master plan. Review of the master plan will determine the available wastewater capacity for the Kapolei West project.

The apartment rate for calculating average flow was used for all 11 low-density residential and 1,143 medium-density residential units. The average flow for the housing products, which included both multi-family and single family units, should be recalculated. Table 17 should also include wastewater flows from schools, parks, golf courses, and commercial areas. Please include the calculated peak flows in Table 17.

You may call Ms. Tessa Ching of our Wastewater Branch at 523-4956 if you have any questions.

Mr. Thomas A. Fee, AICP, President
Helber Hastert & Fee, Planners, Inc.
May 5, 2005
Page 7

12. Section 6.5 Solid Waste on pages 6-35 and 6-36: More details should be provided as to how the applicant will be ensuring that its tenants and new owners will be participating in recycling activities. For example, what are some of the design elements that need to be incorporated in commercial buildings and site plans, and housing projects that promote recycling and re-use?

13. Section 6.8 Parks and Recreational Facilities – on pages 6.39 to 6.41: The DEIS should be revised as follows: The 9.5 acres in Table 26 appears low given DPR park area guidelines (two acres per 1,000 residents). This appears to be based on an average ratio of two persons per housing units, which is too low.

DPP estimates of the average household size for the Ewa DP area range from 3.25 in 2005 to 3.34 in 2030. Table 8 on page 5.2 of the DEIS also reflects an average person per unit ratio over three (68,718 residents divided by 20,804 units) for the Ewa DP area in 2000. Table 26 and the narrative in Section 6.8.3 Mitigation Measures should be revised accordingly. DPP's "Year 2030 Forecast of Household Size Distribution by DP Area" will be posted on our website under "Research and Statistics" shortly.

Plans should provide for an integrated pedestrian and bikeway network that links residential areas with parks, and provide opportunities for residents to meet and interact near the center of each community or housing group to optimize accessibility by residents.

14. The following editing changes are suggested:

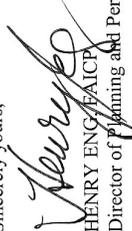
- Add "(Appendix A)" after "... Ko Olina Phase II)" in Section 1.1.1. Introduction.
 - Figure 1 Location Map on page 2-2: include an inset map showing the petition area's location on the island of Oahu.
 - Vehicular/Pedestrian Access on page 2-11: add the proposed "Roads D, F, and G" to the Project Master Plan map in Figure 3 and a reference should be made in the text.
- Labeling should be consistent, i.e. the text on page 2-11 refers to the "Development Concept Plan", whereas Figure 3 on page 2-7 is named "Project Master Plan".
- Road "D" will intersect with the H-1 Freeway instead of Farrington Highway as it is stated in the second paragraph.

Mr. Thomas A. Fee, AICP, President
Helber Hastert & Fee, Planners, Inc.
May 5, 2005
Page 8

- Section 11.0 References: the DPP reference number for the letter dated December 19, 2003, should be 2003/ELOG-3592 vice 3594 as listed.

Should you have any questions, please contact Ray Sakai of our staff at 523-4047.

Sincerely yours,


HENRY ENG, AICP
Director of Planning and Permitting

HE:js

cc: Aina Nui Corporation
State Land Use Commission
Office of Environmental Quality Control

p:\Div\FunctionEa-eis\2005\elog-641.doc

Helber Hastert & Fee
Planners, Inc.

Henry Eng, FAICP
June 2, 2005
Page 2

June 2, 2005

Mr. Henry Eng, FAICP

Director

Department of Planning and Permitting

City and County of Honolulu

650 South King Street, 7th Floor

Honolulu, HI 96813

Dear Mr. Eng:

**Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawaii**

Thank you for your letter dated May 5, 2005 in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). We have reviewed your comments and offer the following responses.

1. Section 1.9 Purpose and Need for This EIS

We acknowledge that the zone change application may require additional information that is not necessary for the EIS.

2. Section 2.4 Project Description

a. Section 2.4 of the Final EIS has been revised to identify the location of proposed low and medium density residential parcels and to describe the low density residential component being proposed within the Petition Area at a density of 1.2 dwelling units/acre. The Final EIS includes a land use schedule (Table 6) that summarizes the acreages, densities and land uses proposed for each parcel. Figure 3 Project Master Plan has been revised so that each parcel is labeled to correspond with the land use schedule. The following language has been added to the Final EIS.

"Table 6 presents the acreages, densities and corresponding land uses for the individual parcels shown in the project master plan (see Figure 3). The densities shown on the land use schedule are gross unit densities developed to guide planning assumptions. While the overall unit count (2,370 units) will remain unchanged, densities and unit counts within the various residential areas will likely be adjusted as the project moves closer to actual development. The mix of housing types would be determined during the design phase for each parcel."

b. Your comment that the Final EIS should include the park classification for the two proposed parks and for Kamokila Park is noted. In addition to the 14.3-acre neighborhood



park described in the Draft EIS, the Final EIS classifies the 2.8-acre passive park as a mini park and Kamokila Park as an existing community park. We have revised the discussion of community-based parks on page 3-29 and page 6-21 of the Final EIS for consistency with the description presented on page 2-10.

- c. The pedestrian corridor planned to extend between Honokai Hale and Nanakai Gardens subdivisions to park spaces south of the OR&L ROW is shown on Figure 3 Project Master Plan of the Final EIS.
- d. We note your comment that Kapolei Parkway is planned to connect to Alii Nui Drive, and that the City does not usually approve different street names for the same length of right-of-way. Kapolei Parkway is "planned as a major east-west corridor, connecting the eastern parts of Ewa with the City of Kapolei and employment centers to the west" (Ewa Development Plan page 4-5). Aina Nui Corporation intends to extend the Kapolei Parkway segment through Kapolei West in accordance with existing regional plans, and is not aware of the permitting process that approved the Alii Nui Drive name within the Ko Olina Resort.
- e. Roadway connections between Kapolei West and the adjacent communities of Honokai Hale and Nanakai Gardens were considered and dismissed during the early planning stages due to community concerns (see discussion in the following paragraph). We share your concerns regarding connectivity between the communities, and note that the project includes a planned north-south pedestrian corridor and a network of multipurpose pathways and pedestrian/bicycle friendly roadways to link the neighborhoods, park spaces and middle school.
- f. We generally agree that increased roadway connectivity is a desirable feature of development. However, residents of Honokai Hale and Nanakai Gardens communities have made it clear that they do not wish to have any direct roadway connections with Kapolei West out of concern that an interconnected roadway system would overwhelm their quiet neighborhoods. It may be possible to design a connection which would permit Honokai Hale and Nanakai Gardens residents direct vehicle access to Kapolei West that would not result in Kapolei West-originated traffic "short-cutting" through to Farrington Highway. A 200-foot wide regional drainage facility runs parallel to the eastern edge of Koio Drive, making a Road E connection to Koio Drive impracticable.
- g. Your comment that the proposed residential area at the makai end of Road D appears inappropriate is acknowledged. Although commercial and industrial uses were considered during the initial planning for this area due to its proximity to the harbor, residential uses were favored due to the existing and planned resort uses bordering the parcel's western edge. The proposed residential development would maintain a western orientation (i.e., towards the Ko Olina Golf Course and Marina) to minimize noise, air quality and nuisance impacts associated with the harbor's industrial activities. A landscaped buffer would be constructed and maintained along the Deep Draft Harbor frontage to provide a visual screen and mitigate dust and noise impacts.

3. Section 2.5 Project Phasing

- a. Project phasing is still only understood at a general level; the Golf Course and Regional Commercial parcel would be developed early in the construction period and home construction would be paced to meet the projected absorption rate of about 180 units per year. Segments of the Kapolei Parkway and the makai leg of Road D would also need to be constructed in the early phases. A detailed phasing plan will be prepared as part of the subsequent rezoning process.
- b. The Draft EIS describes construction of the Kapolei Parkway as development of adjacent lots occur. We concur that Kapolei Parkway is a principal east-west regional connector, and acknowledge your request that Kapolei Parkway be given high priority for full and early completion rather than being completed in increments over a longer period. This section of Kapolei Parkway is an 'Ewa Regional Transportation Plan road.

4. Section 3.2.1 General Plan

The discussion of General Plan policies in the Final EIS has been updated to include DPP's revised population, employment and housing projections.

5. Section 3.2.2.2 The Vision for Ewa's Future

- a. We disagree with your point that the two parks located south of the OR&L ROW are malpositioned. Both parks are located in a generally flat area, readily accessible (i.e., within ¼ mile) to Petition Area homes (1,154 units). The larger, active park includes an approximately four-acre cultural preserve in the southeast corner. The balance of about ten acres is large enough to accommodate two play fields, associated parking and restroom facilities. Uses for the passive park are still under consideration, but could include parking, seating areas and landscaping. The larger park area is at the makai terminus of the proposed pedestrian corridor that extends through Kapolei West up to the makai end of Laaloa Street in the neighboring Honokai Hale community, which should make it easier for residents of nearby communities to enjoy the park facilities. In addition to recreational value, the parks provide an important transitional use between the mauka residential areas and the makai Kalaheo/JCIP industrial area. We have revised the Open Space and Greenways discussion on page 3-25 of the Final EIS to provide justification for the location of parks within the Petition Area.
- b. We concur that connectivity between communities is important, and that planning and design of the internal circulation systems within each residential community needs to incorporate design measures to support non-automobile travel. These specific linkages and design concepts will be developed as planning and design continues. We note that you expect future zoning and community development proposals to incorporate these linkages, and that you are especially interested in the proposed zoning of the Transit/Mixed Use parcel (Parcel L) near the transit node at the southeast corner of the Urbanized Area.

6. Section 3.2.2.3 Land Use Policies, Principles and Guidelines

- c. A side by side comparison of the two alternatives is difficult because of the lack of information available on the original 3,500 unit Ko Olina Phase II proposal. A limited comparison is possible based on a review of Ko Olina Phase II's Land Use Commission records and the 1991 DP amendment application. Both projects address the primary and secondary housing markets. Kapolei West has identified a 61% primary and 39% secondary split. No equivalent proportion was found for Ko Olina Phase II. As noted on Table 4 of the DEIS, Ko Olina Phase II overall residential density was estimated at 22.4 units per acre versus the 11 units per acre identified for Kapolei West. Ko Olina Phase II was expected to commence construction in 1994 with full buildout expected by 2006, resulting in a delivery rate of just over 300 units per year. Kapolei West is expected to commence construction in 2008 with full buildout expected by 2020 indicating a delivery rate of just over 180 units per year. The Ko Olina Phase II Land Use Commission Decision and Order required the project to "provide affordable housing opportunities for low to moderate income residents of the State of Hawaii to the satisfaction of the City and County of Honolulu." This is the same provision being sought for the Petition Area.
- a. We note your comment that the Final EIS should indicate how the proposed medium density housing units would relate to the major rapid transit line, or to the creation of transit oriented districts. Although the Ewa DP lists "development of higher density residential use along a major rapid transit corridor" as a stated policy for existing and planned residential communities, the Petition Area lies to the west of the transit node and the rapid transit corridor shown on the Ewa DP Public Facilities Map (i.e., the Petition Area is outside the transit node and the rapid transit corridor).
- b. We concur that convenient linkages and access between Kapolei West and neighboring job centers of Ko Olina Resort, Kalaheo Harbor, the City of Kapolei, and Campbell Industrial Park are critical for the successful development of the Ewa region. Access to Kapolei West would be through a new segment of Kapolei Parkway connecting to Alii Nui Drive to the west and Kalaheo Boulevard to the east. Additional H-1 Freeway access would be via the proposed Hanua Street extension to the east and a new "Road D" connection to the to the west.
- c. Locating parks adjacent to or near public schools would provide an opportunity for shared use; however, the State Department of Education has indicated a preference for separate recreation facilities due to security and maintenance concerns. We have considered your proposal to expand the residential area south of the OR&L ROW and accommodate a community park next to the middle school site. After careful consideration, we have determined that the parcels south of the OR&L ROW are best served by the proposed recreational uses as they are proximate to Petition Area residents and serve as a buffer to the neighboring industrial areas.

