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165

STATE OF HAWAII

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98:DEV/1979

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM HOUSING AND COMMUNITY DEVELOPMENT CORPORATION OF HAWAII 677 OUEEN STREET, SUITE 300 HONOLULU, HAWAII 96813 FAX (808) 587-0600

December 15, 1998

TO:

The Honorable Gary Gill, Director Office of Environmental Quality Control (OEQC)

FROM:

SUBJECT: Final Environmental Assessment (FEA) Finding of No Significant Impact (FONSI) Kapolei High School Tax Map Key: (1)9-1-16:74 and por. 75 Ewa, Oahu, Hawaii

Donald K. W. Lau, Executive Director

The State of Hawaii, Housing and Community Development Corporation of Hawaii (HCDCH), has reviewed the comments received during the thirty-day public comment period which began on "September 8, 1998." The HCDCH has determined that this project will not have any significant environmental impacts and has issued a FONSI. Please publish this notice in the January 8, 1999, OEQC Bulletin.

We have enclosed a completed OEQC Environmental Notice Publication Form, four copies of the Final Environmental Assessment, and a computer disk with project summary.

Should you have any questions, please contact Sandy Pfund, Project Coordinator at 587-0550.

Enclosures

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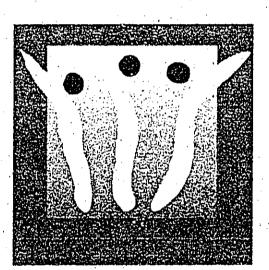
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FINAL ENVIRONMENTAL ASSESSMENT '98 DEC 23 A9:22

FOR THE

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*** KAPOLEI HIGH SCHOOL**



Prepared for:

STATE OF HAWAII HOUSING AND COMMUNITY DEVELOPMENT CORPORATION OF HAWAII

December 1998

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FINAL ENVIRONMENTAL ASSESSMENT

FOR THE

KAPOLEI HIGH SCHOOL

Prepared for:

STATE OF HAWAII HOUSING AND AND COMMUNITY DEVELOPMENT CORPORATION OF HAWAII (HCDCH)

Prepared by:

MITSUNAGA & ASSOCIATES, INC. 747 Amana Street Suite 216 Honolulu, Hawaii 96814

December 1998

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BENJAMIN J. CAYETANO GOVERNOR DONALD K.W. LAU EXECUTIVE DIRECTOR

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STATE OF HAWAII

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM HOUSING AND COMMUNITY DEVELOPMENT CORPORATION OF HAWAII 677 QUEEN STREET, SUITE 300 HONOLULU, HAWAII 96813 FAX (808) 587-0600

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Should you have any questions, please contact Sandy Pfund, Project Coordinator at 587-0550.

Enclosures

OEQC BULLETIN PUBLICATION FORM (Follow instructions on other side)

1	Project Nam	e: KAPOLEI HIGH SCHOOL
	Legal Autho	rument <i>(circle one)</i> : Draft EA Final EA EIS prep notice draft EIS final EIS rity: <u>Chapter 343, HRS</u> ermination: <u>FONSI</u>
2	District:	Qahu Ewa y Number: $9-1-16$: 74 and 75 por.
3	Applicant: Address:	Housing and Community Development Corporation of Hawaii 677 Queen Street, Suite 300 Honolulu, Hawaii 96813
	Contact:	Sandy Pfund Phone: 587-0550
4	Approving A Accepting A Address:	uthority: <u>Governor</u> , State of Hawaii <u>c/o Office of Environmental</u> Quality Control <u>235 S. Beretania St., Suite</u> 702
	Contact:	<u>Honolulu, Hawaii 96813</u> Phone:
5	Consultant: Address:	Mitsunaga and Associates, Inc. 747 Amana Street, Suite 216 Honolulu, Hawaii 96814
	Contact:	Byung S. Lee, AICP Phone: <u>945-7882, #1</u> 32
6	Public Comm	nent Deadline: Feb. 8, 1999
7	•	ired prior to implementation:Building, Grading, NPDES
8	Project Sumr	nary (name of file on disk):
9	Public Library	Copy: <u>Ewa Beach Public L</u> ibrary
10	This form wa Signature: _	as prepared by: <u>Byung S. Lee, AICP</u> Phone: <u>945–7882,</u> #132

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Environmental Assessment

KAPOLEI HIGH SCHOOL

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Table of Contents

		Page
Pref	ace	····· i
Surr	imary	İİ
	Proj	oosing Agency and Landowner ii
	Prop	perty Location and Description ii
	Prop	posed Actioniii
	Alter	rnatives iv
	Find	ings and Determination vi
	Dev	elopment Summary vii
	Nec	essary Permits and Approval viii
I .	PRC	JECT OVERVIEW 1
	А.	Project Location, Existing Use, and Land Ownership
	В.	Project Need 2
	C.	Proposed Action
	D.	Project Schedule and Costs 10
11.	DES	CRIPTION OF THE EXISTING ENVIRONMENT
	А.	Physical Environment
	В.	Socio-Economic Environment
	C.	Public Services
	D.	Infrastructure
112.	POTE	ENTIAL IMPACTS AND MITIGATION MEASURES
	A.	Impacts to Physical Environment
	в.	Impacts to Community Setting
	С.	Impacts to Infrastructure
	U .	

тос - 1

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List of Figures

Figure 1	Location and Service Area Map	3
Figure 2	Vicinity Map	5
Figure 3	Тах Мар	6
Figure 4	Villages of Kapolei Master Plan	7
Figure 5	Kapolei High School Master Plan	11
Figure 6	Geologic Soil Types Map	15
Figure 7	Flood Insurance Rate Map	17
Figure 8	U.S. Navy AICUZ Map	21
Figure 9	Noise Contour Map (NASBP Community Redevelopment Plan)	23
Figure 10	Ewa Regional Drainage Map	39
Figure 11	Power Map	41
Fiaure 12	State Land Use Boundary Map	57

List of Tables

Table 1	Year 2010 and 2020 Population in Ewa	26
Table 2	Proposed Feeder Complex	30

List of Appendices

Appendix A	Community Input Diagram
Appendix B	Design Charette Participants
Appendix C	Site Plans and Main Entry Sketch
Appendix D	Photos of Project Site
Appendix E	Kapolei High School Facilities Assessment and
	Development Schedule (FADS)
Appendix F	Traffic Assessment: Kapolei High School
Appendix G	Comments and Response Letters on Draft EA
Appendix H	Bibliography
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Appendix I Project Team

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KAPOLEI HIGH SCHOOL

Table of Contents

Environmental Assessment

		Page
Prefa	ace	
Sum	mary	
	Prop	oosing Agency and Landowner
	Prop	perty Location and Description
	Prop	posed Actionii
	Alte	rnatives iv
	Find	lings and Determinationv
	Dev	elopment Summaryvi
	Nec	essary Permits and Approval vii
Ι.	PRC	JECT OVERVIEW 1
	Α.	Project Location, Existing Use, and Land Ownership 1
	В.	Project Need 2
	C.	Proposed Action
	D.	Project Schedule and Costs 10
11.	DES	CRIPTION OF THE EXISTING ENVIRONMENT 13
	Α.	Physical Environment 13
	В.	Socio-Economic Environment 25
	C.	Public Services
	D.	Infrastructure
III.	POTI	ENTIAL IMPACTS AND MITIGATION MEASURES
	А.	Impacts to Physical Environment 43
	В.	Impacts to Community Setting 49
	C.	Impacts to Infrastructure 51

Envi	Environmental Assessment		KAPOLEI HIGH SCHOOL
IV.	RFI	ATIONSHIP TO GOVERNMENTAL PLANS,	
	POLICIES AND CONTROLS		
	A.		
	В.	State Land Use Law	
	С.	Hawaii State Plan	
	о. D.	City & County of Honolulu General Plan	
	E.	County Zoning	
	E. F.	Ewa Development Plan	
	г. G.	Kapolei Master Plan	
	G.	Community Input	61
V.	DETE	ERMINATION, FINDINGS AND	
	REASONS FOR SUPPORTING DETERMINATION		
	A.	Significance Criteria	
	В.	Findings and Determination	
VI.	AGEN	VCIES CONTACTED PRIOR TO/DURING THE PRE	PARATION OF
		ENVIRONMENTAL ASSESSMENT	
		•	

i :

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KAPOLEI HIGH SCHOOL

· · ·

List of Figures

Figure 1	Location and Service Area Map 3
Figure 2	Vicinity Map
Figure 3	Тах Мар 5
Figure 4	Villages of Kapolei Master Plan
Figure 5	Kapolei High School Master Plan 11
Figure 6	Geologic Soil Types Map
Figure 7	Flood Insurance Rate Map
Figure 8	U.S. Navy AICUZ Map
Figure 9	Noise Contour Map (NASBP Community Redevelopment Plan)
Figure 10	Ewa Regional Drainage Map
Figure 11	Power Map 39
Figure 12	State Land Use Boundary Map
	57

List of Tables

Table 1	Year 2010 and 2020 Population in Ewa	26
Table 2	Proposed Feeder Complex	20
	Proposed Feeder Complex	30

List of Appendices

Appendix A	Community Input Diagram
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- Appendix B Design Charette Participants
- Appendix C Site Plans and Main Entry Sketch
- Appendix D Photos of Project Site
- Appendix E Kapolei High School Facilities Assessment and Development Schedule (FADS)
- Appendix F Traffic Assessment: Kapolei High School
- Appendix G Comments and Response Letters on Draft EA
- Appendix H Bibliography
- Appendix I Project Team

KAPOLEI HIGH SCHOOL

Preface

The State of Hawaii, Housing and Community Development Corporation of Hawaii (HCDCH) in partnership with a private developer and in consultation with the State Department of Education (DOE) and the State Department of Accounting and General Services (DAGS), proposes to develop the Kapolei High School in Kapolei, Hawaii. (TMK 9-1-16:74 and por. 75). Pursuant to Chapter 343, Hawaii Revised Statutes, and Chapter 200 of Title 11, Administrative Rules, <u>Environmental Impact</u> <u>Statement Rules</u>, this Environmental Assessment (EA) documents the project's technical characteristics and environmental impacts, and advances findings and conclusions relative to the significance of the project.

KAPOLEI HIGH SCHOOL

<u>Summary</u>

Proposing Agency and Landowner

The proposing agency for the proposed project is the State of Hawaii, Housing and Community Development Corporation of Hawaii (HCDCH) as the successor of the Housing Finance and Development Corporation (HFDC) pursuant to Act 350, Session Laws of Hawaii 1997. The landowner for the property is the HCDCH.

Property Location and Description

The proposed Kapolei High School project is located on the southwest side of the Island of Oahu, approximately 22 miles west of the primary urban center of Honolulu. The site is located near the center of the Ewa Plain, north of Naval Air Station Barbers Point (NASBP), south of the Makakilo residential community and directly east of the proposed Kapolei Town Center. Further to the west lie the Campbell Industrial Park, Deep Draft Harbor, Ko'Olina resort/residential community, and the existing community of Honokai Hale. Major roadways providing general access to the site area include the H-1 Freeway and Farrington Highway, while Kapolei Parkway and Fort Barrette Road (aka Barbers Point Access Road) provide the direct access to the site. For taxation purposes, the project site is identified as TMK 9-1-16:74 and por. 75.

The site has been designated Urban for purposes of State Land Use. The site is zoned AG-1 Restricted Agricultural District by the City and County of Honolulu. The site is also zoned R3.5 Residential District under Act 15, Session Laws of Hawaii 1988. A public school can exist over such zoning. The project site area encompasses approximately 45 acres for the Kapolei High School and is located adjacent to a proposed residential neighborhood to the east and NASBP to the south. The north border of the project site fronts Kapolei Parkway, while the west border fronts Barbers Point Access Road.

ii

The Kapolei High School project site is presently owned by the State of Hawaii, HCDCH but the school will be developed by Makai Village Partnership, a private developer. The land was previously leased to Oahu Sugar Company (OSCo) by the former owner, Campbell Estate, for sugar cane cultivation. All sugar cane cultivation in this area was terminated by OSCo. The State of Hawaii owns the railway and roadway rights-of-way makai of the project site and bordering NASBP. There is a small strip of land between the railroad right-of-way and NASBP owned by Campbell Estate. Barbers Point Access Road and Makakilo Interchange are also owned by the State of Hawaii. Kapolei Parkway, along the mauka frontage of the project site, is presently owned by State of Hawaii but will eventually be dedicated to the City and County of Honolulu. Farrington Highway is under disputed ownership. City and County of Honolulu shall acknowledge ownership and jurisdiction of all disputed highways under Act 288, SLH 1993. Fort Barrette Park (Puu Kapolei) is owned by the City and County of Honolulu. NASBP is owned by the Federal Government, but it is in the process of being transferred to various State, City and County, and Federal agencies. The proposed project is to be developed near the southwestern corner of the Villages of Kapolei.