Helber Hastert & Fee
Planners, Inc.

Henry Eng, FAICP
June 2, 2005
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7. Section 3.2.4 Special Management Area

The following language has been added to page 3-38 of the Final EIS.

“Any development within the SMA with a valuation of \$125,000 or which may have a substantial adverse environmental or ecological effect must obtain approval of a Major Special Management Area Use Permit (SMP) from the Honolulu City Council before other permit sand project construction may begin (Section 205A-22, HRS). The SMP for any uses not permitted by zoning must follow the rezoning needed.”

8. Soils – Section 4.3.2 Probable Impacts

- a. Your suggested language has been added to the additional erosion control best management practices listed in the Final EIS (page 4-4). “Soddings and plantings shall be established on disturbed areas which are at final grade or will not be worked for longer than 14 days.”
- b. The reference to Chapter 23, Revised Ordinances of Hawaii (ROH) has been changed to Chapter 14, ROH in the Final EIS (page 4-5).

9. Groundwater Resources – Section 4.5.2 Probable Impacts

Water requirements will continue to be coordinated with the BWS and the Commission on Water Resource Management. The following language has been added to the Final EIS to address your concern regarding the adequacy of the potable water supply for the Petition Area.

“The BWS has the authority to allocate the use of water from their system within the limits approved by the Commission for municipal purposes. The source of potable water for the project would be coordinated with the BWS and the Commission, and the availability of water for the project would be confirmed by the BWS when building permits are approved.”

10. Section 6.1 Transportation

- a. Proposed mitigation is intended to improve level of service to non-project baseline conditions. With mitigation, the most significant intersections impacted by the project will operate at levels of service equal to or better than the projected conditions without the project. Additional roadway connections to H-1 Freeway/Farrington Highway would improve regional connectivity and could reduce traffic flow on the planned Hanua Street connection to the Freeway. However, any additional connection(s) to the H-1 Freeway/Farrington Highway between the planned Hanua Street connection at the Palalial Interchange and the proposed Road D connection would result in a short distance between junctions, and this short spacing would likely adversely impact traffic flow along this section of the Freeway. A roadway connection in this area would also need to bridge across the regional drainage facility and the 1st and 10th fairways that parallel the makai side of the H-1 Freeway.

Helber Hastert & Fee
Planners, Inc.

Henry Eng, FAICP
June 2, 2005
Page 6

- b. The installation of a traffic signal at the Koio Road intersection with Farrington Highway to create a full-movement intersection would be desirable since Koio Road would increase regional connectivity between the Kapolei Parkway/Alii Nut Drive corridor and the H-1 Freeway/Farrington Highway corridor, thus dispersing traffic over more routes with lower volumes along each route. Although the Koio Road intersection is outside our project area, we will consider installing a traffic signal at Koio Road, which would require removing the existing signal at Waimea Street. Residents of Honokai Hale and Nanakai Gardens have made it very clear that they do not want an interconnected roadway system so it is likely that they would oppose this change.

- c. For purposes of conservatism, the traffic assessment in the Kapolei West TIAR did not reflect the proposed connection of Road D to Farrington Highway/H-1 Freeway due to uncertainties regarding the configuration and timing of this connection. If a right-turn in/out connection is provided on the makai side to Road D, this would divert some of the eastbound traffic indicated in the TIAR forecasts at the Koio Road and Hanua Street Extension connections to Farrington Highway/H-1 Freeway. The provision of a full-movement connection (at-grade intersection or grade-separated interchange) would divert some of the westbound traffic from the Hanua Street connection between the Kapolei Parkway and the Freeway, which would improve the forecast conditions at the Kapolei Parkway intersection with Hanua Street.

11. Section 6.3 Wastewater

- a. We acknowledge the limitation of solids handling and will continue to coordinate with the Department as the project progresses. It is hopeful that the solids handling capacity project will be completed prior to development of the Petition Area and the Kapolei West project.
- b. The wastewater master plan for the development will include the entire Kapolei West area and offsite wastewater system.
- c. Table 17 in the Draft EIS has been revised to reflect the wastewater flows using single family values for the low density residential. Calculated peak flows will be included in the sewer master plan.

12. Section 6.5 Solid Waste

Design features and requirements to promote recycling will be identified during project design and development phases. Commercial entities would comply with the City's commercial recycling requirements. Implementation of the City's planned residential curbside recycling program would encourage recycling and further reduce the amount of solid waste generated by the project.

Helber Hastert & Fee
Planners, Inc.

Henry Eng, FAICP
June 2, 2005
Page 7

13. Section 6.8 Parks and Recreational Facilities

The community based park requirements in the Final EIS have been updated based on your suggested factor of 3.3 persons per housing unit (i.e., 68,718 total residents and 20,804 housing units in the Ewa DP region in 2000). Based on the new calculations, the community-based park requirements for the Petition Area and the Urbanized Area have been revised from 3.8 acres and 5.7 acres to 6.3 acres and 9.5 acres, respectively.

14. Suggested Editing Changes

Your suggested editing changes have been incorporated into the Final EIS. We note that the reference to the "Development Concept Plan" on page 2-11 of the Draft EIS has been changed to "Project Master Plan" to be consistent with Figure 3.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

Sincerely,

HELBERT HASTERT & FEE, Planners



Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control

DEPARTMENT OF TRANSPORTATION SERVICES
CITY AND COUNTY OF HONOLULU

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MUFU HANNEWMANN
MAYOR

EDWARD Y. HIRATA
DIRECTOR

May 6, 2005

TP3/05-98670R



Ms. Donna Goth, President
Aina Nui Corporation
1001 Kamokila Boulevard, Suite 255
Kapolei, Hawaii 96707

Dear Ms. Goth:

Subject: Kapolei West Expansion Area

Thank you for the letter from Helber Hastert & Fee, Planners requesting our review of and comments on the draft environmental impact statement for the subject project. We have the following comments as the result of our review:

1. **Section 2.0 PROJECT DESCRIPTION**

- **2.1 LOCATION AND OWNERSHIP**
Figure 2 (Page 2-3) should show the tax map key for the Urbanized Area.
- **2.2 BACKGROUND**
In Table 4 (Page 2-5), the information for the Kapolei West (2004) proposal should specify what is proposed for the petition area.

2. **Section 6.0 ASSESSMENT OF AFFECTED ENVIRONMENT, PROBABLE IMPACTS AND MITIGATION: PUBLIC FACILITIES AND SERVICES**

- **6.1 TRANSPORTATION**
All roadways shown in Figures 11 (Page 6-2), 12 (Page 6-8), 13 (Page 6-9), 14 (Page 6-20), and 15 (Page 6-23) should be properly identified.
- **6.1.1.1 Existing Roadway System**
The description of the existing roadway system should indicate which roadways are proposed to be dedicated to the City.

- 6.1.1.3 Existing Traffic Conditions
Public Transportation
The last sentence in this section (Page 6-5) should be revised to read that "TheHandiVan provides curb-to-curb service...."
- 6.1.2.1 Future Conditions Without the Proposed Action
2014 Roadway Improvements (Pages 6-6 and 6-7)
According to the City's Ewa Development Plan, Kamokila Boulevard should be connected to Roosevelt Avenue, Kamaaha Avenue should be connected to Fort Barrette Road and Kapolei Parkway should be connected to Fort Barrette Road. This should be reflected in Figure 12.

2020 Roadway Improvements (Page 6-7)

Figure 13 should reflect all of the improvements described in this section.

PUBLIC TRANSPORTATION (Page 6-7)

In accordance with the title of this section, the probable impacts on public transportation should be described.

2014 PEAK HOUR TRAFFIC CONDITIONS (WITHOUT PROJECT)

Trip Generation (Page 6-10)

The impact on public transit trips should be described.

- 6.1.2.2. Future Conditions With and Without the Petition Area
TRIP GENERATION (Page 6-13)

The impact on public transit trips should be described.

Table 13 (Page 6-15) and Table 14 (Page 6-17)

The LOSs for the Kalaeloa Boulevard-Farrington Highway Morning Peak Hour Existing Condition are not consistent.

- 6.1.3 Mitigation Measures

Table 15 (Page 6-21) and Table 16 (Page 6-24)

The intersections with LOS F present undesirable situations and measures should be identified to lessen these conditions.

3. APPENDIX J, TRAFFIC IMPACT STUDY

- The traffic signals proposed at Kapolei Parkway-Regional Commercial Center Driveway, Kapolei Parkway-Parcel A/B Access Roads, and Kapolei Parkway-Roads D/F are warranted based on Warrant #3, Peak Hour.

- For the trip generation analysis, a lower trip generation rate was used for part-time residents, based on a different Trip Generation land use rate (260). A full explanation to justify this action should be included.
- As one possible mitigation measure, the traffic signals in Kapolei should be coordinated for progression and interconnected.
- Figures S-1, S-2, 2-1, 2-3, 3-1, 3-2, 3-4, 3-5, 3-6, 4-1, 4-2, 5-1, 5-2, 6-1 and 6-2 should have the roadways properly identified.
- The "Urbanized Area" referred to in Tables S-2 and S-3 should be clarified.
- The LOSs for the Kalaeloa Boulevard-Farrington Highway Morning Peak Hour Existing Condition are not consistent in Tables S-2 and S-3.

Should you have any questions regarding these comments, please contact Faith Miyamoto of the Transportation Planning Division at 527-6976.

Sincerely,



EDWARD Y. HIRATA
Director

cc: Ms. Genevieve Salmonson, Director
Office of Environmental Quality Control

Mr. Bert Saruwatari, Planner
Land Use Commission

Ms. Corilyn Olson Orr, Project Planner
Helber Hastert & Fee, Planners

Helber Hastert & Fee
Planners, Inc.

Edward Hirata
June 2, 2005
Page 2

June 2, 2005

Mr. Edward Y. Hirata
Director
Department of Transportation Services
City and County of Honolulu
650 South King Street, 3rd Floor
Honolulu, HI 96813

Dear Mr. Hirata:

**Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawaii**

Thank you for your letter to Ms. Donna Goth, President of Aina Nui Corporation, dated May 6, 2005 in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). We have reviewed your comments and offer the following responses.