Proposed Action

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The proposed action involves the development of the High School on approximately 45 acres of land in the southwestern corner of the Villages of Kapolei development. In preparing for the 21st century, the Kapolei High School will be the fourth public school in Hawaii to incorporate utilization of a design charette process that provided for significant input by the community that the school will serve as well as educators and students. The charette process consisted of a series of intense brainstorming, project design sessions, in which all appropriate groups came together for periods of concentrated time. The process facilitated and accelerated communication and decision-making, and provided the opportunity for significant input by more people than the traditional design process allows.

iii

KAPOLEI HIGH SCHOOL

The design charette for Kapolei High School was scheduled in three sessions and, held over a four-month period, from November 1997 through February 1998. During this time, a Steering Committee and State/Community Task Force helped to translate the ideas and themes for Kapolei High School into the physical design of the school. For further details of the design charette process see <u>Kapolei High School:</u> <u>Creating a Dynamic Learning Community (Design Charette and Master Plan Report)</u> (May 1998), prepared for Makai Villages Partnership by Mitsunaga and Associates, Inc.

The school campus will include one- or two-story buildings consisting of four classroom buildings (also called Neighborhoods), a Music Building, an Adult Education Center, a Forum (multipurpose gathering place with cafeteria function), a Library/Media Center, an Administration Center, and a P.E. Locker/Gymnasium Building. The total net space for all buildings will be approximately 198,000 sf and 302,000 sf gross floor space. The design charette process kept the total square footage of building spaces for Kapolei High School within the DOE guidelines for a comparable high school facility. (See Appendix E, Kapolei High School FADS.) The school campus will also include a football field, a baseball field, a softball field, play courts, staff and visitor parking with access to Kapolei Parkway, and a parent pick-up and drop-off area.

The school buildings will be designed in a manner to encourage the efficient use of energy resources. For natural ventilation and shade from the sun, the buildings will have high-pitched roofs, overhangs and large windows. Plumbing fixtures such will be selected to meet ultra-low flow requirements. Energy efficient, high-pressure sodium luminaires will be provided around the exterior of the buildings. General interior illumination will be provided by energy-efficient fluorescent luminaires.

The school will be designed as a year-round, four-track school to accommodate large enrollments, provide flexibility in the use of classroom spaces, and use financial and facility resources cost-effectively.

KAPOLEI HIGH SCHOOL

<u>Alternatives</u>

A. <u>No Action Alternative</u>

A no action alternative would, in the short-term, simply produce no development on the subject project site; the land would remain in its vacant state; and there would be no increased demands on infrastructure support. However, in the longer term, if no school is built on the site, residential development would eventually take its place in accordance with the proposed use in the 1993 Kapolei Master Plan. This alternative would not produce any educational facilities or create any additional job markets in Kapolei. Moreover, this alternative would leave the soaring number of high school age students in Kapolei with no high school in their immediate community; thus, forcing these school age residents to attend already overflowing Campbell High school. For all the foregoing reasons, the applicant has rejected this alternative.

B. <u>Alternate Sites</u>

Several alternate sites were considered before the final decision to place the school at the proposed site location. These alternate sites are covered in detail in the <u>FEIS for Kapolei Village</u> submitted by HCDCH in February 1988. Another site located in East Kapolei was also considered. Subsequently, after careful consideration of all available sites over several years of the planning process, HCDCH decided that the site of the High School should be at the existing proposed site for the best use of the available land and financial resources.

C. <u>Alternate Facility Configurations</u>

Several alternate site and building configurations were considered before the final decision for the Kapolei High School Master Plan was made. These alternate configurations are covered in detail in the <u>Kapolei High School: Creating a Dynamic</u> <u>Learning Community (May 1998)</u>. Through series of brainstorming design charette process with significant community inputs, the master plan for the school was decided.

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KAPOLEI HIGH SCHOOL

Findings and Determination

The proposed project will involve earthwork and construction activities. In the short-term, these activities may create temporary nuisances normally associated with construction activities. However, dust control measures, such as regular watering and sprinkling, will be implemented to minimize wind-blown emissions. It should also be noted that HCDCH also requires: preparation of a Dust Mitigation Plan, dust screens and notification to the Villages of Kapolei Association, or others, prior to commencement of site work. All construction activities are anticipated to be limited to normal daylight working hours. Impacts generated from construction activities are not considered adverse.

From a long-term perspective, the proposed project is not anticipated to result in adverse environmental impacts. There are no known significant habitats or rare, endangered or threatened species of flora or fauna or archaeological sites located on the project site. The proposed project conforms with area-wide improvements. Appropriate erosion control measures will be incorporated during the construction phase to minimize soil loss associated with construction activities. With regard to other infrastructure systems and public services, the proposed project should have no adverse environmental impact.

In light of the foregoing findings and based upon an analysis of project impacts in relation to the significance criteria (Section V), it is concluded that the proposed action will not result in any significant adverse environmental impacts. Therefore, HCDCH declares a Finding Of No Significant Impact (FONSI).

vi

Environmental Assessn	nent KAPOLEI HIGH SCHOOL
	Development Summary
Property Owner.	State of Hawaii, Housing and Community Development Corporation of Hawaii (HCDCH)
Property Location:	Approximately 22 miles west of the primary urban center of Honolulu, near the center of the Ewa Plain, north of the Naval Air Station Barbers Point (NASBP), in the southwestern corner of the Villages of Kapolei.
Proposing Agency.	Housing and Community Development Corporation of Hawaii
Тах Мар Кеу:	Zone 9, Section 1, Plat 16: Parcels 74 and portion of 75.
Area:	45 acres
State Land Use District:	Urban
City and County Ewa Development Plan Designation:	Urban
City and County Public Facilities Map Designation:	Future high school site
City and County Zoning:	AG-1 Restricted Agricultural District
Act 15 Zoning:	R3.5 Residential District
Existing Uses:	Underdeveloped lots
Proposed Use:	School (Note: A public school can exist over AG-1 and R3.5.)
Proposed Action:	The applicant HCDCH proposes to develop the Kapolei High School on approximately 45 acres of land in the southwestern corner of the Villages of Kapolei as part of the Kapolei master planned community in partnership with a private developer and in consultation with the State DOE and DAGS.
EA Accepting Authority:	Governor, State of Hawaii
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KAPOLEI HIGH SCHOOL

Necessary Permits and Approval

State of Hawaii Α.

> Department of Health 1.

- Best Management Practices a) (Approved for the Kapolei Village Master Plan)
- National Pollutant Discharge Elimination System b)
- 2. Department of Transportation
 - New Access to State Highway a)

Β. City and County of Honolulu

1. Department of Planning Permitting

- Waiver Application a) (LUO Requirement: Building Height Restriction & Off-street Parking Requirement)
- Building Permit b) (Incl. Traffic Review Branch's Approval)

2. Department of Wastewater Management

- Sewer Connection Application a)
- Industrial Wastewater Certificate b)
- 3. Department of Public Works
 - Grading Permit a)
 - Erosion Control Report b)
 - Drain Connection Application *c*)

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KAPOLEI HIGH SCHOOL



KAPOLEI HIGH SCHOOL

I. PROJECT OVERVIEW

A. PROJECT LOCATION, EXISTING USE, AND LAND OWNERSHIP

The proposed Kapolei High School project is located on the southwest side of the Island of Oahu, approximately 22 miles west of the primary urban center of Honolulu. (See Location and Service Area Map, Figure 1.) The site is located within the Villages of Kapolei near the center of the Ewa Plain, north of Naval Air Station Barbers Point (NASBP), south of the Makakilo residential community and directly east of the proposed Kapolei Town Center. Further to the west lie the Campbell Industrial Park, Deep Draft Harbor, Ko'Olina resort/residential community, and the existing community of Honokai Hale. Major roadways providing general access to the site area include the H-1 Freeway and Farrington Highway, while Fort Barrette Road (aka Barbers Point Access Road) and Kapolei Parkway provide the direct access to the site. (See Vicinity Map, Figure 2.) For taxation purposes, the project site is identified as TMK 9-1-16:74 and por. 75. (See Tax Map, Figure 3.)

The site has been designated Urban for purposes of State Land Use. The site is zoned AG-1 Restricted Agricultural District by the City and County of Honolulu. The site is also zoned R3.5 Residential District under Act 15, Session Laws of Hawaii 1988. A public school can exist over such zoning. Designated use in the revised Kapolei Development Master Plan of 1993 by the State Housing and Community Development Corporation of Hawaii (HCDCH) shows the 45 acres encompassing the proposed project site as a high school. The Kapolei High School site is adjacent to proposed residential neighborhoods (Makai Villages 7 and 8) to the east. (See Villages of Kapolei Master Plan, Figure 4.) The north border of the project site fronts Kapolei Parkway while the west border fronts Fort Barrette Road. (See Appendix D, Photos of Project Site.)

The Kapolei High School project site is presently owned by the State of Hawaii and was previously leased to Oahu Sugar Company (OSCo) by the

KAPOLEI HIGH SCHOOL

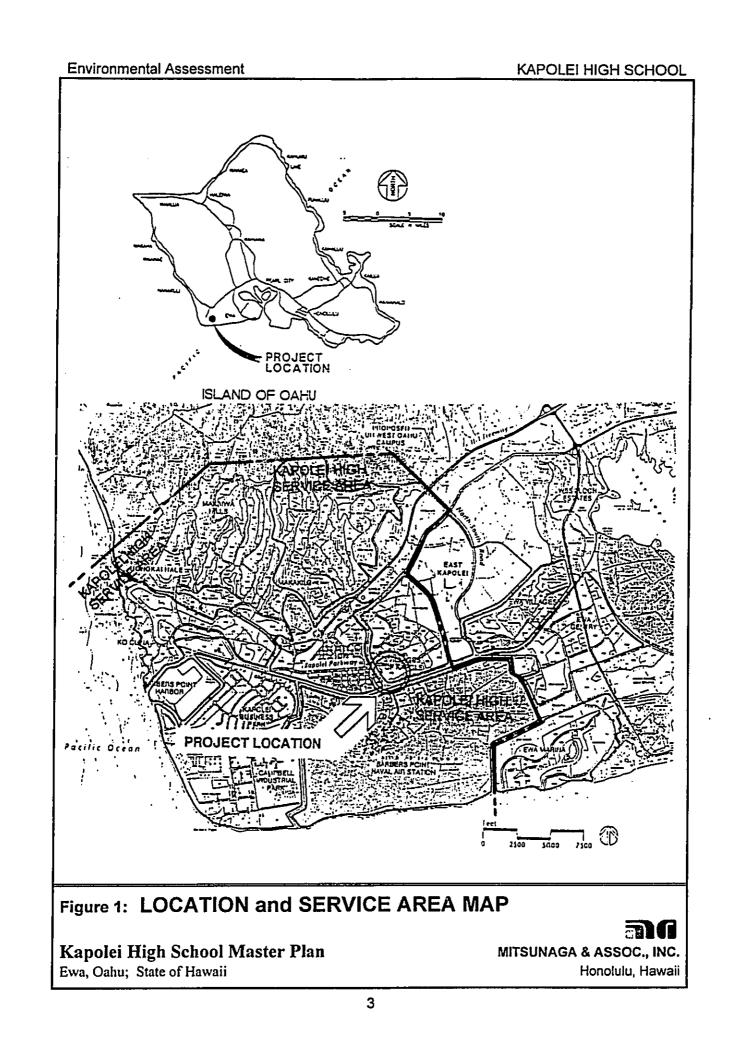
former owner, Campbell Estate, for sugar cane cultivation. All sugar cane cultivation in this area was terminated by OSCo. Such former sugar cane fields located east of the project site across a drainage channel and south of the Kapolei Golf Course are owned by the State of Hawaii, but these fields have been allowed to lay fallow pending future development of the area.

The State of Hawaii owns the railway and roadway rights-of-way makai of the project site and bordering NASBP. There is a small strip of land between the railroad right-of-way and NASBP owned by Campbell Estate. The State of Hawaii owns Barbers Point Access Road and Makakilo Interchange. Kapolei Parkway, along the mauka frontage of the project site, is presently owned by the State of Hawaii but will eventually be dedicated to the City and County of Honolulu. Farrington Highway has been under disputed ownership. City and County of Honolulu shall acknowledge ownership and jurisdiction of all disputed highways including Farrington Highway under Act 288, SLH 1993.

The City and County of Honolulu owns Fort Barrette Park (Puu Kapolei). Naval Air Station Barbers Point (NASBP) is owned by the Federal Government. NASBP is in the process of being transferred to various State, City and County, and Federal agencies. The proposed project is to be constructed in the southwestern corner of the Villages of Kapolei and just west of the proposed Village 7 of the Villages of Kapolei.

B. <u>PROJECT NEED</u>

The City's 1995 <u>First Biennial Report</u> predicts that with public school enrollment projected to rise 10,000 in the next seven years (i.e. 1996-2003) a dire need for new schools is anticipated in the high-growth areas of Ewa and Central Oahu. (See <u>First Biennial Report: On the Condition of the City and</u> <u>County General Plan and Development Plans</u>, Planning Department, City and County of Honolulu, June 1995.)



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<u>Final Supplemental Environmental Impact Statement (FSEIS) for Ewa by</u> <u>Gentry</u> (1993) reported that based on anticipated residential growth, additional schools would be required at the Villages of Kapolei, West Loch and Ewa Gentry. One elementary school was proposed for the Villages of Kapolei and one each at West Loch and Ewa Gentry. An intermediate school and a high school were also proposed for the Villages of Kapolei.

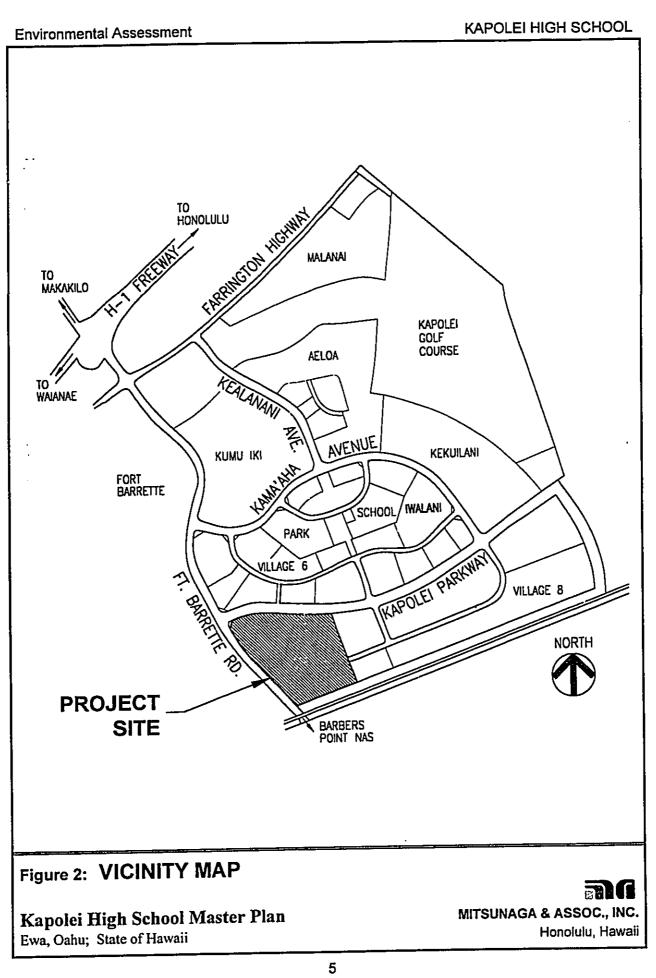
In 1993, the school enrollment in the Leeward District was 31,449 students and increased to a 1997 enrollment of 37,071 students (according to DOE's Sanford Beppu, August 1998). The Ewa area is one of the fast growing area in the Leeward District. The Ewa area is currently served by ten elementary schools, one intermediate school, and one high school: Barber Point Elementary, Ewa Elementary, Ewa Beach Elementary, Holomua Elementary, Iroquois Point Elementary, Kaimiloa Elementary, Kapolei Elementary, Makakilo Elementary, Mauka Lani Elementary, Pohakea Elementary, Ilima Intermediate, and Campbell High (according to DOE's Nick Nichols, August 1998).

Kapolei High School will serve 1,800 to 2,400 students from the surrounding residential communities: Nanakai Gardens to the west, Makakilo to the north, Villages of Kapolei to the east, and Barbers Point to the south. (See Location and Service Area Map, Figure 1; and Proposed Feeder Complex, Table 1.) If no new school construction occurred, enrollments at Campbell High School would soar far above capacity. In June of 1997, Ray Minami (CIP Planner and Planning Section Head of the DOE Facilities and Support Services Branch) indicated that both Ilima Intermediate and Campbell High School will be overburdened by 25 to 30 percent until Kapolei Middle and Kapolei High Schools are completed. According to Ray Minami, there is a dire need for the Kapolei High School to be completed as soon as possible to meet the present and future demand. The earliest completion date available for the Kapolei High School (Phase 1) will be the 2000 - 2001 school year. The target completion date is, however, subject to the timing and availability of adequate State funding.

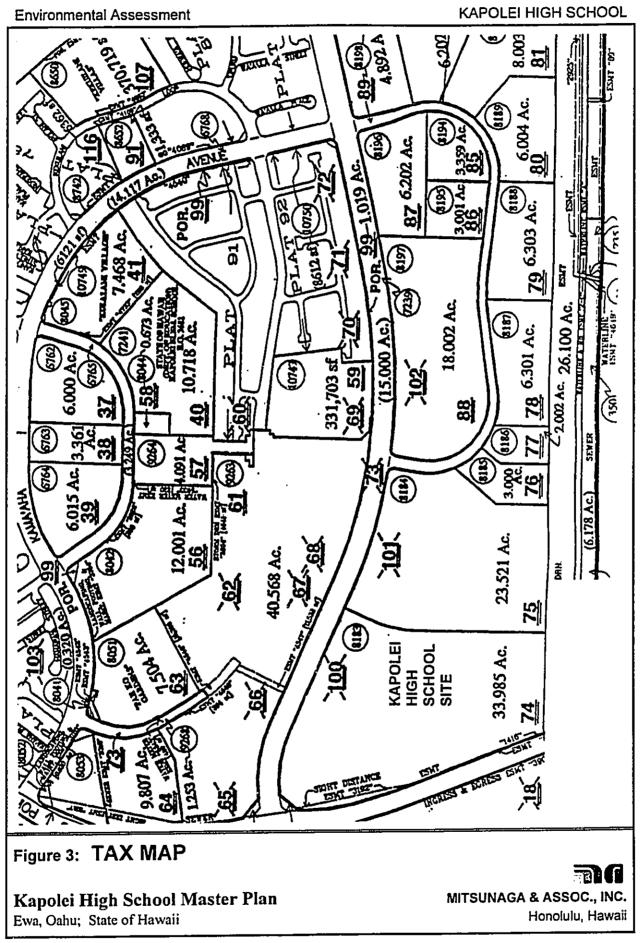
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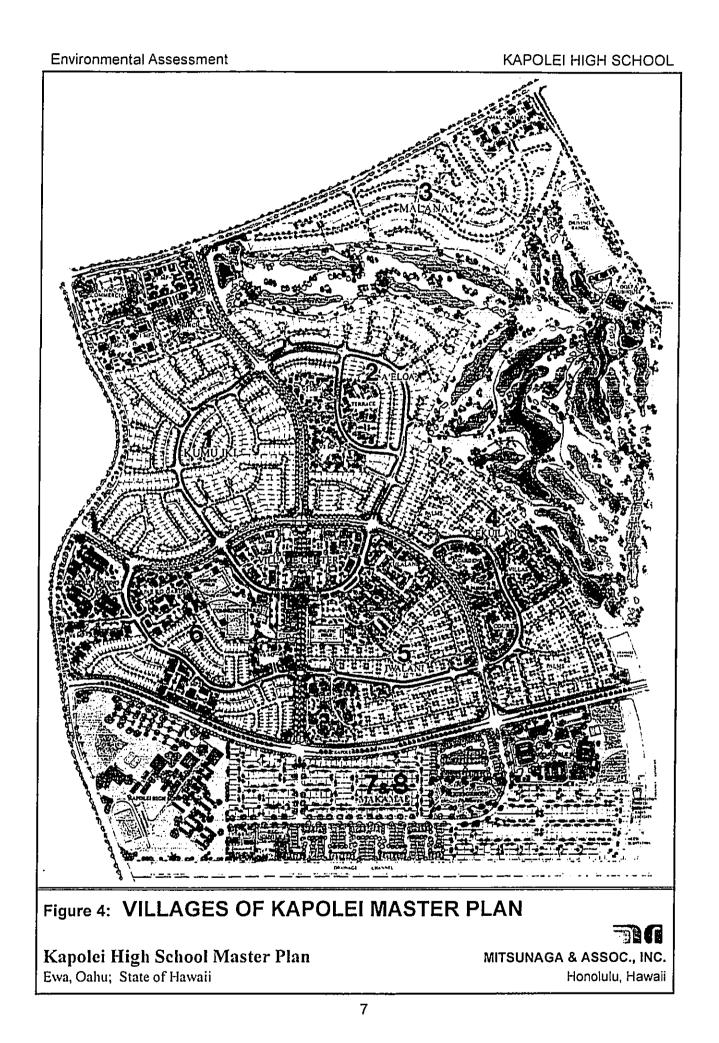
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KAPOLEI HIGH SCHOOL

C. <u>PROPOSED ACTION</u>

The proposed action involves the construction of a High School on approximately 45 acres of land in the southwest corner of the Villages of Kapolei development. In preparing for the 21st century, the Kapolei High School will be the fourth public school in Hawaii to incorporate utilization of a design charette process that provided for significant input by the community that the school will serve as well as educators and students. The charette process consisted of a series of intense, brainstorming, project design sessions, in which all appropriate groups came together for periods of concentrated time. The process facilitated and accelerated communication and decision-making, and provided the opportunity for significant input by more people than the traditional design process allows.

The design charette for Kapolei High School was scheduled in three sessions and held over a four-month period, from November 1997 through February 1998. During this time, a Steering Committee and State/Community Task Force helped to translate the ideas and themes for Kapolei High School into the physical design of the school. This progressive approach has resulted in a new kind of school design--one that is humanistic as well as future-oriented, infused with local culture as well as advanced technologies. For further details on the design charette process see <u>Kapolei High School: Creating a Dynamic Learning Community (Design Charette and Master Plan Final Report) (May 1998)</u>, prepared for Makai Villages Partnership by Mitsunaga and Associates, Inc.

The buildings which house classrooms are called neighborhoods with some 450 students in each of the four neighborhoods. Neighborhoods also include the science/technology labs as well.

KAPOLEI HIGH SCHOOL

The administration building/forum/music building complex will be close to the school entrance. The administration building is easily identified and welcomes students, parents and guests to the school. The forum will have convenient access from both school entrances, because it will function as a multipurpose gathering place for the community as well as the students. Furthermore, use of the forum for indoor performances will establish a natural relationship with the music building, which is adjacent to it. The combination of these functions into the three-building complex near the entry will give form to the village plaza just in front of it. A separate building for the media center will serve as the technological/ communications/resource hub of the school, with multi-purpose uses for students, adult education and the community-at-large.

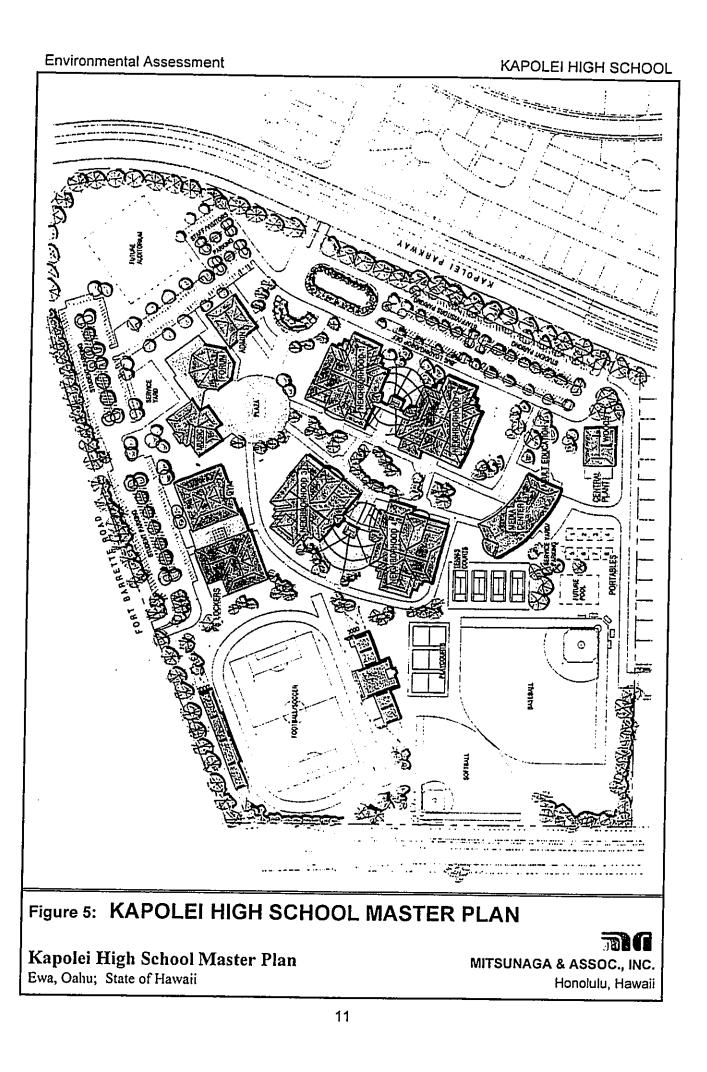
Athletic facilities include a separate gym with athletic locker/shower facilities, offices and physical education (P.E.) classrooms. Outdoor facilities include a soccer/football field, one softball diamond, one baseball diamond, tennis courts, and play courts that can be used for basketball. Spaces are reserved for the possibility of an auditorium and a swimming pool in the future.