1. Section 2.0 Project Description

- a. Figure 2 (page 2-3) has been revised to show the tax map key parcels for the Urbanized Area. We note that the tax map key parcels for the urbanized area are also described in Section 2-1 (page 2-1, paragraph 4).
- b. Aina Nui Corporation proposes to consolidate the Petition Area with the adjoining Urbanized Area for the development of Kapolei West. As such, the intent of Table 4 is to demonstrate that the land uses proposed as part of the overall Kapolei West project are generally consistent with previous development proposals. A summary of land uses and development acreages proposed for the Petition Area in relation to the Urbanized Area is presented in Table 5 (page 2-8).

2. Section 6.0 Assessment of Affected Environment, Probable Impacts and Mitigation: Public Facilities and Services

- a. 6.1 Transportation: Major roadways within the vicinity of the project area are identified in Figures 11, 12, 13, 14 and 15. No revisions to the Final EIS are proposed.
- b. 6.1.1.1 Existing Roadway System: All roadways indicated on the project master plan (DEIS Figure 3) are planned to be dedicated to the City.
- c. 6.1.1.3 Existing Traffic Conditions: The phrase "door-to-door" has been revised to "curb-to-curb" in the Final EIS as requested.
- d. 6.1.2.1 Future Conditions Without the Proposed Action:

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2014 Roadway Improvements: We acknowledge that future roadway improvements will connect Kamokila Boulevard to Roosevelt Avenue, Kama'aha Avenue to Fort Barrette Road, and Kapolei Parkway to Fort Barrette Road. These roadways are not in the immediate vicinity of the project area and are therefore not shown on Figure 12.

2020 Roadway Improvements: Figure 15 has been revised to include the planned Makaiwa Hills interchange.

Public Transportation: An estimate of the number of public transit trips generated by the Kapolei West development will be incorporated into the Project TIAR.

e. 6.1.2.2 Future Conditions With and Without the Petition Area:

Trip Generation: An estimate of the number of public transit trips generated by the Kapolei West development will be incorporated into the Project TIAR.

Tables 13 and 14: The level of service (LOS) in Table 13 was incorrectly listed as LOS E instead of LOS D. The table will be corrected in the TIAR

f. 6.1.3 Mitigation Measures: The detailed discussions of future traffic conditions in Appendix J TIAR do discuss the level of improvements that would be needed to provide more acceptable traffic conditions for most of those locations identified with volume-to-capacity ratios approaching or greater than 1.00 without the development, as well as proposed mitigative actions where the Project resulted in the intersection deficiencies. The discussion in Section 6.1.3 focuses only on those locations where the problem conditions would result from the addition of the Project traffic.

3. Comments on Appendix J

- a. The forecast traffic volumes satisfy the warrant #3 for installation of traffic signals at these locations. Traffic signals should be installed when the actual traffic conditions satisfy the warrants for "existing conditions." The construction of each of these intersections will include the installation of vehicle detection ducts and pull-boxes to minimize future traffic disruption during the installation of the traffic signal at each of these intersections.
- b. The market study for the area indicates a substantial market for sale for use by part-time residents. The reclassification of the Petition Area for potential development has in large part been sought in order to provide additional areas for residential development closer to the ocean and more marketable to part-time residents.
- c. The traffic signals installed along the Kapolei Parkway should certainly be interconnected to facilitate the coordination of the signal operations through the City of Kapolei and Kapolei West areas.

Helber Hastert & Fee
Planners, Inc.

Edward Hirata
June 2, 2005
Page 3

- d. The figures identify major roadways in the near vicinity of the project area. No revisions are proposed.
- e. A sentence will be added to indicate that the urbanized area includes that part of the Kapolei West development that has received State Land Use Commission approval for urban uses.
- f. Table S-3 erroneously identified the existing conditions as LOS E when it should be LOS D. The table will be corrected in the TIAR.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

Sincerely,

HELBERT HASTERT & FEE, Planners



Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control

FIRE DEPARTMENT
CITY AND COUNTY OF HONOLULU

3275 KOAPAKA STREET, SUITE H425 • HONOLULU, HAWAII 96819-1869
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MUFI HANKEWANN
MAYOR



ATTILIO K. LEONARDI
FIRE CHIEF



April 8, 2005

Ms. Donna Goth, President
Aina Nui Corporation
1001 Kamokila Boulevard, Suite 255
Kapolei, Hawaii 96707

Dear Ms. Goth:

Subject: Draft Environmental Impact Statement
Project: Kapolei West Expansion Area
Location: Kapolei, Oahu, Hawaii
Tax Map Keys: 9-1-014; Portion 033
9-1-015; Portions 004 and 020

We received a letter from Mr. Thomas A. Fee of Helber Hastert & Fee Planners, Inc., requesting that our comments on the above-mentioned project be submitted to you.

The Honolulu Fire Department (HFD) has no objections to the project, provided the following are completed with:

1. Provide a fire apparatus access road for every facility, building, or portion of a building hereafter constructed or moved into or within the jurisdiction when any portion of the facility or any portion of an exterior wall of the first story of the building is located more than 150 feet (45 720 mm) from fire apparatus access as measured by an approved route around the exterior of the building or facility. (1997 Uniform Fire Code, Section 902.2.1)
2. Provide a water supply, approved by the county, capable of supplying the required fire flow for fire protection to all premises upon which facilities or buildings, or portions thereof, are hereafter constructed or moved into or within the county.

Ms. Donna Goth, President
Page 2
April 8, 2005

On-site fire hydrants and mains capable of supplying the required fire flow shall be provided when any portion of the facility or building is in excess of the 150 feet (45 720 mm) from a water supply on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building. (1997 Uniform Fire Code, Section. 903.2 as amended)

3. Submit civil drawings to the HFD for review and approval.

Should you have any questions, please call Battalion Chief Lloyd Rogers of our Fire Prevention Bureau at 831-7778.

Sincerely,

ATTILIO K. LEONARDI
Fire Chief

AKL/SY:bh

cc: Ms. Genevive Salmonson, Director
State of Hawaii, Department of Health, Office of Environmental Quality Control
Mr. Bert Saruwatari, Planner
State of Hawaii, Department of Business, Economic Development and Tourism
Land Use Commission
Ms. Corlyn Olson Orr, Project Planner
Helber Hastert & Fee Planners, Inc.

Helber Hastert & Fee
Planners, Inc.

Chief Attilio Leonardi
June 2, 2005
Page 2



June 2, 2005

Chief Attilio Leonardi, Fire Chief
Fire Department
City and County of Honolulu
3375 Koapaka Street, Suite H425
Honolulu, Hawaii 96819-1869

Dear Chief Leonardi:

**Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawaii**

Thank you for your letter to Ms. Donna Goth, President of Aina Nui Corporation, dated April 8, 2005 in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). The comments are the same as those of your November 10, 2004 comments on the EIS Preparation Notice. The development will comply with Sections 902.2.1 (requiring fire apparatus access) and 903.2 as amended (requiring adequate water supply) and other applicable 1997 Uniform Fire Code requirements. Civil drawings will be submitted to Honolulu Fire Department for review and approval.

The Draft EIS Section 6.10.2 includes the following language:

"The Petition Area would increase demand on existing fire protection facilities; however, existing fire protection facilities are adequate to provide fire protection services to the Petition Area.

Design and construction of the water system would meet all the requirements of the BWS. Access roads capable of supporting the Department's fire apparatus would be designed and built according to the City and County of Honolulu's Fire Department requirements. All roadway and water system designs would be submitted to the Fire Department for review and approval."

No changes will be made to the Final EIS.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

Sincerely,

HELBER HASTERT & FEE, Planners

Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control

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MUFI HANNEMANN
MAYOR

BOISSE P. CORREA
CHIEF

GLEN R. KAJIYAMA
ANDREW H. HIRSHU
DEPUTY CHIEFS

OUR REFERENCE BS-KP

April 15, 2005

Ms. Donna Goth, President
Aina Nui Corporation
1001 Kamokila Boulevard, Suite 255
Kapolei, Hawaii 96707

Dear Ms. Goth:

Thank you for the opportunity to review and comment on the Draft Environmental Impact Statement (DEIS) for the Kapolei West Expansion Area project.

The Honolulu Police Department's (HPD) comments are recorded on pages 6-41 and 42. The project will result in a need for increases in staffing and facilities. The authors of the DEIS state that the HPD's need is a result of regional population growth and not the development of the Petition Area. They also conclude that "No mitigation is required." We will simply state again that increased resources will be required by the HPD to provide police services for this substantial development.

If there are any questions, please call Major Michael Tamashiro of District 8 at 692-4253 or Mr. Brandon Stone of the Executive Bureau at 529-3644.

Sincerely,

BOISSE P. CORREA
Chief of Police

By 
KARL GODSEY
Assistant Chief of Police
Support Services Bureau

cc:  Ms. Genevieve Saimonson, OEQC
Mr. Bert Saruwatari,
Land Use Commission
Ms. Corlyn Olson Orr,
Helber Hastert and Fee, Planners
Serving and Protecting with Aloha

Helber Hastert & Fee
Planners, Inc.

HONOLULU POLICE DEPT.
CHIEF'S OFFICE

05 MAR 22 11 1b



Dear Participant:

Attached for your review is a Draft Environmental Impact Statement (DEIS) that was prepared pursuant to the EIS law (Hawaii Revised Statutes, Chapter 343) and the EIS rules (Administrative Rules, Title 11, Chapter 200).

Title Of Project: Kapolei West Expansion Area
Location: Oahu, Ewa District
Tax Map Key Nos.:

Agency Action: Applicant Action:

YOUR COMMENTS MUST BE RECEIVED OR POSTMARKED BY: MAY 6, 2005

Please send original comments to:

Applicant: **Aina Nui Corporation**
Address: 1001 Kamokila Boulevard, Suite 255, Kapolei, HI 96707
Contact: Donna Goth, President Phone: (808) 674-3540

Copies of the comments should be sent to:

The Office of Environmental Quality Control
Address: 235 South Beretania Street, Suite 702, Honolulu, HI 96813

Accepting Authority: **Land Use Commission, State of Hawaii**
Address: 235 South Beretania Street, Room 406, Honolulu, HI 96813
Contact: Bert Saruwatari, Planner Phone: (808) 587-3822

Consultant: **Helber Hastert & Fee, Planners**
Address: 733 Bishop Street, Suite 2590, Honolulu, HI 96813
Contact: Corlyn Olson Orr, Project Planner Phone: (808) 545-2055

Thank you for your participation in the EIS process. We look forward to receiving your comments, questions and suggestions.

Sincerely,

HELBER HASTERT & FEE, PLANNERS


Thomas A. Fee, AICP
President

Enclosure

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Helber Hastert & Fee
Planners, Inc.

Mr. Karl Godsey, Assistant Chief of Police
June 2, 2005
Page 2

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control



Helber Hastert & Fee
Planners, Inc.

June 2, 2005

Mr. Karl Godsey, Assistant Chief of Police
Support Services Bureau
Police Department
City & County of Honolulu
801 South Beretania Street
Honolulu, HI 96813

Dear Mr. Godsey:

**Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawaii**

Thank you for your letter dated April 15, 2005 in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). This letter is to acknowledge your comment that additional resources, including increased staffing and facilities, will be required to provide police services for the proposed project.