D. PROJECT SCHEDULE AND COST

Kapolei High School will be built in two increments. Construction of the first increment is targeted to be started in February 1999 and finished in August 2000. Building construction of the second increment is anticipated to be started in February 2000 and completed August 2001. The target completion date is, however, subject to the timing and availability of adequate State funding.

Total estimated cost for the proposed school construction is approximately \$75,000,000. The total cost includes approximately \$57,500,000 for building construction and \$17,500,000 for site works. This does not include design fees, permit fees, furniture and equipment costs, or any other costs not directly related to the school construction.





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Environmental Assessment

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2.0 DESCRIPTION OF THE EXISTING ENVIRONMENT

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KAPOLEI HIGH SCHOOL

II. DESCRIPTION OF THE EXISTING ENVIRONMENT

A. <u>PHYSICAL ENVIRONMENT</u>

1. Regional Context

The socioeconomic structure of the Ewa area has evolved from one that was primarily agricultural to one that is now principally oriented towards urbanization, including housing, commercial development, and tourism. With this evolution, the demand and need for educational facilities have become more acute. The Kapolei High School will service 1,800 to 2,400 ninth to twelfth grade students from surrounding communities including Nanakai Gardens to the west, Makakilo to the north, Villages of Kapolei to the east, and Barbers Point to the south. (See Location and Service Area Map, Figure 1.) It is designed as a yearround, four-track school to accommodate large enrollments, provide flexibility in the use of classroom spaces, use financial and facility resources cost-effectively, and provide a nurturing and exciting academic environment.

The project site and surrounding areas had been planted in sugar cane since the late 1800's and the entire Villages of Kapolei site was under lease to OSCo. Sugar cane fields still exist east of the Villages of Kapolei. This area, often described as East Kapolei, is owned by the State of Hawaii and managed by the Department of Land and Natural Resources (DLNR), however there are no plans to cultivate the fields and they will remain fallow pending future planned development in this area.

The Ewa-Kapolei area is comprised of many different and distinct communities, both old and new. Existing residential development in the vicinity of the project includes the older Honouliuli residential area, the West Loch residential development and golf course to the east, and the plantation-era Ewa Villages to the southeast. The City of Kapolei, NASBP

KAPOLEI HIGH SCHOOL

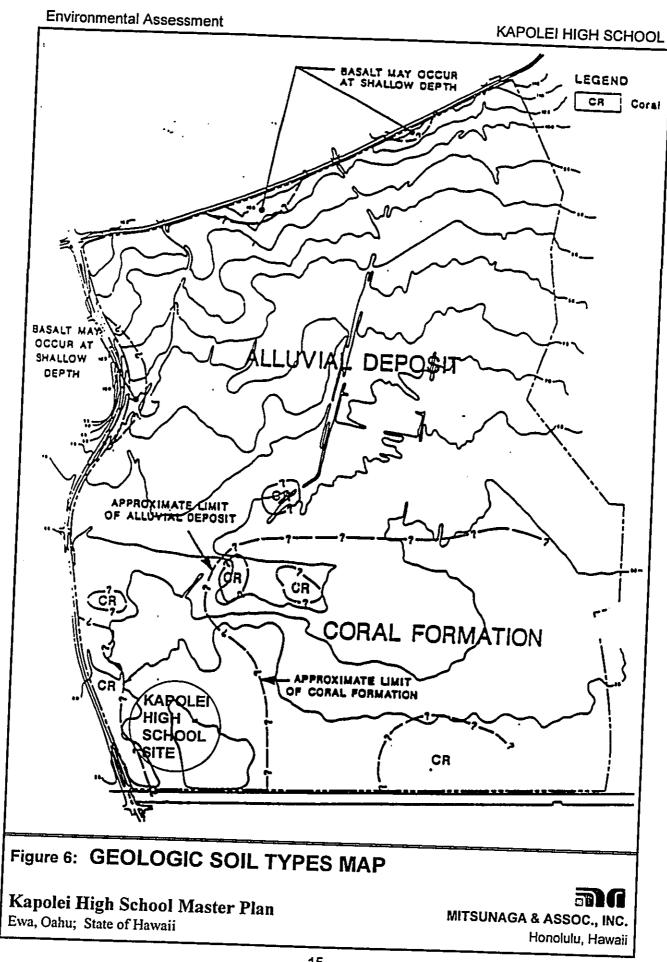
and proposed Ewa Marina project are also within a one mile radius of the site. To the northeast lies Waipahu town, and to the northwest, the residential community of Makakilo.

2. Climate

The climate in the project area is generally dry with northeast tradewinds providing the predominant wind direction, blowing 85 percent of the time with an average velocity of 9 knots. The Ewa Plain experiences light rainfall of approximately 20 inches per year. Temperatures in the area range from 69-91 degrees Fahrenheit. The warmest average monthly temperature is 80.7 degrees Fahrenheit and the coolest month average temperature is 72.3 degrees Fahrenheit. The highest temperature of record is 93 degrees Fahrenheit, and the lowest temperature recorded is 53 degrees Fahrenheit.

3. Topography and Soil Characteristics

The major topographic feature in the area is the Waianae Range forming the major backdrop of the project area. Intermediate features in the area include: Puu Makakilo (972 feet elevation above mean sea level) (MSL), Puu Kapuai (1,047 feet MSL), Puu Palailai (492 feet MSL), all located directly north of the site; and two intermittent streams (Makakilo Gulch and Makalapa Gulch). The site is relatively flat. Average slope is less than one percent. Geologic formations of the site are coral outcrop (CR) for the most part which is generally hard and may require rippling for excavation. The remainder of the site is made up of alluvial deposition. The excavated coral material can provide a good source of low expansive structural fill. Cavities of varying sizes are often found in the coral formation. If encountered, backfilling of the cavities with grout or compacted fill may be required. (See Geological Soil Types Map, Figure 6.)



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4. Flood and Tsunami Hazard

According to the Flood Insurance Rate Maps (Federal Emergency Management Agency 1990) shown in Figure 7, the project area is designated Zone D, areas in which flood hazard is undetermined. However, according to <u>Kapolei High School: Creating a Dynamic</u> <u>Learning Community (Design Charette and Master Plan Report). (May</u> <u>1998)</u>, the Kapolei High School was designed to be outside of the 100-year flood plain as determined by the Federal Emergency Management Agency. Retention and detention basins have been provided by the Housing and Community Development Corporation of Hawaii for the entire Villages of Kapolei.

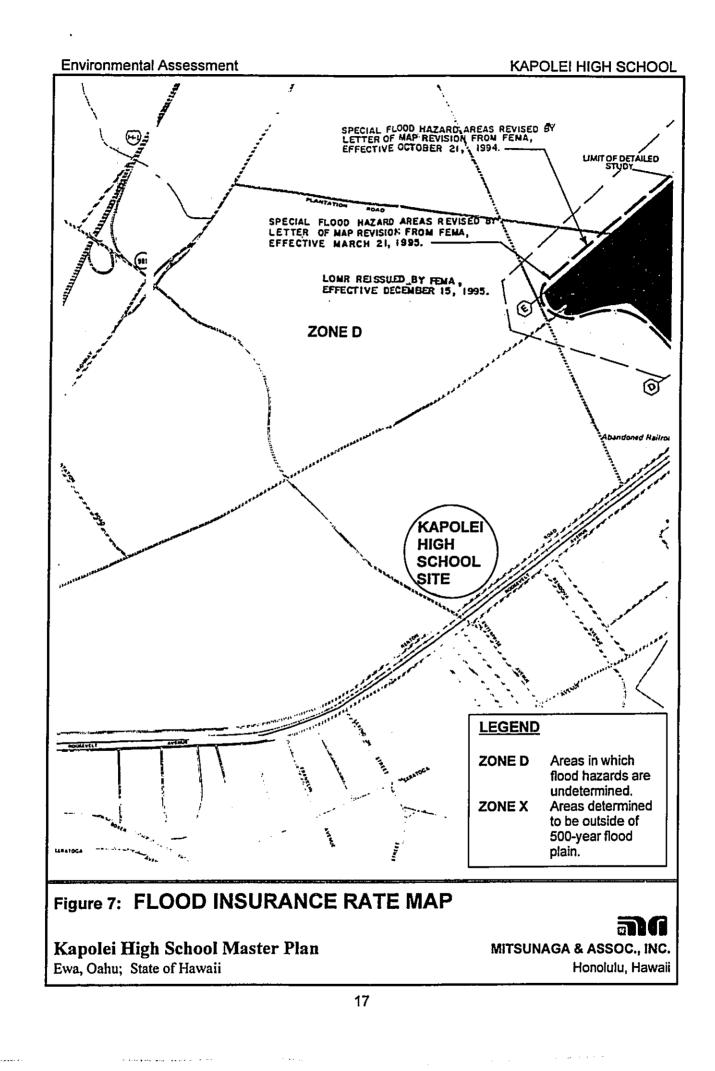
5. Flora and Fauna

The project site was under sugar cane (saccharum offinarum) cultivation prior to initial grading for the Villages of Kapolei in the late 1980's. Agricultural lands are dynamic systems, changing with the different stages of cultivation practices. Cane fields may vary from newly harvested, bare field to shore stature, open stands to tall stature, very dense stands. The fast-growing sugar cane tends to shade out and outcompete other plants to form large monodominant stands. The weedy species associated with sugar cane cultivation include nutgrass (Cyperus rotundus), swollen fingergrass (Chloris inflata), red pualele (Emilia fosbergii), snowthistle (Sonchus oleraceus), and hairy spurge (Euphorbia hirta). Presently, wild bitter melon (Momordica charantia var. pavel) and little bell (Ipomoea triloba) are locally common vines now found along the margins of the fields on the project site which is predominantly covered by common scrub vegetation. According to a biological study conducted by Char & Associates in 1987, which included the project site area, no threatened or endangered floras occur at the project site.

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Because of the many years the project site has been under sugar cane cultivation, the area is not a suitable habitat for native birds. Various surveys of the Ewa area conclude that the entire region has been disturbed for over a hundred years, resulting in severe alteration of the native ecosystem. The only mammals known to inhabit this altered ecosystem are introduced species such as feral cats, dogs, rats, mice, and mongoose.

6. Archaeological Resources

Based on a September 1987 comprehensive study of the entire Villages of Kapolei area (i.e. <u>EIS Kapolei Master Plan Project</u>) conducted by Paul Rosendahl, Ph.D., Inc., consulting archaeologist of the Kapolei area, which included the 45 acre site designated for the Kapolei High School, it was determined that:

".... no potentially significant archaeological sites or features of any kind were encountered during the reconnaissance survey of the Kapolei Project area."

Also, the 1992 <u>Environmental Impact Statement for the Kapolei</u> <u>Sports and Recreation Center</u> involves a 475-acre site of which 150 acres borders the eastern side of the Villages of Kapolei. Based on the comprehensive document research and consultations with the Chief State Archaeologist, Ross Cordy during the completion of this EIS, it was determined that:

".... the presence of any archaeological sites of any significance on the surface or subsurface of any of the alternate sites is unlikely because of the continuous cane cultivation for nearly 70 years."

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7. Air Quality

There are no State Department of Health air monitoring sites in the immediate vicinity of the project site. The nearest monitoring stations are at Pearl City and Barbers Point, which measure particulate matter. Particulate matter levels are well below the State standard levels at these sites. Air quality at the project area was expected to be comparable or somewhat better, given the site's more rural location. The State Department of Health (DOH) monitors air quality at various locations on Oahu. Typically, however, each station does not monitor the full complement of air quality parameters.

The annual air quality measurements that were made nearest to the project site at the Barbers Point Station for each of the regulated air pollutants generally indicate that Ambient Air Quality Standards (AAQS) as defined by the DOH and Federal Environmental Protection Agency have not been exceeded. It appears likely that the State AAQS for sulfur dioxide, nitrogen dioxide, and lead are currently being met at the project site.

The ozone AAQS has not been exceeded during the past four years at the Sand Island monitoring station. Carbon monoxide readings from urban Honolulu at the DOH Building station indicate the State AAQS may be exceeded at a rate of one to three times per year, but only in traffic congested areas. As such, the AAQS for carbon monoxide at the project site has probably not been exceeded.