The following revisions have been made to the Final EIS to address your concerns (deleted text is indicated by a ~~strike through~~, and new text is underlined).

Section 6.9.2 Probable Impacts

"The Honolulu Police Department indicated that the Kapolei West project would increase the demand for police services, and that the population growth in the region is resulting in the need for additional staffing and police facilities. The Petition Area would introduce approximately 1,150 homes and 1,900 new residents to the region. The need for increases in staffing and additional police facilities is a consequence of the planned regional population growth, which includes the Petition Area. ~~and not the development of the Petition Area.~~ The Honolulu Police Department will require increased resources to provide police services for the development."

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

Sincerely,

HELBER HASTERT & FEE, Planners

Thomas A. Fee, AICP
President

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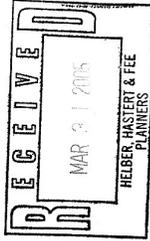
OAHU CIVIL DEFENSE AGENCY
CITY AND COUNTY OF HONOLULU

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PHONE: (808) 525-4121 • FAX: (808) 524-3439



MUF HANNEMANN
MAYOR

WILLIAM D. BALFOUR, JR.
ACTING ADMINISTRATOR



March 29, 2005

Mr. Thomas A. Fee, AICP
President
HELBER HASTERT & FEE, PLANNERS
Pacific Guardian Center
733 Bishop Street, Suite 550
Honolulu, Hawaii 96813

Dear Mr. Fee:

RE: Draft Environmental Impact Statement (DEIS)
Kapolei West Expansion Area, Oahu, Ewa District

Thank you for the opportunity to review the above mentioned Draft EIS. The Oahu Civil Defense Agency (OCDA) does not have any comments, questions, or suggestions.

Sincerely,

WILLIAM D. BALFOUR, JR.
Acting Administrator

Helber Hastert & Fee
Planners, Inc.

June 2, 2005

Mr. William D. Balfour, Jr.
Acting Administrator
Oahu Civil Defense Agency
City and County of Honolulu
650 South King Street
Honolulu, HI 96813

Dear Mr. Balfour:

**Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawaii**

Thank you for your letter dated March 29, 2005 in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). This letter is to acknowledge your response indicating that your agency does not have any comments to offer at this time.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

Sincerely,

HELBER HASTERT & FEE, Planners

Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control



May 4, 2005

Ms. Donna Goth, President
Aina Nui Corporation
1001 Kamokila Boulevard, Suite 255
Kapolei, HI 96707

Dear Donna,

Subject: DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS)

Thank you for allowing Hawaiian Telcom to review the Draft Environmental Impact Statement (DEIS) for the Kapolei West Expansion Area. Upon review of the DEIS, we have determined that Hawaiian Telcom has existing telecommunication facilities within the identified project boundary. Please contact me in the event that these existing telecommunication facilities need to be adjusted or relocated so we can coordinate the move and identify any applicable relocation cost.

We have also determined that the existing telecommunication facilities need to be augmented to support the anticipated telecommunication demands for this project. We may require easements to install the necessary electronic equipment and cable facilities to serve this area. The specific requirements for Hawaiian Telcom will be determined during our review of the proposed construction plans.

Please give me a call at 546-3888 if you have any question.

Sincerely,

Stacy Shishido
Section Manager
Network Engineering & Planning – CAF Planning

c: The Office of Environmental Quality Control
Bert Saruwatari - Land Use Commission, State of Hawaii
Corlyn Olson Orr - Helber Hastert & Fee, Planners

Helber Hastert & Fee
Planners, Inc.

June 2, 2005

Ms. Stacy Shishido
Section Manager
Network Engineering and Planning – CAF Planning
Hawaiian Telcom, Inc.
P.O. Box 2200
Honolulu, HI 96841

Dear Ms. Shishido:

**Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawaii**

Thank you for your letter to Ms. Donna Goth, President of Aina Nui Corporation, dated May 2, 2005 in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). This letter is to acknowledge your comments on telecommunications facilities, including the need to augment existing telecommunications facilities within the project boundary to support the project and the possible requirement for easements to install the facilities needed to serve the project.

The developer will coordinate the proposed development with Hawaiian Telcom and submit construction plans for Hawaiian Telcom's review.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

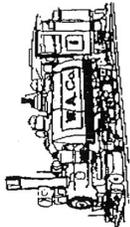
Sincerely,

HELBERT HASTERT & FEE, Planners

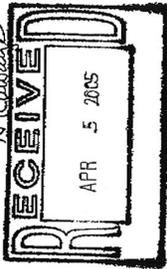
Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control





Hawaiian Railway



April 2, 2005

AINA NUI CORPORATION
1001 Kamokila Boulevard, Suite 255
Kapolei, Hawaii 96707

Dear Sir/Madam:

We have reviewed the Draft Environmental Impact Statement for the Kapolei West Expansion Area and have the following comments:

On pages 4-19, the EIS concludes that the proposed development of crossings would have no effect on the OR&L Right of Way (SHP #50-80-12-9744). From Figure 3 we deduce that there will be three new at-grade crossings of the railroad track and three underpasses. There may be some construction interruption of the historic train rides. The underpass construction will be complicated by the existence of an 8-inch HECO fuel pipeline in the makai side of the OR&L Right of Way at a depth of about 4 feet below ground. We continue to recommend that automated crossing guards be considered at the major road crossings.

The drainage discussion in pages 6-31 through 6-35 indicates that a drainage channel in the eastern watershed would drain to Kalaheo Harbor. From Figure 2 in Appendix K we see that this would include OR&L Bridge 28A (64' span) which we maintain. We recommend that Figure 2 be placed in the main body of the report rather than Figure 3 which doesn't even show the project area. The unlined channel under Bridge 28A is dry much of the year but in heavy rainstorms does pass a considerable volume of water. Bridge 28A dates back to 1938, as far as we can determine. It is a two-span riveted plate girder steel structure on concrete abutments over one concrete pier. We would appreciate detailed coordination to preserve this bridge in any design for a major drainage channel.

Thank you for the opportunity to comment on this document. Our point of contact is Ben Schlapak at 836-6553.

Very truly yours,

ROBERT YATCHMENOFF
President

c: SHPO - Nathan Napoka
HDOT-HWY-DD, Milton Oka

HAWAIIAN RAILWAY SOCIETY
A Chapter of the National Railway Historical Society

P. O. Box 60369 • Ewa Beach, Hawaii 96706 • Ph: (808) 681-5461 • Fax: (808) 681-4860

Helber Hastert & Fee Planners, Inc.

June 2, 2005

Mr. Robert Yatchmenoff
President
Hawaiian Railway Society
P.O. 60369
Ewa station, Ewa Beach, Hawaii 96706

Dear Mr. Yatchmenoff:

Kapolei West Expansion Area Draft Environmental Impact Statement Kapolei, Ewa District, O'ahu, Hawaii

Thank you for your letter to Aina Nui Corporation, dated April 2, 2005 in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). We have reviewed your comments and offer the following responses.

1. The Draft EIS states that the railroad crossings proposed would have no effect on the historic site of O'ahu Railroad and Land Company Railroad (OR&L) right-of-way (ROW) following resolution of mitigation measures. The Draft EIS further states that no mitigation is necessary. We concur that the two assertions are contradictory. We acknowledge that there may be short-term construction-phase impacts to the operation of the OR&L, and that the three proposed road crossings and two golf cart crossings would result in long-term impacts to the OR&L ROW. All surface and subsurface work impacting the OR&L ROW will be closely coordinated with your organization, the State of Hawaii Department of Transportation, and the State Historic Preservation Division.

Section 4.9.3 Mitigation has been added to the Final EIS to discuss proposed mitigation measures, including scheduling of construction activities, the construction of automated crossing guards at major road crossings, and continued consultation with the Hawaiian Railway Society, the State of Hawaii Department of Transportation and the State Historic Preservation Division.

2. As noted in your letter, stormwater in the eastern watershed would be directed to a drainage channel that underlies Bridge 28A, which has a 64-foot span and was built circa 1938. Any culvert crossings, which would be coordinated with the appropriate agencies and organizations, would avoid Bridge 28A to minimize impacts to the existing structure. The drainage plan details that were graphically represented in Appendix K of the Draft EIS are included as a new figure in the main body of the Final EIS.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

Helber Hastert & Fee
Planners, Inc.

Robert Yaichmenoff
June 2, 2005
Page 2

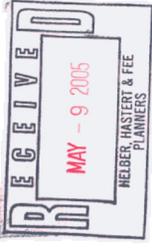
Sincerely,

HELBERT HASTERT & FEE, Planners



Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control



May 6, 2005

Ms. Donna Goth, President
Aina Nui Corporation
1001 Kamokila Boulevard, Suite 255
Kapolei, Hawaii 96707

Re: Review Comments on the Draft Environmental Impact Statement (DEIS)
Dated March 10, 2005
Title of Project: Kapolei West Expansion Area
Location: Oahu, Ewa District

Dear Ms. Goth

Thank you for this opportunity to present comments to the Draft Environmental Impact Statement for Kapolei West (the "EIS"). The Ko Olina Community Association is the master association for the Ko Olina Resort & Marina, which sits directly adjacent to the proposed development. Members within our Association include Marriott Hotels (operating the J.W. Marriott Ihilani Resort), Massachusetts Mutual (owner of the Ihilani Resort), Marriott Vacation Club International (owner and operator of the Ko Olina Beach Club timeshare), Almar Inc. (operators of the Ko Olina Marina), Ko Olina Golf Club, many other landowners, as well as all of the individual residents within the resort residential projects at Ko Olina. With that background, our comments are as follows:

General Failure to Adequately Address Impacts: As a general comment, many sections assessing impacts indicates "no mitigation required", as if the project is not responsible for addressing any impacts. Mitigation measures should discuss planned implementation of specific improvements required to adequately serve existing and projected developments. Additionally, as discussed in detail below, many matters raised in the EIS fail to address the environmental, social and economical impact of the proposed project on the region surrounding the project – including the Kapolei area and entire West Oahu region. It is difficult to assess the true impact of the proposed project without this information. Related to this issue is the lack of a sufficient analysis of alternatives to the proposed Project. There are alternatives that would address the issues raised below which must be examined in evaluating the impacts of the proposed project. In fact, the alternative of following the existing Development Plan is not adequately examined in the EIS.



2. **Regional Jobs:** Based on the elimination of planned industrial lands on the makai portion of the Project, and its conversion to golf course/buffer area, the EIS states that there will be a loss of 2,900 jobs to the region. In the growing West Oahu, jobs serve three key purposes (i) the development of the Kapolei region as a second city and cure the historical unemployment problems of the region; (ii) alleviating commuter traffic problems by providing a counterflow or non-flow of traffic on H-1; and (iii) creating a lifestyle to allow residents to live, work and play in the same community. Job creation within the region remains a key element of the planned development of Kapolei as a second city, and was the basis for the development of residential product around the City of Kapolei. The loss of 2,900 jobs is significant and, while the EIS argues that this will help ease traffic concerns in the immediate area, it (i) fails to address how the loss of these jobs will affect overall commuter traffic, as fewer area residents will be able to live and work in the same area; and (ii) fails to address how this job loss affects the development of the Kapolei region – in fact, the employment section of the EIS does not even address this proposed loss of 2,900 jobs. The loss of 2,900 jobs is not a positive impact, as the employment section attempts to summarily imply.

3. **Residential Development:** Analyzing the impacts of the proposed development must be couched within the overall plans to develop Kapolei and West Oahu. Importantly for Kapolei West is the need to understand that this development was originally planned to be phase II of Ko Olina Resort. This is significant because, as is evidenced by today's residential market developed within Ko Olina, resort residential developments, cause significantly less impact on infrastructure (including traffic, schools, etc.). Because the project is no longer being proposed as a part of the Ko Olina Resort, it is likely that its impacts on infrastructure will be greater than the alternative of developing Kapolei West as a second phase of Ko Olina Resort.

4. **Scenic and Visual Resources:** Statements in the EIS that views would not be obstructed should be further documented by visual aids, including views from Farrington Highway/H-1 and the existing developments of Ko Olina and Honokai Hale,. Given the changes proposed from the original master plan of the area, this information must be presented in this EIS. Without such information, it is impossible to adequately evaluate the impacts of the proposed project.

5. **Transportation:** Transportation issues for any West Oahu development are important, and the EIS fails to adequately address these concerns:

- a. **Regional Traffic Impacts:** While the EIS discusses traffic impacts in the immediate vicinity of the project site, there is insufficient discussion of the larger regional context. The EIS fails to address the new population's impact on regional bottlenecks areas along H-1. The EIS must address



regional transportation issues and identify planned improvements that would adequately alleviate regional traffic congestion.

- b. **Reliance on Possible Improvements:** The EIS inappropriately relies on possible future roadway and traffic improvements. The EIS must more clearly state what improvements are assumed to be provided by the State or others and what the project will be funding. Without this information, it is not possible to evaluate the true impact of the proposed project.

- c. **Traffic Flow Assumptions:** The traffic study projects a 50-50 split in traffic entering and exiting Kapolei West which does not seem to be plausible. The assumptions and rationale for this should be more clearly provided.

- d. **Industrial Traffic through Residential and Resort Areas:** The proposed traffic flow would run traffic from Campbell Industrial Park and Campbell Business Park directly through the residential developments of the project and may encourage such traffic to continue through the region's resort development. This is a significant impact that must be examined and alternatives considered.

6. **Schools:** The Department of Education's plans to address projected overcrowding of schools in 2009, as shown in Table 21, are discussed in the EIS but there is no assurance that these plans will be completed by the time the proposed project is implemented. In fact, Kapolei High School is already over capacity. Commitments to participate in fair-share contribution programs and dedication of a middle school site are conceptually appropriate but do not assure impact mitigation.

7. **Drainage:** Given the size of the project area and the changes from the original regional master plan, a drainage plan should be presented to address how storm runoff will be accommodated to prevent off-site and down-gradient impacts.

8. **Water Supply:** A more specific plan for water system facilities should be presented in the EIS to determine what off-site improvements will be needed. The use of non-potable water should include a discussion of the impacts on the sustainable yield of the underlying caprock aquifer. Additionally, the EIS fails to address the need to require that non-potable water be used for landscaping within the project, especially for the multi-family developments – and not just the parks and golf course, as proposed in the EIS.



Thank you for the opportunity to provide these comments. We look forward to a response and to the EIS addressing these concerns and issues.

Sincerely,

Ko Olina Community Association
By: Kenneth Williams
Its: Vice President

c: The Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Land Use Commission, State of Hawaii
235 South Beretania Street, Suite 406
Honolulu, Hawaii 96813

Helber Hastert & Fee, Planners
Corlyn Olsen Orr, Project Planner
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Helber Hastert & Fee
Planners, Inc.

June 2, 2005

Mr. Kenneth Williams
Vice President
Ko Olina Community Association
92-1480 Alinui Drive
Kapolei, Hawaii 96707

Dear Mr. Williams:

**Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawaii**

Thank you for your letter to Ms. Donna Goth, President of Aina Nui Corporation, dated May 6, 2005 in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). We have reviewed your comments and offer the following responses.

1. General Failure to Adequately Address Impacts

We disagree with the implication that the project is "not responsible for addressing any impacts." The DEIS clearly describes the full range of improvements required to support and minimize impacts of the project. To address the reviewer's general concern, the FEIS has been reformatting, redefining planned improvements and construction procedures as "mitigation." For example, best management practices to reduce soil erosion during the construction period, described in the DEIS under Probable Impact, have been moved to a new Mitigation section; water and wastewater system improvements described under Probable Impacts, have been moved to a new Mitigation section, etc. The summary provided in the DEIS Section 1.3 (Summary of Probable Impacts and Mitigation Measures) has been updated to reflect these changes.

We also disagree with your conclusion that the alternative of following the existing Development Plan has not been adequately examined. The analysis of alternatives presented in the DEIS was thorough and we believe the findings support the Proposed Action.

2. Regional Jobs

A response to this comment necessitates an overview of the regional job goals as well as the Petitioner's land planning intent.

We completely agree that job creation in the Ewa Development Plan area is essential to establishing a true second city. DPP estimates that job growth in the Ewa region will increase from about 21,500 in 2000 to over 70,000 by 2030 (a 226% increase). Jobs within the Kapolei region (City of Kapolei, Ko Olina/Kapolei West/Kaleloa/ICIP/Makaiwa/Makakilo) are projected to increase from about 10,300 in 2000 to over 50,000 by 2030 (a 386% increase). Jobs in the Kaleloa/ICIP area alone (immediately south of the Petition Area) are forecast to increase from

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Planners, Inc.

Mr. Kenneth Williams
June 2, 2005
Page 2

about 5,530 in 2000 to over 14,200 by 2030 (a 157% increase) – a net increase of 8,670 jobs.

The job loss referred to in your letter was a worse case scenario based on theoretical zoning densities and intended only for comparison with the proposed use of the area. While it identifies potential number of jobs if the alternative use of the land was for industrial development, it was not intended to represent a change in projected regional employment levels. From a regional perspective, the 75.6-acre subject area represents a small portion of the larger 2,300-acre Kalaheoa/JCIP employment area (approximately 3.3 percent) and its removal from industrial use should not limit projected industrial job growth in the area. The alternatives analysis in the FEIS (Chapter 8) has been revised to emphasize this conclusion.

Given the remaining land to be developed in the City of Kapolei, the undeveloped land east and west of Kalaheoa Boulevard and the intended development of several more hotels in Ko Olina, there is ample opportunity to reach the projected job growth intended for the second city.

From a land planning perspective, the Petitioner believes that the Proposed Action for this area (consisting primarily of parks and golf course fairways), would result in improved land use compatibility (by providing a transitional land use between the residential areas above the OR&L ROW and the Kalaheoa/JCIP industrial area below the OR&L ROW), improve the visual experience of travelers along the Historic Railroad ROW (pedestrians, bicyclists and train riders), provide the opportunity for a championship class golf course (desired to complement the Ko Olina course where the OR&L ROW also bisects the golf course) and provide a more sensitive backdrop to the identified cultural resources in the area south of the OR&L ROW.

3. Residential Development

We disagree with the conclusion that the impact on infrastructure of the original Ko Olina Phase II project would be “significantly less” than the Kapolei West project. While both projects included a mix of primary and secondary housing, Kapolei West has substantially fewer residential units (1,130 fewer units), translating to reduced demands on public facilities and services.

Kapolei West is still being planned as an extension of the Ko Olina Resort, albeit under different ownership. The addition of a second championship golf course will increase the attractiveness of the existing Ko Olina Resort.

4. Scenic and Visual Resources

As noted in the DEIS, Petition Area development would not obstruct significant views identified in the Ewa Development Plan. The Petition Area has been identified for urban development for many years so Ko Olina residents should not be surprised that the fallow agricultural lands to the south and east would ultimately be converted to urban uses.

The primary visual impact of Petition Area development on Ko Olina residents would be

Helber Hastert & Fee
Planners, Inc.

Mr. Kenneth Williams
June 2, 2005
Page 3

associated with homes constructed adjacent to and south of Ko Olina’s 2nd, 3rd, 4th and 5th golf fairways and the existing Ko Olina Fairways residential community. Perimeter Fairway units are oriented south, towards the adjacent golf fairways with the bluff of the Petition Area visible across the golf fairways (between 300 to 700 feet away). Perimeter homes constructed within the Petition Area would be visible to perimeter homes within the Fairways community, but with ample separation provided by the expansive golf fairways – a condition similar to most planned golf communities. Because the homes would be constructed south of the Fairways, sunset views, if available to any of the Fairways units, would not be affected (planned Ko Olina development to the west of the Fairways may affect this view plane, however).

5. Transportation

a. Regional Traffic Impacts

The TIAR focused on the impacts within the City of Kapolei/Ko Olina area since the proposed Kapolei West development represents a substantial reduction in the residential units identified for the area in the Ewa Development Plan, and thus should place less burden on the H-1 Freeway connection to the central Honolulu area than the higher residential counts reflected in the previous plans for the Project site.

b. Reliance on Possible Improvements

The possible improvements that Aina Nui relies upon in the DEIS are taken from the Ewa Regional Transportation and subsequent Bill 52 impact fee ordinance program. The Estate of James Campbell, Ko Olina, and all the other major Ewa landowners and developers, together with the State Department of Transportation (DOT) and the City and County of Honolulu developed a transportation plan for the region. Bill 52 then developed a funding plan. In addition, the TIAR identifies other roadway improvements that are included in the OMPO Long-Range Regional Plan. The TIAR summary also identifies those additional improvements that would be needed to mitigate the traffic impacts of the Project. Aina Nui Corporation will continue its work with the Estate of James Campbell, the State DOT, the City and County of Honolulu, and other landowners and developers to implement the regional transportation plan and other roadway improvements identified for the area.

c. Traffic Flow Assumptions

At Project build-out, the planned land uses are projected to result in a split of entering/exiting vehicles of about 39%-61% in the morning peak hour and 55%-45% in the afternoon peak hour. These splits are based on the planned mix of residential and commercial land uses, and the standard trip generation rates to/from each of these uses based on the Institute of Transportation Engineers data presented in its publication *Trip Generation*.

d. Industrial Traffic through Residential and Resort Areas

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Mr. Kenneth Williams
June 2, 2005
Page 4

Under normal conditions, most truck traffic would likely use the faster Farrington Highway route. The Ewa Regional Transportation Plan, developed by the State of Hawaii, the City and County of Honolulu, and the regions' landowners and developers has identified the road network that is needed to accommodate traffic in the region.

6. Schools

Aina Nui Corporation is planning to donate the land for a new Middle School within Kapolei West to fulfill its fair share requirements. A middle school should complement the elementary school site that is required in the Ko Olina Resort.

7. Drainage

The regional drainage plan is not expected to change from previous master plans for the area. A drainage master plan will be prepared that will address offsite concerns.