Several sources of industrial air pollution are located at Campbell Industrial Park, which is located at Barbers Point to the southwest about three miles of the project site. Companies currently operating at Campbell Industrial Park include the Chevron and PRI refineries, H-Power, and others. Prevailing winds from the northeast will carry these emissions

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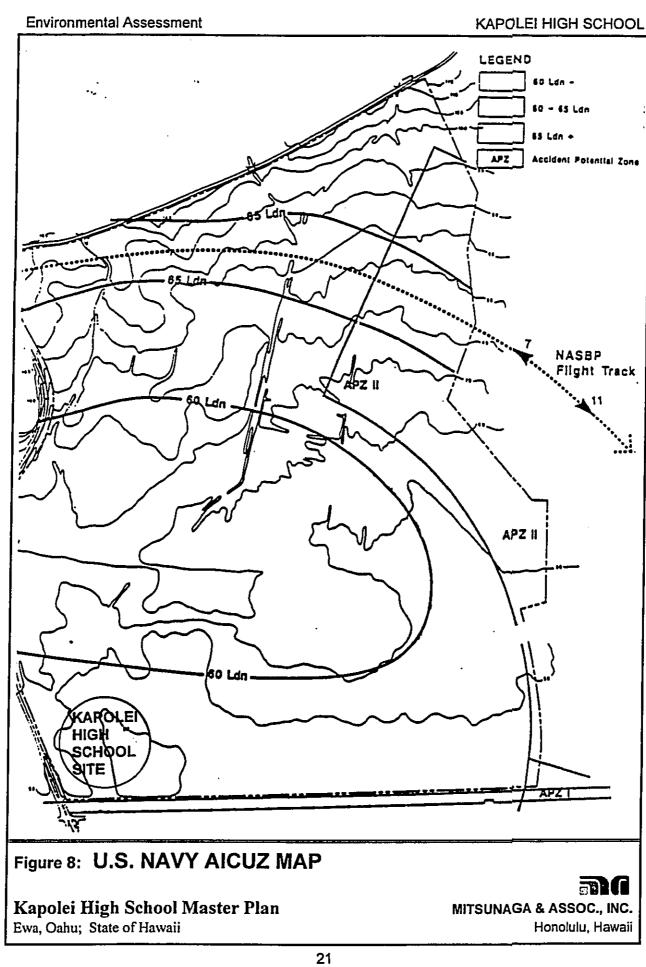
away from the project site most of the time, although southwesterly winds, occurring less than 5 percent of the time, will carry emissions toward the site. It should be noted that all the buildings of the Kapolei High School except the gym, forum and woods laboratory will be air-conditioned. Thus, most of the indoor activities will be unaffected by even the minimum impacts of air quality.

8. Noise

Existing noise levels in the vicinity of the project area are mostly generated from NASBP operations. Noise impacts of aircraft operations from NASBP on the project area and surrounding environment have been the subject of a number of studies. However, it should be noted that NASBP is being phased out and potential impacts associated with military aircraft in the area will not be an issue in the long-term.

<u>Aircraft</u> The major source of noise in the Ewa area is the aircraft taking-off from and landing at NASBP. The Department of Defense established the Air Installations Compatible Use Zone (AICUZ) program to protect the public's health, safety, and welfare while maintaining the operational capability of military air installations.

The purpose of the AICUZ program is to develop information which describes the noise level and flight clearance requirements of military airfield operations. This information can be used by landowners and government regulators in achieving the highest and best use of adjacent lands while assuring the health, safety, and welfare of existing and prospective residents.



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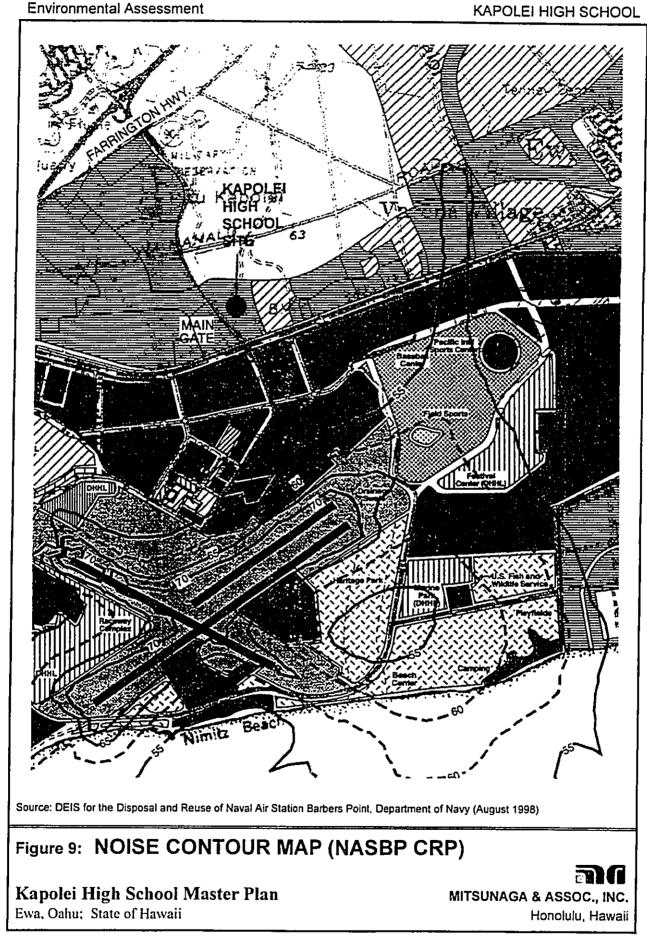
The NASBP AICUZ was first established in 1976, updated in 1984, and again in 1989. Also presented in Figure 8 which depicts aircraft noise effects from NASBP. The noise descriptor currently used by federal agencies to assess environmental noise is the Day-Night Average Sound Level (Ldn). As a general rule, noise levels of 55 Ldn or less occur in rural areas and urbanized areas which are shielded from high volume streets. In urbanized areas, levels generally range from 55 to 65 Ldn, usually dependent on traffic noise from motor vehicles.

For the purpose of determining noise acceptability for funding assistance from federal agencies (FHA/HUD and VA) to purchase residential property, an exterior noise level of 65 Ldn or lower is considered acceptable.

It should be noted that, due to Hawaii's open living conditions and the predominance of naturally ventilated dwellings, an exterior noise level of 65 Ldn does not eliminate all risks of noise impacts. For these reasons, a lower level of 55 Ldn is considered as the unconditionally acceptable level of exterior noise. However, upon consideration of the feasibility of applying the lower 55 Ldn standard government agencies such as FHA/HUD and VA have selected 65 Ldn as a more appropriate regulator standard. It has been this standard that is applied for all existing residential development in the vicinity of the High School site.

The U.S. Navy has prepared an Air Installations Compatible Use Zone (AICUZ) Study (1984) which established off-station contours and safety zones. The AICUZ Study identifies significant noise impacts to the project site. The project site lies within the 60 to 65 Ldn contours.

The 1984 AICUZ Report establishes three Accident Potential Zones (APZ-for aircraft landing and take-off operations) essentially



KAPOLE! HIGH SCHOOL

radiating off the runway and aircraft flight tracks. These include Clear Zone, APZ I and APZ II. A primary concern is that the building structure and/or improvements not reflect glare, emit electronic interference, or produce smoke. The entire 45 acres designated for the site is clearly outside even the least hazardous APZ II area. (See U.S. Navy AICUZ Map, Figure 8.)

Draft Environmental Impact Statement (DEIS) for the Disposal and Reuse of Naval Air Station Barbers Point (August 1998) evaluates the potential aircraft noise effects associated with proposed reuse plan after the 1999 base closure. The evaluation is based on the aircraft operations in 1993 and projected through the year 2020. Flight patterns for the State-preferred alternative (aka NASBP Community Redevelopment Plan) are designed to minimize noise impacts on the surrounding communities as most tracks are directed towards the ocean to avoid overflights over land.

Noise levels resulting from the effects of assumed aircraft operations and flight tracks are illustrated in Figure 9. These data show that noise levels of 55 Ldn or less would occur at the proposed school site. No significant noise impacts would occur as a result of the aircraft operations associated with the NASBP CPR.

9. Visual Resources

The predominant view from the site of the Waianae Mountain Range located approximately three miles to the north. Other views include the primary urban center with Diamond Head visible approximately 25 miles to the east; and the Pacific Ocean, NASBP, two miles to the south. (See Appendix D, Photos of Project Site.)

B. <u>SOCIO-ECONOMIC ENVIRONMENT</u>

1. Land Use History

In 1793, Vancouver, the British explorer, anchored off the entrance of what is presently designated as West Loch. According to Vancouver, the area did not seem to be populous, nor to possess any great degree of fertility. However, he was told that at a short distance from the sea, the soil was rich, and all necessaries of life were abundantly produced. Historically, the area was famous for the taro variety known as kai koi o Ewa. These fields no longer exist in the Ewa area.

In 1879, James Campbell developed the first artesian well near the West Loch area. The development of a reliable water source in this barren area provided the water for the development of the sugar industry which flourished for the next 60 to 70 years.

The project site is in the Villages of Kapolei Project which itself is part of the larger Campbell Estate Long-Range Master Planned Development for Kapolei. The State Housing and Community Development Corporation of Hawaii is developing the Villages of Kapolei master planned residential community at Kapolei. The first homes in the Villages of Kapolei were completed in 1990, with up to 5,000 units on 890 acres planned at buildout.

Kapolei will include a variety of residential types, including market rate and affordable single and multi-family units, rental and elderly housing. Full ranges of community support facilities have been and continue to be constructed at Kapolei, including an 18-hole golf course, parks and recreational amenities, churches, schools and commercial buildings.

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2. Population

A population policy of the City and County General Plan is to encourage development within the secondary urban center at Kapolei and the Ewa and Central Oahu urban-fringe areas ... to meet housing needs not readily provided in the primary urban center.

The following Table 1 compares the General Plan's population growth guidelines with population projections for Ewa, for the years 2010 and 2020. The figures are based on a projected Oahu-wide population of 1,012,100 persons in the year 2010, and 1,071,200 persons in the year 2020 (Planning Department, Preliminary Data 1995).

Table 1

Year 2010 and 2020 Population in Ewa: Policy vs. Projection

	Share of Island Population	Population
Year 2010 General Plan Policy Planning Dept. Forecas	12.0% - 13.3% st* 10.2%	121,452 - 134,609 103,300
Year 2020 General Plan Policy Planning Dept. Foreca	12.0% - 13.3% st* 11.7%	128,544 - 142,470 124,800

*Preliminary Data, Honolulu Planning Department 1995. Population forecast includes DP approved and proposed projects, including The Villages of Kapolei. Source: Planning Department

3. Economy

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Cumulatively, the increased population in the Ewa region will provide additional justification for already-proposed regional infrastructure improvements, public services and commercial development. Although the project will not result in a net increase in Oahu's population or employment, it will cause population and jobs to be located in Ewa. This growth of the Ewa region is consistent with City and State population policy objectives.

C. <u>PUBLIC SERVICES</u>

1. Recreational Facilities

Existing public parks in the project region include Ewa Mahiko Neighborhood Park, Puuloa Neighborhood Park, Makakilo Community Park, Geiger Park Gentry, and the new Kapolei Community Park. In addition, the City is planning a new district park at either Ewa Mahiko or near Ewa Villages. The City also expects to acquire a major new regional beach park within the Barbers Point Naval Air Station upon closure of the base.

2. Police and Fire Protection

The area is presently served by the Waianae Police Station in the Honolulu Police Department's District 8. The Waianae station services the area from Kunia to Kaena Point. There are presently five beats in the Ewa area with one officer per beat, 24-hours a day, seven days a week. The police officers assigned to the Ewa area work with the community through two channels: the volunteer Neighborhood Security Watch and the Community Policing Team 6, the latter an effort to directly involve the community with crime prevention efforts. According to sources at the Honolulu Police Department (HPD), there are plans to increase the total number of police beats in the Ewa area: five beats to serve Kapolei and three beats in the Makakilo area. The proposed Kapolei Police Station is planned for completion by 1999.

The Ewa area is served by four fire stations: Makakilo Station, serving Makakilo, upper Kapolei and Ko'Olina Estates; the Waipahu Station, serving lower Kapolei, Ewa by Gentry and Ewa area to Renton Road; the Ewa Beach Station, serving all of lower Ewa Beach up to Renton Road; and the recently completed Kapolei Fire Station. The Waipahu Station assists the Ewa Beach Station when necessary.

KAPOLEI HIGH SCHOOL

The Kapolei Fire Station has both a ladder company and an engine company with a total of 10 firefighters. The Waikele Fire Station due for completion in 1998, will also assist the Kapolei Fire Station when necessary.

3. Solid Waste

Refuse collection from residential areas in the Ewa-Kapolei area near the project site is provided by the City and County of Honolulu. Nonresidential uses and multi-family residential areas are serviced by private refuse collection companies. Residential waste is transported to the City and County of Honolulu's H-POWER (Honolulu Program of Waste Energy Recovery) waste-to-energy combuster, located at the James Campbell Industrial Park. Ash residue and nonprocessible waste are then disposed of at the Waimanalo Gulch Landfill in east Oahu.

4. Health Care

Saint Francis-West Medical Center is the full-service hospital closest to the proposed project. The hospital is approximately five to 15 minutes from the site, depending on traffic conditions. St. Francis-West provides a full range of hospital services, including emergency care, outpatient treatment, laboratory and x-ray facilities and medical offices. The hospital has 100 licensed beds available. Ambulance service is coordinated with the City and County, and the hospital has a helipad for medivac transport.