8. Water Supply

A project specific master plan will be prepared as planning for the development continues. Further discussions with the Board of Water Supply (BWS) will be held to identify required offsite water system facilities. Use of non-potable water within the project site will be coordinated with the responsible agencies. The sustainable yield of the underlying caprock aquifer will be positively affected through irrigation infiltration of non-potable water supplied by the BWS.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

Sincerely,

HELBER HASTERT & FEE, Planners


Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control

Ralph F. Harris, President
Board of Directors
Ko Olina Fairways Association of Apartment Owners
92-1527-H Aliinui Drive
Kapolei, Hawaii 96707-2232

Phone: (808) 679-0085
Fax: (808) 679-0086

May 5, 2005

Ms. Donna Goth, President
AINA NUI CORPORATION
1001 Kamokila Boulevard, Suite 255
Kapolei, HI 96707

RE: Review Comments on the Draft Environmental Impact Statement (DEIS)

Dated March 10, 2005

Title of Project: Kapolei West Expansion Area

Location: Oahu, Ewa District

Tax map Key Nos: (1) 9-1-14; portion 33; 9-1-15: portion 4 and portion 20

Dear Ms. Goth:

Thank you for the copy of the Draft Environmental Impact Statement (DEIS) for the Kapolei West project and the subsequent electronic copy of the report on a CD. We appreciate your responsiveness to our request.

This letter is a composite of comments that we received from homeowners at the Ko Olina Fairways and members of our Board of Directors who have taken their time to review the Aina Nui's draft DEIS.

When we wrote you in February 2005 we pointed out that our general understanding is that a Kapolei West Plan should complement the Ko Olina Resort development as conceived in the master planning process. The draft EIS does not acknowledge this concept and we think that is failure to plan a transition of the two developments that works for the community. Our understanding as residents (circa 1995) on this Resort that the Campbell Master Plan and Ewa Master Plan anticipated a second resort quality golf course in the abutting development would complement the Ko Olina Resort. The Kapolei West plan does not meet a standard to complement a transition from the Resort.

The AOA Ko Olina Fairways strongly opposes three (3) major areas of "close proximity" to the Fairways. Our objections include 1) the proposed roadway plan that results in a four way intersection at Road "D" and Aliinui Drive. The proposed road will run along the eastern boundary of the Ko Olina Resort and Marina property line and that



Ms. Donna Goth, President
AINA NUI CORPORATION
May 5, 2005
Page 2 of 3

is next to the Ko Olina Fairways. 2) The proposed commercial site at the new intersection would be a disaster for attracting more people to this new focal point and this will threaten the quality of life and security concerns of homeowners. 3) In your Draft EIS the traffic congestion that would occur at the intersection with Aliinui Drive and Road "D" would be further complicated by the Resort gate that will need to be installed and manned 24 hours a day.

These major objections were detailed to Aina Nui Corporation in a letter dated February 18, 2005 letter following Aina Nui's presentation to the Ko Olina Fairways homeowners in January 2005. A copy of that letter is included with this letter as part of our comments on the draft.

Additionally, we were asked by homeowners to include further comments and objections related to roadway "D" because such a roadway, if built, would generate increased noise and dust that will affect the quality of life at the Fairways. We recommended that Aina Nui revisit their plan and move the roadway away from the existing residential at Ko Olina Resort and include a sufficiently landscaped buffer to reduce the impact of vehicles traveling along the road.

We were also ask to comment that you remove the proposed commercial site which makes no sense knowing that Campbell Estate has a new Regional Mall that is approved and coming online before this project. The mall site borders on the eastern boundary of the Kapolei West Plan and therefore additional commercial activities next to existing residential does not make sense! We believe that the location of this commercial parcel is incompatible with your overall Plan.

The addition of traffic signals on Farrington Highway is unclear but noted and there may be a new signal at the location of the intersection of road "D" and Farrington. Farrington has two existing traffic signals fronting Honokai Hale and Nanakai Gardens. The additional signals on the highway will affect traffic flow that is already stressed.

Finally, we attach specific comments from one of our Directors, Mr. Timothy Spillane, that addresses several inconsistencies and omissions in your DEIS. Mr. Spillane's comments are interesting in that he has noted that there are some subtle missing comments in your EIS and some subtle assumptions in your plan.

We did notice that in comparing the changes in your master plan that this project would result in three thousand (3,000) lost industrial jobs compared to alternative uses!

Thank you for including our comments and objections in the review of the Draft EIS. Should you have any questions or comments please contact me.

Ms. Donna Goth, President
AINA NUI CORPORATION
May 5, 2005
Page 3 of 3

Sincerely,
AOAO Ko Olina Fairways



Ralph F. Harris, President

Enclosures: Letter dated February 18, 2005 from Ralph F. Harris, President, Ko Olina Fairways AOAO to Aina Nui Corporation.
Comments of Director Spillane, AOAO Ko Olina Fairways

cc: The Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Land Use Commission, State of Hawaii
235 South Beretania Street, Suite 406
Honolulu, Hawaii 96813

Helber Hastert & Fee, Planners
Corlyn Olsen Orr, Project Planner
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Ko Olina Community Association
Ken Williams, General Manager
1480 Aliinui Drive
Kapolei, Hawaii 96707

Board of Directors
AOAO Ko Olina Fairways
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Ralph F. Harris, President
Ko Olina Fairways Board of Directors
92-1527-H Alii Nui Drive
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February 18, 2005

Ms. Donna Goth, President
AINA NUI CORPORATION
1001 Kamokila Boulevard, Suite 255
Kapolei, HI 96707

RE: Presentation Feedback from Ko Olina Fairways AOA

Dear Ms. Goth:

Thank you and your team for taking the time to present the Kapolei West project to the Fairway's homeowners and the Board of Directors on January 19, 2005.

As an association of apartment owners we have several concerns about Aina Nui Corporations' proposal. It has been our understanding that the Kapolei West Plan should complement the Ko Olina Resort development as originally conceived as a possible extension of the Resort in the Ewa Master Plan. Although planning is an evolving process we hope that our comments will cause some rethinking on those portions of the plan that about the Fairways at Ko Olina Resort.

- 1 As you heard comments from homeowners at the meeting, the proposed opening of the Aliinui Drive extension raises concern about unencumbered access to Ko Olina and the Fairways. Although you stated that you would have little control regarding access into the resort, homeowners have expressed their concern that this access point will open the resort to undesirable traffic flow along the northern boundary of the Fairways.
2. Additionally, Aina Nui's plan shows an internal roadway running along the boundary of the Fairways from Alii Nui Drive heading southward to planned residential areas. This proposed roadway would drastically increase the noise level and increase security concerns along the eastern boundary of the Fairways. The homeowners would prefer a buffer along the boundary that would maintain the current quality of life for the homeowners directly affected by this plan.
3. The western boundary of Aina Nui's project and the eastern boundary of the Ko Olina Resort, on the Kapolei West Plan, becomes a central gathering place with the junction of the proposed roadways and the addition of a commercial site at the intersection with Alii Nui Drive. This use has the potential of attracting undesirable elements in to the area, and significantly increasing noise and activity near quiet residential areas. This plan and the proposed commercial activities are incompatible with the

Ms. Donna Goth, President
AINA NUI CORPORATION
February 20, 2005
Page 2 of 2

surrounding communities at Ko Olina Resort. The resulting intersection at Alii Nui Drive will have some very practical problems should Ko Olina Resort place a gate on the Resort side of the intersection. Traffic would be all bottled up at the intersection while access to the resort is screened. This would be an intolerable and potentially dangerous situation.

4. Homeowners are further concerned that Alii Nui Drive may become a thoroughfare for industrial trucking through Kapolei West and, of course, the traffic and safety concerns would diminish the quality of life in this residential community.
5. We will address our concerns about a gate on Alii Nui Drive with Ko Olina Resort.

These are the initial concerns that have been expressed to the Board of Directors. I know that several homeowners have comments and recommendations that they will address directly to Aina Nui.

Thank you again for visiting with the Ko Olina Fairway's Homeowners. We look forward to additional discussions about plan modifications.

Should you have any questions or comments please call. Mahalo,

Sincerely,



Ralph F. Harris, President
Ko Olina Fairways Board of Directors

cc: Ken Williams, General Manager, Ko Olina Community Association
Ralph Ahles, Property Manager, Metropolitan Management Company

Comments from Director Spillane (Ko Olina Fairways AOA)

Submitted May 5, 2005

1.3 EIS Summary:

The petition area of 174.2 acres of lands currently zoned as "agricultural". The Aina Nui Corporation (Estate of James Campbell) is petitioning the State of Hawaii, Land Use Commission to reclassify the petition area from an "Agricultural District" to an "Urban District". The petition request is to rezone the area for the purpose of residential development. The intent is to integrate the petition area (174.2 acres) with an adjoining parcel (372.6 acres) of urbanized area to complete an overall development area identified as "Kapolei West", a proposed 546.8 acre master planned urban district, residential and golf community.

Petition Area:

- Residential (1154 homes)
- Park (17.1 acres)
- Golf course

Probable Impacts:

Physical Environment:

No adverse impacts on climate, soils, botanical, groundwater, historic, cultural, archeological, scenic, or visual resources, or air quality or noise. Cultural and archeological resources have been studied, and several important sites have been identified for preservation or data recovery.

The proposed plans for the preservation and/or data recovery for the Cultural and Archeological resources studied and identified in this EIS need to be further identified and expanded upon.

Socio-Economic Environment:

The Draft EIS proposes that the action would have the following beneficial impacts on:

- (1) Housing, employment and fiscal resources.
- (2) Slightly offsetting the large projected shortfall of primary housing units.
- (3) The fact that the Development phase – could support an average of 390 direct, indirect and induced jobs per year.
- (4) That with completion in 2020 – could support 260 operational period jobs per year.
- (5) Positive state and county government revenue/expenditure ratios yields

- Section 226-106 Affordable Housing, section 226-106(8). Give higher priority to the provision of quality housing that is affordable for Hawaii residents and less to development of housing intended primarily for individuals outside of Hawaii. 420 in-migrants (380 new to the state, 40 presumed to relocate from elsewhere in the state).

- Homeownership, Policy A (2) Encourage increased private sector participation in the development of affordable housing units. Policy A (3) Ensure that (1) housing projects and (2) projects which impact housing provide a fair share/adequate amount of affordable homeownership opportunities.

Not a single negative impact is identified???

Development phase economic increase in employment should not be a major consideration in regards to the Hawaii State Plan.

Increases in state and county government revenue due to residential development have never reflected a significant gain in revenue due to the increased expenditures to support the development (infrastructure, infrastructure maintenance, schools, parks etc. after initial developer contributions)

The proposed beneficial impact on housing is based on a quoted 420 in-migrants (380 new to the state, 40 presumed to relocate from elsewhere in the state). It is fairly obvious that the real benefits will be exclusively developer orientated. These benefits would include offerings of additional housing units, advertised, marketed and sold, claiming the accolades of the adjacent Ko Olina Resort facilities, amenities and services, as well as the proposed Kapolei West Golf Course (with housing prices below established Ko Olina Resort properties but still high in regards to HRS Section 226-106 Affordable Housing, section 226-106(8)). Future owners will consist of vacation/investment property owners as opposed to the targets referenced throughout the document stressing the "Hawaii State Plan", prerequisites as noted above.

The majority of the Kapolei West housing market would be based on vacation/investment property owners attempting to purchase property with the expectation of the availability of the adjacent Ko Olina Resort facilities.

The interpretation of the Campbell Estate as being a "private sector entity" participating in the development of affordable housing units is highly questionable.

None of the identified Hawaii State Plan milestone prerequisites would be accomplished.

Public Facilities and Services:

The proposed Action would not have a significant direct or indirect impact on public transportation systems if the proposed traffic mitigation measures are implemented. The Proposed Action would not have an adverse impact on utilities and public infrastructure systems (water supply, wastewater, drainage, solid waste, power and communications)

- State Transportation Functional Plan:

- Policy I.A.1 Increase transportation capacity and modernize transportation infrastructure in accordance with existing master plans and laws requiring accessibility for people with disabilities.

- Policy I.B.1 Close the gap between where people live and work through

decentralization, mixed zoning and related initiatives.

- Action I.B.1.a Promote the development of the Ewa Second City to provide jobs near homes. Promote the development of jobs near homes.

Any development of this significance will most certainly adversely impact Public facilities, services and infrastructure. The mere comment in an EIS that this will not present any adverse impact is in itself disturbing. It portrays an aggressive, "answer issues away" thought process designed specifically to suffice the reader/reviewer and move forward with the petitioner's request. An EIS does not have the answers to all, nor should the author convey that it does.

The proposed mitigation projects identified in the EIS addressing the increased transportation capacity and transportation infrastructure may alleviate some of the Kapolei "city proper" transportation issues, but does not offer any resolution/mitigation with respect to the Ko Olina Resort and H-1 increased load use (During construction phase and, or upon completion). The "Ewa Second City Concept", under the guise and interdisciplinary guidance of the Campbell Estate and its affiliates has not made significant strides in regards to the State Transportation Functional Plan (see above). The Ewa Plain has been largely developed as a residential community with few significant economic employment stimuli. Current and proposed employment opportunities in both Kapolei and in the proposed Kapolei West Expansion Area are limited to retail, sales, services, restaurant and general labor. The projected ratio of homeowner expenditures and local employment income within this labor market is not conducive to support potential Kapolei West homeowners (homeowners who work and live in the Kapolei/Proposed Kapolei West areas).

The majority of homeowners in the Ewa Plain developed communities are still earning their incomes between Pearl City and Waikiki, and are dependant on the H-1 transportation corridor on a daily basis. This load capacity on the H-1 increases quarterly in proportion with the increases in Leeward Oahu housing developments. The Kapolei West Project is but one of several.

None of the identified Hawaii State Plan milestone prerequisites would be accomplished.

1.4 Alternatives Considered:

- No Action
- 'Ewa Development Plan Alternative

This is very anemic Alternatives Consideration area. "No Action" is an EIS default and the "Ewa Development Plan Alternative" is a "broad-brushed" placeholder. No Alternatives are offered depicting:

- A middle ground development plan offering concessions (half housing density with golf course/without golf course, full proposed housing density without golf course)?
- No Action with the benefits of open undeveloped space providing a buffer between communities?

An urban buffer providing relief space between the Ko Olina Resort Property and Kapolei Town Proper to enhance the resort's ambiance as a "resort" and not another Kapolei neighborhood? Undeveloped space can be beneficial.

An EIS should be objective, and not gravitate in support of a specific stance in the proposal. This EIS indicates considerable bias towards the petitioner, and suggests easy resolutions to any impacts (never adverse impacts) which could possibly result. It proposes no alternatives other than the proposed action. It identifies that the proposed action is the only logical alternative. The only logical alternative because it best utilizes the action area to best benefit the State of Hawaii, the City and County of Honolulu, the proposed "2nd City of Kapolei", Honokai Hale, the KoOlina Resort Complex, Makakilo and everything in between. It conveniently does not mention the benefits afforded (with approval of the proposed action and the Kapolei West Development as a whole) to the Estate of James Campbell, the petitioner.

No proposed endeavor of this magnitude is easy, or without adverse consequences to the environment or to those affected in the immediate vicinity of the proposed action. Thank you for the opportunity to comment on this EIS. Mahalo.

Timothy Spillane
92-1507 Aiiunui Drive #18H
Kapolei, Hawaii 96707

Helber Hastert & Fee
Planners, Inc.

June 2, 2005

Mr. Ralph F. Harris
President
Ko Olina Fairways Association of Apartment Owners
92-1527-H Aliiui Drive
Kapolei, Hawaii 96707-2232

Dear Mr. Harris:



**Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawaii**

Thank you for your letter to Ms. Donna Goth, President of Aina Nui Corporation, dated May 5, 2005 in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). This letter is to acknowledge your comments, including a letter dated February 18, 2005 from Ko Olina Fairways and comments from Director Timothy Spillane dated May 5, 2005. We have reviewed your comments and offer the following responses.

1. Kapolei West Plan should complement the Ko Olina Resort

The Kapolei West development is planned to complement the Ko Olina Resort. As shown in the plan, travelers along Aliiui Drive and Kapolei Parkway should not perceive a difference between the two developments. They will be passing through a very similar mix of golf fairway views interspersed with pockets of residential development. Although not yet designed, the proposed Kapolei West golf course plan can accommodate a 7,300 yard (back tees) championship course, complementing the 6,480 yard (back tees) Ko Olina course. The clubhouse grounds and practice tees are dimensioned to accommodate a resort-level of quality.

2. Roadway D intersection with Kapolei Parkway

The plan for the Urbanized Area indicates an intersection with Roadway D and Kapolei Parkway (not Aliiui Drive as indicated in your letter). Roadway D is a collector roadway that provides access to the Petition Area and Farrington Highway. The intersection is planned near the northeast corner of the Fairways community. A proposed mauka/makai greenbelt pathway is proposed along the east boundary of the Fairways complex, providing a buffer from the intersection and makai leg of Road D. As explained at our January 19, 2005 presentation to your Board, the intersection location is constrained on the east side by golf fairway routing which in turn constrained by the topographic relief of the plateau area. The greenbelt pathway will be landscaped to provide a visual buffer between the homes on the eastern perimeter of the Fairways and the proposed intersection.

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3. Proposed Neighborhood Commercial Site

The plan for the Urbanized Area includes a two-acre mixed use area within the northeast quadrant of the Road D/Kapolei Parkway intersection. This is intended to provide a more central location for convenient retail services to nearby communities of Ko Olina, Nanakai Gardens and Honokai Hale. In addition to neighborhood serving retail use, residential use is also envisioned within the parcel. The proposed regional center at the east end of the Kapolei West project area (also within the Urbanized Area) will be automobile/freeway oriented and would not provide the type of convenience envisioned for the smaller neighborhood center.

4. Resort Gate

As noted above, Road D intersects with the planned Kapolei Parkway, not Aliiui Drive. There is no gate planned for this location. In addition, the Ewa Regional Transportation Plan, the Ewa Development Plan and State and City development approval conditions (including those for Ko Olina) all identify Kapolei Parkway as a major east-west surface arterial road providing a direct, un gated connection between Kapolei West and the Ko Olina Resort.

5. Road D Traffic Signal

The Kapolei West plan indicates one additional access point to Farrington Highway at the east end of Kamokila Park (referred to as Road D). The Road D connection would be at the planned future location of an intersection with the Makaiawa Hills project located mauka of Farrington Highway.

6. Lost Industrial Jobs

A response to this comment necessitates an overview of the regional job goals as well as the Petitioner's land planning intent.

We regret that the analysis used to evaluate alternatives was mischaracterized as regional job loss. While it identifies potential number of jobs if the alternative use of the land was for industrial development, it was not intended to represent a change in projected regional employment levels. Job creation in the Ewa Development Plan area is essential to establishing a true second city and to the success of the Kapolei West project. DPP estimates that job growth in the Ewa region will increase from about 21,500 in 2000 to over 70,000 by 2030 (a 226% increase). Jobs within the Kapolei region (City of Kapolei, Ko Olina/Kapolei West/Kaleloa/JCIP/ Makaiawa/Makakilo) will increase from about 10,300 in 2000 to over 50,000 by 2030 (a 386% increase). Jobs in the Kaleloa/JCIP area alone (immediately south of the Petition Area) are forecast to increase from about 5,530 in 2000 to over 14,200 by 2030 (a 157% increase) – a net increase of 8,670 jobs.

The job loss referred to in your letter was a worse case scenario based on theoretical zoning densities and intended only for comparison with the proposed use of the area. While it identifies potential number of jobs if the alternative use of the land was for industrial development, it was not intended to represent a change in projected regional employment levels. From a regional

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perspective, the 75.6-acre subject area represents a small portion of the larger 2,300-acre Kalaeloa/JCIP employment area (approximately 3.3 percent) and its removal from industrial use should not limit projected industrial job growth in the area. The alternatives analysis in the Final EIS (Chapter 7) has been revised to emphasize this conclusion.

Given the remaining land to be developed in the City of Kapolei, the undeveloped land east and west of Kalaeloa Boulevard and the intended development of several more hotels in Ko Olina, there is ample opportunity to reach the projected job growth intended for the second city.

From a land planning perspective, the Petitioner believes that the Proposed Action for this area (consisting primarily of parks and golf course fairways), would result in improved land use compatibility (by providing a transitional land use between the residential areas above the OR&L ROW and the Kalaeloa/JCIP industrial area below the OR&L ROW), improve the visual experience of travelers along the Historic Railroad ROW (pedestrians, bicyclists and train riders), provide the opportunity for a championship class golf course (desired to complement the Ko Olina course, where the OR&L ROW also bisects the golf course) and provide a more sensitive backdrop to the identified cultural resources in the area south of the OR&L ROW.

7. Mr. Spillane's comments (dated May 5, 2005)

A. Cultural and Archaeological Resources

The Draft EIS provides a comprehensive summary of archaeological, and cultural resources as well as the full text of the various studies and correspondence with the State Historic Preservation Division. Proposed Plans for preservation and data recovery are presented in Section 4.9.2 of the Draft EIS.

B. Consistency with the Hawaii State Plan

The Draft EIS provides a thorough discussion of how the Proposed Action supports the policies and objectives of the Hawaii State Plan. We disagree with your conclusion to the contrary.

C. Impacts on public facilities, services and infrastructure

The Draft EIS clearly describes the full range of improvements required to support and minimize impacts of the project. To address the reviewer's general concern, the Final EIS has been reformatted, redefining planned improvements and construction procedures as "mitigation." For example, best management practices to reduce soil erosion during the construction period, described in the Draft EIS under Probable Impact, have been moved to a new Mitigation section; water and wastewater system improvements described under Probable Impacts, have been moved to a new Mitigation section, etc. The summary provided in Section 1.3 (Summary of Probable Impacts and Mitigation Measures) has been updated to reflect these changes.