Other medical facilities within a 20 to 30 minute drive include the Waianae Coast Comprehensive Health Center, Pali Momi Medical Center at Pearlridge, Wahiawa General Hospital, and Kaiser Permanente's Punawai Clinic in Waipahu. Non-emergency services are also provided by local general physicians.

KAPOLEI HIGH SCHOOL

5. Schools and Libraries

A Social Impact Assessment conducted by Community Resources, Inc. prepared in 1994 and updated in 1995, analyzed schools and libraries. The 1994 study described existing conditions and estimated project demand for these facilities, as summarized below.

Primary and Secondary Schools. The project is within the State Department of Education's (DOE) Leeward School District. The service area boundaries for the high school are Nanakai Gardens to the west, Makakilo to the north, Villages of Kapolei to the east, and Barbers Point to the south. (See Location and Service Area Map, Figure 1.) According to the DOE, the rapid development in the Ewa-Kapolei area has created a pressing need for additional schools and classroom space. The proposed and projected Capital Improvement Program (CIP) budgets for the next three bienniums are already severely strained by the lack of CIP funds to build adequate classrooms.

According to DOE's Nick Nichols, the Ewa area is currently served by ten elementary schools, one intermediate school, and one high school (1996 actual enrollment /2002 projected enrollment in parentheses): Barber Point Elementary (515/497), Ewa Elementary (527/649), Ewa Beach Elementary (520/614), Holomua Elementary (453/1147), Iroquois Point Elementary (1222/1220), Kaimiloa Elementary (734/766), Kapolei Elementary (790/1305), Makakilo Elementary (628/626), Mauka Lani Elementary (656/725), Pohakea Elementary (568/617), Ilima Intermediate (1322/1097), and Campbell High (2022/2365).

Kapolei Elementary School opened in 1993, and the Department of Education has plans to open a new Kapolei Middle School on 20 acres east of the proposed Kapolei High School site in the Villages of Kapolei. Students graduating from the Kapolei Intermediate School will attend the

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proposed Kapolei High School. (See Proposed Feed	er Complex, Table		
2.)			
Table 2			
Proposed Feeder Complex (By 2015) ¹			
Elementary Schools Intermediate School	s <u>High Schools</u>		
Ewa Elem. (K-6) Ewa Beach Elem. (K-6) Holomua Elem. (K-6) Ilima Iroquois Point Elem. (K-6) Kaimiloa Elem. (K-6) Pohakea Elem. (K-6) <i>Ewa Marina Elem.</i> ^{2,3} <i>(K-6)</i>	Campbell ——— High (9-12)		
Barbers Point Elem. (K-5) — Kapolei Mauka Lani Elem. (K-5) — Kapolei Makakilo Elem. (K-5) — Intermediate ^{2,3} Kapolei Elem. ³ (K-5) — (6-8) Ko Olina/Makaiwa Elem. ^{2,3} (K-5) —	Kapolei ——— High ^{2,3} <i>(9-12)</i>		
East Kapolei I Elem. ^{2,3} (K-5) East Kapolei East Kapolei II Elem. ^{2,3} (K-5) Intermediate ^{2,3} – East Kapolei III Elem. ^{2,3} (K-5) (6-8) Notes: 1. Source: State DOE (Nick Nichols, August 1998)	East Kapolei ——— High ^{2.3} (9-12)		
 Planned new schools Year round, Multi-track schools 			

<u>Post-Secondary Education</u>. The nearest post-secondary educational facility is the University of Hawaii-West Oahu, located in temporary quarters at the Leeward Community College (LCC) in Pearl City.

In 1995, in response to the economic recession in the State, Governor Ben Cayetano negotiated a land exchange with Campbell Estate to provide funding to build UH-West Oahu at Kapolei. According to the terms of this agreement, the University of Hawaii has received 941

acres of land above the H-1 Freeway to Kapolei, the second city, on the slopes of Puu Kapuai. Among other conditions, the land exchange involves the improvement and sale by the State of the original UH-West Oahu site, below the H-1 Freeway, with the use of net proceeds from the sale designated for development and construction of the UH-West Oahu campus.

In 1996, UH Board of Regents (BOR) approved the Governor's plan and decided that UH-West Oahu will remain in an interim site at LCC until a new campus is built. However, the BOR decided that UH-West Oahu will be expanded by the movement of 19 buildings from Kapiolani Community College (KCC). In April 1996, the Legislature approved funding for moving the buildings from KCC to UH-West Oahu and approved the Governor's land exchange plan for funding a new campus.

A permanent home for the institution has been identified, and for the first time the Legislature has established mechanisms to fund the development and construction of a new campus in Kapolei. Meanwhile, UH-West Oahu continues to function as an upper-division baccalaureate institution providing an essential service to the people of West Oahu.

Library Services. Ewa Beach Public Library serves approximately 40,000 residents within the Ewa area. The combination school and public library is a full-service library situated on the Campbell High School campus. The State government is planning to construct a major new Kapolei Library within the City of Kapolei, to serve as a second anchor to Honolulu's Downtown library. There are also long-term plans to separate the Ewa Beach School and public library into two facilities.

KAPOLEI HIGH SCHOOL

D. INFRASTRUCTURE

1. Roadways

The project site is well served by regional and local road systems (Figure 2). Major public roadways adjacent to the site include Farrington Highway, a two-lane highway mauka of the project site and Barbers Point Access Road (aka Fort Barrette Road), a two-lane highway just west of the site. Further north of the site is the H-1 Freeway allowing access to the site via the Makakilo Interchange. The H-1 Freeway has been upgraded from four lanes to six lanes.

Also, the project site fronts Kapolei Parkway, a six-lane roadway which fronts the entire northern border of the site. Future plans for Kapolei Parkway include extension of the road eastward over and across the drainage channel via a bridge, towards Ewa by Gentry and Ewa Beach.

Other roadways located in and around the project site include: the State-owned OR&L Railroad right-of-way (ROW), located south of the project site, extending from Pearl Harbor to the Ko'Olina Resort; and Hanson Road, paralleling the OR&L ROW inside the NASBP boundary, connecting Geiger Road and Fort Weaver Road, providing military access to the major residential communities of Ewa Beach and Iroquois Point.

The Ewa Region Highway Master Plan is specifically referred to as a working plan to maintain consistency with ongoing land use development in the Ewa region. For further details see <u>Ewa Region</u> <u>Highway Transportation Master Plan, 1997 and 2005 Roadway Concepts</u> (February 1992). The study has generated roadway concepts for future years based on planning projections. In addition, the major facilities of the roadway master plan are shown on the Kapolei Area Long-Range Master

Plan. Information from these and other relevant sources was incorporated in the <u>Final Traffic Impact Study Villages of Kapolei</u> in 1994 by R. M. Towill Corporation.

All of the above studies were updated relevant to the Kapolei High School in a more recent study in July 1998, by Austin, Tsutsumi & Associates, Inc., <u>Traffic Assessment: Kapolei High School</u>. The study provides preliminary determinations that are to be used for further discussions with the City and County Department of Planning and Permitting (DPP), Traffic Review Branch and the State Department of Transportation (DOT) during the review and approval process for vehicular access off Kapolei Parkway and Fort Barrette Road, respectively. Primary vehicular access off Kapolei Parkway and secondary vehicular access off Fort Barrette Road are subject to review and approvals by the C&C DPP, Traffic Review Branch and the State DOT.

The 1998 traffic study assessed the traffic impacts of the proposed Kapolei High School and appurtenant facilities on the adjacent street, and evaluated proposed access driveways to the school site.

Traffic on Farrington Highway, west of Barbers Point Access Road, exhibits direction splits during peak periods typical of suburban commuter routes. East of Barbers Point Access Road, eastbound and westbound traffic are almost evenly distributed. Major employment areas (Campbell Industrial Park and NASBP) attract west bound traffic during the morning which balances eastbound commuter traffic from the Kapolei residential area.

KAPOLEI HIGH SCHOOL

Highest hourly traffic on Farrington Highway adjacent to the project site occurs in the afternoon. However, in the short-term it is expected that most of the traffic involved with the High School will occur within the Villages of Kapolei complex itself along Fort Barrette Road and along Kapolei Parkway which ends at the northeast corner of the project site. Moreover, Farrington Highway is currently being widened from a two-lane to a four-lane highway. Therefore, no major long-term traffic impacts will result.

The Fort Barrette Road access, however, would require construction of intersection improvements, such as a left-turn deceleration and storage lane for southbound traffic and a right-turn deceleration lane for northbound traffic on Fort Barrette Road, in order to mitigate the effects of school and special events traffic on Fort Barrette Road. It should be noted that Fort Barrette Road will be widened to a four-lane divided arterial with a right-of-way of 100 feet under the Campbell Estate master plan.

NASBP, which is currently owned by the Federal Government, is in the process of being transferred to various State, City and County, and Federal agencies. The redevelopment of NASBP will change traffic patterns in the area, particularly when additional roadways are extended from the City of Kapolei and other adjacent areas to NASBP. These additional public accesses are being studied by the Barbers Point Redevelopment Commission and are described in the report <u>Naval Air</u> <u>Station Barbers Point Community Redevelopment Plan Summary Report</u> (March 1997).

2. Wastewater

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The area of the project site and along with the greater Ewa-Kapolei area is served by the City & County's Honouliuli Wastewater Treatment

KAPOLEI HIGH SCHOOL

Plant (WWTP), adjacent to the NASBP. The Honouliuli WWTP also services Central Oahu and the Primary Urban Center areas west of Red Hill, with the exception of military installations and facilities. Wastewater currently receives advanced primary treatment and is disposed via the Barber's Point Ocean Outfall.

The secondary treatment system at Honouliuli was recently completed, and it was designed to accommodate 13 million gallons per day (MGD) of sewage for secondary treatment. The City plans to reclaim and distribute this wastewater effluent, provided that paying customers can be found for the non-potable water. This is consistent with current policies established by the City and County's Department of Wastewater Management requiring that treated effluent be used for irrigation and other uses where feasible.

A wastewater system with sewage transmission line capacity is in place for the Villages of Kapolei. The High School site will be connected to the existing system provided that the City and County Department of Wastewater Management approves sewer treatment capacity and connection approvals to the Honouliuli WWTP.

3. Water

In 1987, the State enacted the State Water Code in order to protect, control and regulate the use of the State's water resources. The State Commission on Water Resource Management (CWRM) is responsible for the administration of the State Water Code, and has designated water management areas (WMAs) in those areas where water resources may be threatened by existing or proposed withdrawals or diversion.

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The project area is located within the Pearl Harbor Water Management Area (WMA), the largest groundwater body on Oahu, which supplies over 50 percent of Oahu's municipal water demand. Groundwater withdrawals within the Pearl Harbor WMA are regulated by the CWRM. The City & County Board of Water Supply (BWS) coordinates the development and allocation of potable water for urban use on Oahu. Based on the design enrollment of the students for the Kapolei High School, the water demand was calculated to be 54 gallons per day (GPD) by the project's water engineers of R. M. Towill. Potable and non-potable water allocation for the school is presently available.

A dual water system is planned for the project in accordance with City and State policies which encourage the conservation of potable water resources and allow the use of non-potable water for irrigation and other appropriate uses. Non-potable systems in single family residential areas are not encouraged due to potential health and liability issues. However, current City policies require development of an adequate non-potable water supply for schools, parks, commercial projects and for irrigation along major roadways. Water efficient landscaping should be used whenever and wherever possible to reduce irrigation demand. The C&C BWS has also noted that installation of a dual water system may be an option within multi-family residential areas, to further decrease potable water demand.

There is presently an existing potable water system in place which serves the Villages of Kapolei. The High School will be connected to the existing system. Also, a non-potable irrigation system exists within Kapolei and is in the process of being activated. Irrigation for the High School will be connected to the existing non-potable system along Kapolei Parkway. Non-potable water allocation is already available.

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4. Drainage

The proposed Kapolei High School is located in the Kapolei Drainage Basin. (See Ewa Regional Drainage Map, Figure 10.) The area of the Kapolei Drainage Basin is approximately 2,100 acres. In general, storm runoffs from the upland areas above the Villages of Kapolei are conveyed through two culverts crossing Farrington Highway to the Kapolei Golf Course. From the golf course, runoff is routed to a channel along the southern boundary of the Kapolei High School. Runoff from the Villages of Kapolei system is also discharged to this channel. The channel flows drain to a coral pit within NASBP. The coral pit is on the lands to be retained by the Navy after the closure of the base in 1999.

Prior to improvements constructed for the Villages of Kapolei, storm runoff from the upland areas passed through the project site cane field ditches to NASBP. Some of the runoff entered a large coral pit located in NASBP, while some runoff flowed through NASBP.