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D. Alternatives

The Draft EIS included an evaluation of a No Action alternative and a Reasonable Alternative (development in accordance with the current Development Plan designation of industrial). The evaluation of the Reasonable Alternative concluded that while industrial development in the area makai of the OR&L ROW is well supported by market demand, the Proposed Action for this area (consisting primarily of parks and golf course fairways), would result in improved land use compatibility as described in our response to Item 6.0.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

Sincerely,

HELBER HASTERT & FEE, Planners



Thomas A. Fee, AICP
President

cc: Donna Goth, Ana Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control

The Senate
The Twenty-Third Legislature

of the
 State of Hawaii

STATE CAPITOL
 HONOLULU, HAWAII 96813

May 6, 2005



Ms. Donna Goth

President
 Aina Nui Corporation
 1001 Kamokila Blvd., Suite 255
 Kapolei, HI 96707

Dear Ms. Goth:

In accordance with HRS §343 and HAR §11-200, I am hereby submitting my comments on Aina Nui Corporation's petition to reclassify 174.2 acres from agricultural to urban. The petition seeks to effect the development of Kapolei West, a 546.8 acre residential and golf community.

My comments are as follows:

Comment #1: Significant economic impact of proposed development
 Two-thousand-nine-hundred jobs will be lost because of the change of industrial lands to golf course/buffer area in makai portions of the development. Job creation was a key element of the planned development of Kapolei as a second city, and was the basis for the development of residential product around the City of Kapolei. The second city is to be a job center. This project turns Kapolei into a suburb. Another Hawaii Kai is not needed.

Comment #2: Traffic flow
 The EIS is unclear regarding the traffic flow through West Kapolei. The proposal appears to provide for two new traffic signal points along Farrington Highway – one at Koio Drive and one on the east end of Kamokilo Park. This would create four signals within a very short stretch of Farrington Highway. Do not create more stop signals on Farrington Highway. It would make more sense to use those existing locations to provide connection from West Kapolei development to Farrington Highway. This would avoid safety issues and traffic flow issues for the planned resort community and the rest of the Waianae Coast. When placing a non-resort residential project adjacent to a resort, resort roads should not be used as a main thoroughfare for daily residential traffic.

- ROBERT BUNDA
PRESIDENT
- DONNA MERCADO KIM
VICE PRESIDENT
- COLLEEN HANABUSA
MAJORITY LEADER
- CLAYTON HEE
MAJORITY CLERK LEADER
- SHANE TOLSON
MINORITY LEADER
- FRED HEMMINGS
MINORITY LEADER
- BOB HOOLE
MINORITY FLOOR LEADER
- GORDON TRIMBLE
MINORITY POLICY LEADER

- FIRST DISTRICT
LORRAINE R. INOUE
- SECOND DISTRICT
RUSSELL S. KOHUBIN
- THIRD DISTRICT
PAUL WHALEN
- FOURTH DISTRICT
SHANE S. TSUBOI
- FIFTH DISTRICT
ROSALYN H. IMKER
- SIXTH DISTRICT
J. VAJANT ENGLISH
- SEVENTH DISTRICT
GARY L. HOOPER
- EIGHTH DISTRICT
SAM SLOW
- NINTH DISTRICT
LES HANAU, JR.
- TENTH DISTRICT
BRIANT TANSUICH
- ELEVENTH DISTRICT
CAROL FUKUNAGA
- TWELFTH DISTRICT
GORDON TRIMBLE
- THIRTEENTH DISTRICT
SUZANNE CHUN OKANOLO
- FOURTEENTH DISTRICT
DONNA MERCADO KIM
- FIFTEENTH DISTRICT
NORMAN SHAMOTO
- SIXTEENTH DISTRICT
DAVID Y. IBE
- SEVENTEENTH DISTRICT
RON MCKEON
- EIGHTEENTH DISTRICT
CLARENCE K. NISHIHARA
- NINETEENTH DISTRICT
BRIAN MAMO
- TWENTY-DISTRICT
WILL ESPINO
- TWENTY-FIRST DISTRICT
COLLEEN HANABUSA
- TWENTY-SECOND DISTRICT
ROBERT BUNDA
- TWENTY-THIRD DISTRICT
CLAYTON HEE
- TWENTY-FOURTH DISTRICT
BOB HOOLE
- TWENTY-FIFTH DISTRICT
FRED HEMMINGS
- CHIEF CLERK
PAUL T. LAWUGUCHI

Comment #3: Additional traffic/transportation concerns

The EIS does not address the traffic concerns that will be caused by the reclassification and rezoning of the area. Traffic impact, both for daily commuter traffic on H-1 and "community" traffic in and around Kapolei, will be significant. The EIS fails to provide any real answers as to what improvements will be made to address this already existing and growing problem. While the EIS attempts to address the issue with the justification that new jobs in Kapolei will alleviate these problems, (i) there is no evidence that there will be enough job growth in Kapolei to offset this new population and (ii) as was previously mentioned, the loss of 2,900 planned industrial jobs must be overcome. Without any net increase in jobs, the development of this residential project will significantly impact traffic problems.

Comment #4: Development of resort residential

Analyzing the proposed development must be couched within the overall plans to develop Kapolei and West Oahu. Importantly for West Kapolei is the need to understand that this development was originally planned to be part of the expansion of the developing Ko Olina Resort. This is significant, because as originally planned, as a resort residential development, the impact on infrastructure (including traffic, schools, etc.) by resort residential projects is significantly less than the impact caused by "regular" residential development as is being proposed in the EIS.

Comment #5: Impact on the master plan

Kapolei is the second city, a master planned community. The EIS fails to discuss how this significant change will affect the balance struck in the planning of Kapolei. A discussion is necessary as to whether this request is merely profit driven.

In addition to these five concerns, I also question the detrimental reliance issues that may arise as a result of these proposed changes.

Thank you for allowing me to comment. Should you have any questions or require further comment, please contact me at 586-7793.

Sincerely,

Colleen Hanabusa
 Senator, Twenty-First District

cc: The Office of Environmental Quality Control
 State of Hawaii Land Use Commission
 Corlynn Olson Orr – Helber, Hastert & Fee

Helber Hastert & Fee
Planners, Inc.

June 2, 2005

Senator Colleen Hanabusa
Twenty-First District
Hawaii State Senate
415 South Beretania Street
Honolulu, Hawaii 96813

Dear Senator Hanabusa:

**Kapolei West Expansion Area
Draft Environmental Impact Statement
Kapolei, Ewa District, O'ahu, Hawaii**

Thank you for your letter to Ms. Donna Goth, President of Aina Nui Corporation, dated May 6, 2005 in response to the Kapolei West Expansion Area Draft Environmental Impact Statement (EIS). We have reviewed your comments and offer the following responses.

1. Significant economic impact of proposed development

A response to this comment necessitates an overview of the regional job goals as well as the Petitioner's land planning intent.

We completely agree that job creation in the Ewa Development Plan area is essential to establishing a true second city. DPP estimates that job growth in the Ewa region will increase from about 21,500 in 2000 to over 70,000 by 2030 (a 2.26% increase). Jobs within the Kapolei region (City of Kapolei, Ko Olina/Kapolei West/Kalaeloa/JCIP/ Makenai/Makakilo) are projected to increase from about 10,300 in 2000 to over 50,000 by 2030 (a 386% increase). Jobs in the Kalaeloa/JCIP area alone (immediately south of the Petition Area) are forecast to increase from about 5,530 in 2000 to over 14,200 by 2030 (a 157% increase) – a net increase of 8,670 jobs.

The job loss referred to in your letter was a worse case scenario based on theoretical zoning densities and intended only for comparison with the proposed use of the area. While it identifies potential number of jobs if the alternative use of the land was for industrial development, it was not intended to represent a change in projected regional employment levels. From a regional perspective, the 75.6-acre subject area represents a small portion of the larger 2,300-acre Kalaeloa/JCIP employment area (approximately 3.3 percent) and its removal from industrial use should not limit projected industrial job growth in the area. The alternatives analysis in the Final EIS (Chapter 7) has been revised to emphasize this conclusion.

From a land planning perspective, the Petitioner believes that the Proposed Action for this area (consisting primarily of parks and golf course fairways), would result in improved land use compatibility (by providing a transitional land use between the residential areas above the OR&L ROW and the Kalaeloa/JCIP industrial area below the OR&L ROW); improve the visual



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experience of travelers along the Historic Railroad ROW (pedestrians, bicyclists and train riders); provide the opportunity for a championship class golf course (desired to complement the Ko Olina course where the OR&L ROW also bisects the golf course); and provide a more sensitive backdrop to the identified cultural resources in the area south of the OR&L ROW.

2. Traffic Flow

The Kapolei West plan indicates one additional access point to Farrington Highway at the east end of Kamokila Park (referred to as Road D). The Road D connection would be at the planned future location of an intersection with the Makenai Hills project located mauka of Farrington Highway. If State DOI will permit it, this connection may initially provide a junction that permits only right-turns to/from Farrington until the connecting intersection with Makenai Hills is constructed.

Koito Road is shown in the TIAR for the Kapolei West Project as permitting use only by right-turns to/from Farrington Highway. The TIAR analyses was based on no connection of Road D to Farrington Highway and the right-turn limitation at Koito Road, routing the maximum volume of traffic onto the Hanua Street and Kalaeloa Boulevard connections to the Freeway. To the extent the additional connections and traffic movements are permitted by State DOT, this should reduce the traffic volumes and improve traffic conditions at the Hanua Street and Kalaeloa Boulevard intersections and ramp connections as compared to those identified in the TIAR.

As noted in the Draft EIS, no direct roadway connections are planned between Kapolei West and the adjacent communities of Honokai Hale and Nanakai Gardens in deference to strong community sentiment against adding additional traffic to their internal streets.

3. Additional traffic/transportation concerns

The TIAR focused on the impacts within the City of Kapolei/Ko Olina areas since the Kapolei West development represents a substantial reduction in the residential units identified for the area in the Ewa Development Plan, and thus should place less burden of the H-1 Freeway connection to the central Honolulu area than the higher residential counts reflected in the previous plans for the Project site.

4. Development of resort residential

We disagree with the conclusion that the impact on infrastructure of the original Ko Olina Phase II project would be "significantly less" than the Kapolei West project. While both projects included a mix of primary and secondary housing, Kapolei West has substantially fewer residential units (1,130 fewer units), translating to reduced demands on public facilities and services.

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Kapolei West is still being planned as an extension of the Ko Olina Resort, albeit under different ownership. The addition of a second championship golf course will increase the attractiveness of the existing Ko Olina Resort.

5. Impact on the Master Plan

The Kapolei West project area has long been envisioned as a golf-oriented residential community, providing a transition from the Ko Olina Resort on the west and the City of Kapolei on the east. There is nothing in the Proposed Action that would indicate a shift from this vision.

6. Detrimental Reliance Issues.

You state that “detrimental reliance issues that may arise as a result of these proposed changes.” We are unclear of what is meant by this statement. Please contact me at 545-2055 in order to provide clarification.

We appreciate your participation in this review process. Your letter and this response will be included in the Final EIS.

Sincerely,

HELBERT HASTERT & FEE, Planners



Thomas A. Fee, AICP
President

cc: Donna Goth, Aina Nui Corporation
Bert Saruwatari, Land Use Commission, State of Hawaii
Genevieve Salmonson, Office of Environmental Quality Control