For the development of the Villages of Kapolei, Kapolei Village Drainage Master Plan was prepared in 1991 and accepted by the City and the Navy as well as the State. A primary goal of the drainage plan was to limit runoff rates and sediment loads entering the NASBP to existing amounts for varying storm magnitudes.

Increase in runoff due to the development of the Villages of Kapolei was estimated as approximately 126 acre-feet for a 100-year, 24-hour storm. Minimum amount for onsite disposal was set at 247 acre-feet to not increase runoff into the NASBP for the design 100-year, 24-hour storm. For the 100-year, 24-hour storm, the peak rate entering the NASBP was estimated to increase from 3,526 cfs to 4,077 cfs as a result of the development of the Villages of Kapolei.

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As a Best Management Practice (BMP) for the Villages of Kapolei development, detention basins (Kapolei Golf Course and lower channel) were constructed to route storm water to offset these increases and maintain the "pre-development" drainage conditions for the downstream portions of the watersheds. Numerous other drainage improvements were made for the Villages of Kapolei which includes the project site for the Kapolei High School.

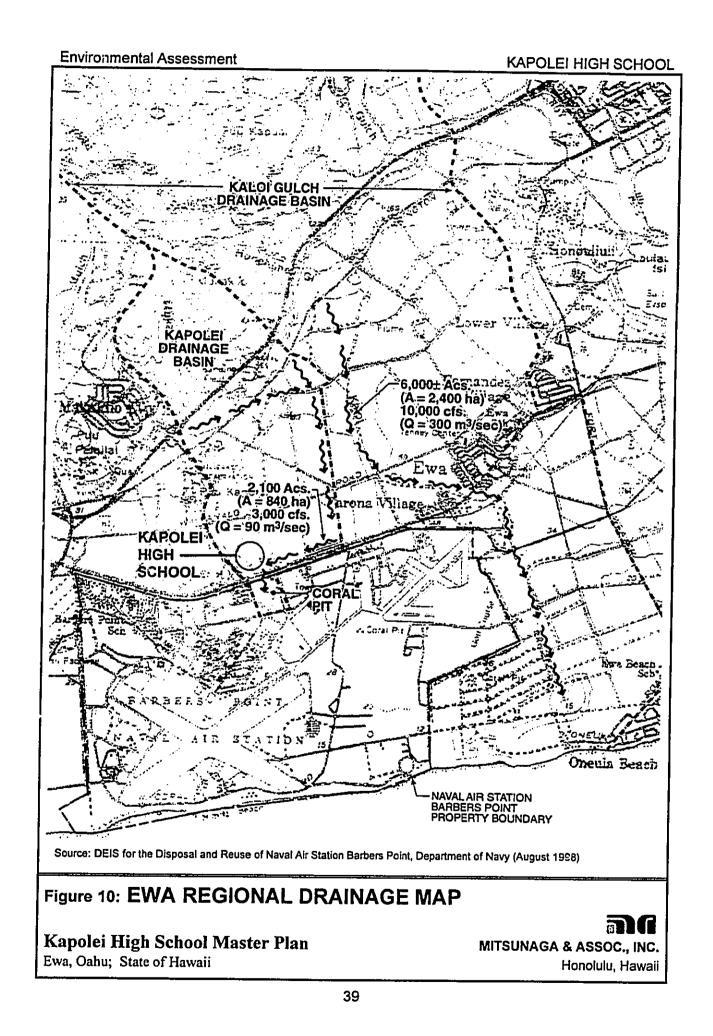
The golf course has capacity to dispose nearly 200 acre-feet of runoff during the 100-year, 24-hour storm to ensure that the Village of Kapolei does not increase runoff to the NASBP. Runoff from the golf course enters the lower channel, located along the southern and lower boundaries of the proposed Kapolei High School. Dimensions include an average bottom width of approximately 30 feet and a depth of approximately 15 feet.

There is an existing buffer strip between the lower channel and the NASBP, and a multi-cell box culvert is located at the entrance to the NASBP beneath Franklin D. Roosevelt Road. Runoff from the buffer strip flows through this culvert and subsequently into the NASBP coral pit. When analyzed in conjunction with the golf course and lower channel, it was determined that the NASBP coral pit would not overflow during the 100-year, 24-hour storm.

The internal drainage system for the school will use swales wherever possible, with a minimum slope of one percent. Drainage inlets run along the Kapolei Parkway and under the six-foot wide sidewalks which border the High School site to the north. Disposal of storm runoff from the High School project site is accomplished primarily through the drainage channel located south of the project site.

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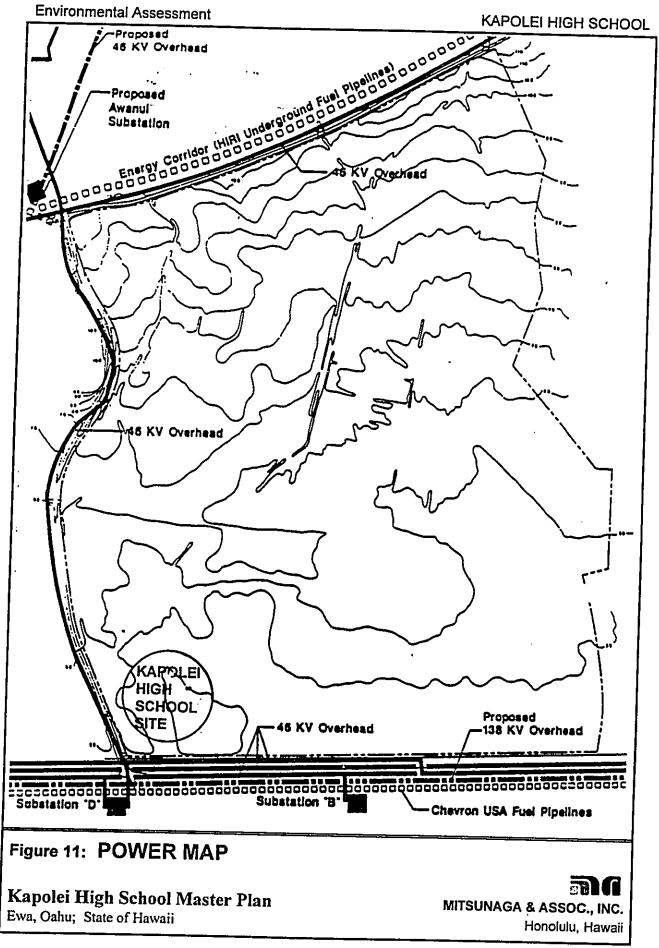
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KAPOLEI HIGH SCHOOL

It should be noted that any grading that might affect drainage will be in conformance with the City and County of Honolulu Grading Ordinance and also in accordance with the Federal National Pollutant Discharge Elimination System (NPDES) requirements, and the recommendations of the geotechnical engineer.

5. Electric Power and Telephone Service

Off-site power and communication requirements include a telephone switching station to serve the proposed Kapolei Town Center and the project site, and an electrical substation when existing power capacities are exceeded. Proposed on-site power and communications improvements consist of electrical and telephone conduits provided along the major roadways. The system also includes street lights and hand holes. Electrical, telephone, and cable systems are underground within the development and adjacent to the project site. (See Power Map, Figure 11.) Presently, street lights run along Kapolei Parkway which front the northern border of the High School site. Also, the high school is planned to include a telecommunications system which includes the development of conduit and raceway infrastructure and cabling systems.



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Environmental Assessment

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3.0 POTENTIAL IMPACTS AND MITIGATION MEASURES

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III. POTENTIAL IMPACTS AND MITIGATION MEASURES

A. <u>PHYSICAL ENVIRONMENT</u>

1. Surrounding Uses

The proposed project is compatible with the surrounding residential neighborhoods. The High School facilities including the play courts and ballfields are intended for the use of the Kapolei area residents. The proposed uses are also compatible with single and multi-family residential uses adjacent to and across Kapolei Parkway.

Impacts	-	There are no negative impacts anticipate with regard to
		surrounding uses.
Mitigation	-	No Mitigation measures are proposed

2. Flora and Fauna

There are no known significant habitats or rare, endangered or threatened species of flora and fauna located within the project site. The proposed project is therefore not considered an adverse impact upon these environmental features. There are also no wetland indicator plants on the project site.

Impacts	 There are no impacts associated with the project with
	regard to flora and fauna.

Mitigation - No mitigation measures are proposed.

3. Archaeological Resources

The project site has been subject to previous ground disturbing activities from agricultural use and construction of the Villages of Kapolei development. There are no surface or sub-surface archaeological materials present on the project site or evidenced by existing studies of the site.

Environmental Assessmen

Impacts	-	There are no known impacts with regard to archeological
		resources.
Mitigation	-	Should any archaeologically significant artifacts, bones,
-		or other indicators of previous on-site historic activities be
		uncovered during the construction phase, their treatment
		will be conducted in strict compliance with the
		requirements of the State Department of Land and
		Natural Resources. The State Historic Preservation
		Officer shall determine the method of preservation, the
		site boundaries, setback restrictions and criteria for
		adjacent uses and the appropriateness of public access.

4. Cultural Resources

There are no cultural practices occurring within or in the vicinity of the project site evidenced by existing studies of the project area. There are no known existing cultural properties or any other types of historic sites evidenced by existing studies. Moreover, the project site has been subject to previous ground disturbing activities from agricultural use and construction of the Villages of Kapolei development.

Impacts	-	There are no known impacts with regard to cultural
		resources.
Mitigation	-	Should any culturally significant indicators of previous on-
•		site cultural activities be uncovered during the
		construction phase, their treatment will be conducted in
		strict compliance with the requirements of the State
		Department of Land and Natural Resources.

5. Air Quality

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Air quality impacts attributed to the project will include dust generated by short-term, construction-related activities. Site work such as

KAPOLEI HIGH SCHOOL

filling and grading and utilities and parking lot construction, for example, will generate airborne particles. Dust control measures such as regular watering and sprinkling will be implemented as needed to minimize windblown emissions. At least one water sprinkling truck will be kept on-site during working hours during the construction phase of the project and all other dust prevention measures such as protective temporary dust screens around construction area, will be utilized in accordance with Department of Health (DOH) regulation.

Project-related emissions are not expected to adversely impact local and regional ambient air quality conditions. It should also be noted that the prevailing winds from the northeast will carry dust and emissions away from existing residential areas more than 95% of the time.

Impacts

Fugitive dust during construction.

Mitigation

A dust prevention plan will be provided by contractor in accordance with Department of Health (DOH) Standards and Rules. Dust prevention measures such as temporary dust screens around the site and regular watering will be implemented during the construction period.

6. Noise

As with air quality, ambient noise conditions will be impacted by construction activities. Heavy construction equipment would be the dominant source of noise during the site construction period. To mitigate the construction noise impacts upon surround uses, construction activities will be conducted during the daylight hours only.

Development of the school could impact nearby existing and future residences if noise from the school is not properly controlled. Potential

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noise sources include: indoor activities such as choral practice; outdoor activities such as sports event at the football stadium; and building equipment such as air-conditioning units.

Most buildings of the Kapolei High School campus, including classroom buildings, Music, and Forum buildings, will be air-conditioned. Therefore, such indoor activities as band and choral practices would not generate significant adverse noise impacts.

The football stadium is intended for use by not only the school but the Villages of Kapolei residents also. Outdoor activities such as sports event at the football stadium could impact nearby existing and future residences. To minimize potential noise impacts, the football stadium will be located at the southwestern corner of the school site far from existing and planned residential neighborhood. Any sound system loudspeakers should be oriented so as not to directly impact nearby residences. Additionally, The hours of school facility use should be limited to avoid noise sensitive hours and will be controlled by the Department of Education (DOE).

Noise from building equipment such as air-conditioning, exhaust fans and pumps could impact adjacent residences. To mitigate the noise impacts, acoustical enclosures and exhaust silencers for the mechanical equipment should be implemented, and landscaping along the school boundaries will be provided.

Impacts	-	Noise from construction activities and school-related
•		indoor/outdoor activities.
Mitigation	-	Construction activities and hours will be in accordance
		with the 11.46 Rules of Department of Health (DOH)
		regulating noise impacts.

46

KAPOLEI HIGH SCHOOL

Appropriate mitigative measures such as landscaping, acoustical enclosure and exhaust silencers will be taken to minimize any noise impacts of the school on adjacent residential neighborhoods from noise generating sources. The hours of school facility use should be limited to avoid noise sensitive hours and will be controlled by the Department of Education (DOE).

7. Energy Resources

The school buildings will be designed in a manner to encourage the efficient use of energy resources. The school buildings will have the highpitched Hawaiian style roof s, deep overhangs and articulated windows of the Ewa plantation style. High-pitched roofs will allow for ventilation through the attic spaces and provide for cool interior spaces. Deep overhangs will provide shade from the sun and allow windows to remain open during rain. The primary material for the exterior walls is concrete unit masonry (CMU) which is a durable, cost effective material.

The school buildings will be designed with many large windows for abundant natural light and views. For the air conditioned buildings the windows will be designed to maximize daylight, and be operable in case of the need for natural ventilation, while still providing an energy efficient building envelope. For the naturally ventilated buildings such as gym and dining area of the forum building, metal louvers will be provided to maximize the amount of air flow through the building.

Plumbing fixtures such as water closets, urinals and lavatories will be selected to meet ultra-low flow requirements. The gym will be provided with gang showers. Shower valves will be a pressure compensated type with volume control. Energy-efficient, high-pressure sodium luminaires will be provided around the exterior of the buildings. General interior illumination will be provided by energy-efficient fluorescent luminaires. For large rooms, multi-level and/or zoning swiching will be provided for energy conservation.

Impacts	-	There are no negative impacts anticipate with regard to
		the efficient use of energy resources.
Mitigation	-	The school will be designed in a manner to promote
		environmentally sensitive and energy efficient design.

8. Visual Resources

The project will be fully landscaped to create a site visually and aesthetically integrated with the Villages of Kapolei, the park, and other surrounding developed properties. The tallest structure is proposed to be approximately 52 feet in height which would be comparable to the existing two-story townhouse structures which are located within the development. Inspired by an Ewa plantation residential style, the school buildings will have simple roof forms, deep overhangs and articulated windows.

Impacts-Impacts will be positive.Mitigation-No mitigation measures are proposed.

KAPOLEI HIGH SCHOOL

B. IMPACT TO COMMUNITY SETTING

1. Population and Local Economy

On the short-term basis, the project will support construction and construction-related employment. Over the long-term, the project will provide limited support to the service sector for project operations and maintenance. Direct on-site employment generated by the project will total 155 new jobs and will likely include approximately 118 school teachers and counselors, 6 maintenance workers, 4 security, 15 health, recreation, cafeteria and other service staff and 12 administrative staff including a principal and 4 vice principals. (Source: Nick Nichols, DOE, July, 1998)

Impacts	-	Short and long-term employment opportunities are a
		beneficial impact to the Kapolei area.
Mitigation	-	No mitigation is proposed.

2. Agriculture

The 45-acre project site is currently not in agricultural use. The proposed development will not affect agricultural endeavors on the island.

Impacts-No adverse agricultural impacts are anticipated.Mitigation-No mitigation is proposed.

3. Police, Fire and Medical Services

Police, fire and medical services are not expected to be adversely impacted by the proposed project. The project will not extend existing service area limits for emergency services.

Impact - There are no negative impacts with regard to police, fire and medical services.

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Mitigation - No mitigation measures are proposed.

4. Solid Waste

A solid waste management plan will be developed in coordination with the Solid Waste Division of the County Department of Public Works and Waste Management for any disposal of clearing and grubbing material from the site during construction.

Once completed, the proposed project will be served by the City and County of Honolulu for refuse collection. Solid waste generated from the project will be disposed at the H-POWER facility. To accommodate future disposal requirements, the City plans to stress recycling efforts followed by physical expansion of existing facilities such as H-POWER. Solid waste generated by the project is not expected to cause any adverse impacts.

- Impacts The City and County Department of Wastewater Management (DPW) estimate is based on approximately four pounds/person/day. The school campus with a projected 1800 students and 155 teachers, staff, etc. would generate about three tons/day. Production of this quantity of solid waste will impact the existing county disposal facilities.
- Mitigation The Kapolei High School Project will endeavor to promote recycling as its primary realistic means of mitigating this impact. However, the City and County of Honolulu through creation of its Resource Recovery facility (H-POWER) has already issued a program to recover energy, as well as decrease the amount of solid waste which must be ultimately disposed of in landfills.

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C. IMPACTS TO INFRASTRUCTURE

1. Roadways

Access to the subject property would be through the six-lane Kapolei Parkway and the four-lane Fort Barrette Road and other intersection streets in Kapolei town and the Villages of Kapolei. The driveway will comply with applicable County sight distance provisions. Presently, Kapolei Parkway is a dead-end roadway at the northeast end of the Kapolei Middle School site. However, a U-turn-around area has been provided for motorists in the area bordering the drainage channel. The turn-around area will be open for use until the time of completion of the bridge and Kapolei Parkway/South Road intersection (approximately 1/2 mile west). There are also short-term (1998) plans for a bridge over the drainage channel and long-term plans for the Kapolei Parkway to extend to the Ewa Gentry development.

Based on the DOE's projected enrollment for year 2002, it is anticipated that more than 40 percent of the students enrolled in the High School facility would be from the Kapolei community. Thus, some of the pick-ups and drop-offs of the students would occur by walking to and from the facility, rather than by automobile. Other students from nearby communities, including Nanakai Gardens to the west, Makakilo to the north and Barbers Point to the south, would be attending the school by vans and buses which will pick up and deliver groups of students. Vehicular trips are anticipated during the morning peak hour, and afternoon vehicular trips are anticipated during the early afternoon peak hour. However, as noted in the IIIA.4 Air Quality Section above, most of the school traffic will not interfere with traffic outside the Villages of Kapolei complex and will have minimal effect on traffic within the complex because the school fronts the six-lane Kapolei Parkway which runs along its northern border and presently ends at the northeast end of the school

KAPOLEI HIGH SCHOOL

site. Therefore in the short-term, only school bound traffic should be involved in and out of the project site area. A recent Traffic Assessment study provides recommendations to accommodate and improve traffic flow in the project area. (See Appendix F, Traffic Assessment.)

- Impacts The development of the Kapolei High School will produce some traffic impact on local collector and regional systems. Specific traffic impacts are through traffic generation projections and are included in <u>Traffic</u> <u>Assessment, Kapolei High School</u> (July 1998) by Austin, Tsutsumi & Associates, Inc.
- Mitigation The developer is committed to follow recommendations made in the 1998 Traffic Study by Austin, Tsutsumi & Associates, Inc. and comply with those recommendations made in the <u>Ewa Region Highway Transportation Master</u> <u>Plan</u>.

2. Water

Based on the proposed number of fixtures within the school, design flow was estimated at 335 gallons per minute (GPM) by Thermal Engineering Corporation in June 1998. Landscape irrigation flow will be 400 GPM. The maximum daily demand for potable water is 80 gallons per day (GPD) based on the design enrollment with an average daily demand of 54 GPD.

Potable and non-potable water allocation is already available. The water system will be designed in conformance with City and County of Honolulu Water System Standards and Standard Details and Department of Education maintenance personnel recommendations. Potable and non-potable water supply will be off Kapolei Parkway. Fire hydrants will be installed on-site in conformance with City and County of Honolulu Fire

KAPOLEI HIGH SCHOOL

Department and State of Hawaii Standards.

The project is not anticipated to have a significant impact upon the water source, storage and transmission system.

 Impacts
 The Kapolei High School will generate a maximum of 80
 GPD.
 There is existing allocation of potable and non-potable water available for the school.

Mitigation - The water system will be designed in conformance with City and County of Honolulu Water System Standards and Standard Details and Department of Education maintenance personnel recommendations.

3. Wastewater

The sewer system will be designed in conformance with City and County of Honolulu Sewer Standards and Standard Details and Department of Education maintenance personnel recommendations. Sewage from the school will be directed to the Villages 7 and 8 Road A or the Kapolei Parkway in accordance with the Villages of Kapolei Sewer Master Plan. Development of the proposed project is not expected to cause any adverse effects due to wastewater.

Impact	-	Project will increase sewage flow, but can be
		accommodated by existing system.
Mitigation	-	Connections will be in conformance with City and County
		(C&C) of Honolulu Sewer Standards.

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4. Drainage

Storm runoff from the project site would be routed to the existing drainage channel which runs along the southern border of the site. The internal drainage system will be designed to comply with the C&C of Honolulu Drainage Standards and Standard Details and Department of Education maintenance personnel recommendations.

- Impact
 Development of the proposed project is not expected to cause any adverse effects to adjacent or downstream properties.
- Mitigation Swales will be used wherever possible with a minimum slope of 1%. Building finished floors will be higher than the surrounding grades and runoff will be directed away from the buildings.

5. Electrical and Telephone Systems

Electrical power requirements associated with the proposed project will be supplied by Hawaiian Electric Company's (HECO) facilities adjacent to the school site. Telephone system requirements generated by the project will be met by GTE Hawaiian Tel facilities. (See Power Map, Figure 10.)

Impacts - The project will provide additional requirements for facilities as specifically provided by GTE Hawaiian Tel and the Hawaiian Electric Co. No adverse impacts are anticipated.

Mitigation - No mitigation measures are proposed.

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4.0 RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES AND CONTROLS

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IV. RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES, AND CONTROLS

A. <u>STATE LAND USE LAW</u>

Chapter 205, Hawaii Revised Statutes, relating to the Land Use Commission, established the four (4) major land use districts in which all lands in the State are placed. These districts are designated Urban, Rural, Agricultural, and Conservation. The subject parcel is within the Urban district. (See State Land Use Map, Figure 12.) The proposed action involves the construction of a High School use which is compatible with the Urban designation.

B. THE HAWAII STATE PLAN

The proposed project is generally consistent with objectives and policies of the Hawaii State Plan. Chapter 226, Hawaii Revised Statutes (HRS), including Objectives and Policies for Socio-Cultural Advancement-Education.

Policies and Priority Guidelines relevant to the Kapolei High School project are found in <u>The Hawaii State Plan:</u> Education Functional Plan of 1989.

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Policies and Priority Guidelines

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

B. Increase and improve the use of information technology in education and encourage

Corresponding Board of Education Goals

Provide facilities that are sufficient in number, functional, well-placed and compatible with the physical surroundings. D-1-2

Provide a series of activities to stimulate improvements to the organization and gain community support for the organization's goals, activities and accomplishments. E-1

Develop a plan to pinpoint, analyze and use, technology to improve classroom instruction. C-1-2

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KAPOLEI HIGH SCHOOL

programs which increase the public's awareness and understanding of the impact of information technologies on our lives. 226-107 (5)

Redouble efforts to upgrade and expand the automated support systems for public schools. D-1-5

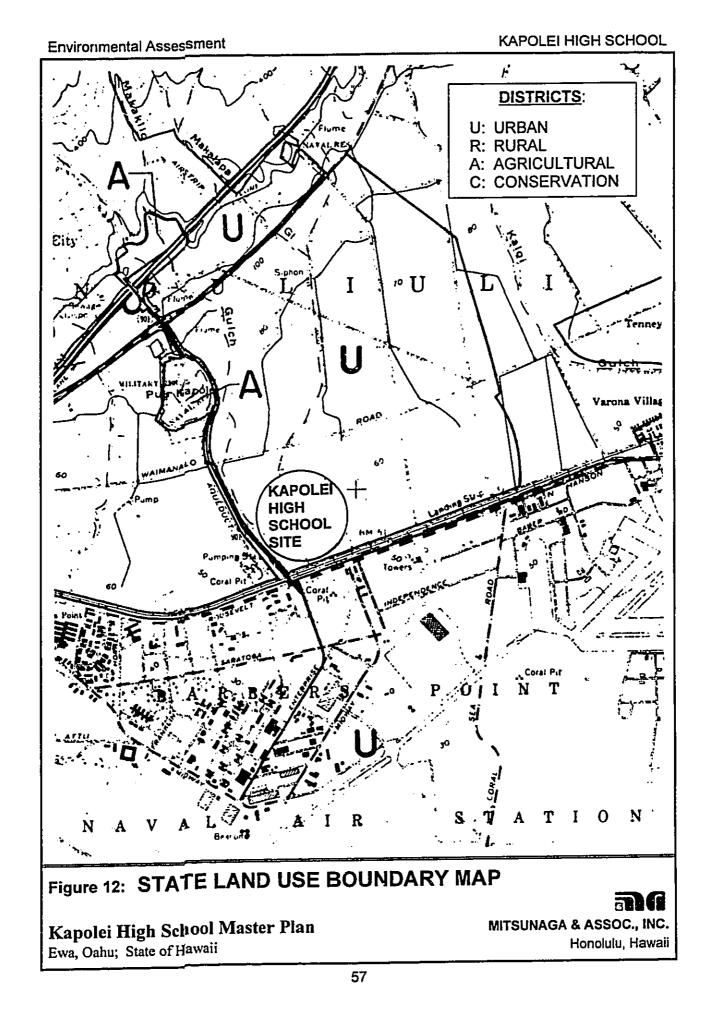
The Villages of Kapolei master plan which includes the High School site provides for educational facilities of all levels. Within the plan are one elementary school, one middle school, and one high school, as well as a day care center site for small children. Close cooperation with the State Department of Education will be maintained to assure adequate provision of educational services.

C. <u>CITY AND COUNTY OF HONOLULU GENERAL PLAN</u>

The Kapolei High School project is compatible with the 1992 General Plan for the City and County of Honolulu which recognizes Ewa and Central Oahu, as the most obvious urban expansion areas on Oahu. The implementation policies for the Plan's guiding objective, to establish a harmonious population distribution pattern on Oahu, address primarily the Ewa and Central Oahu regions.

Policy 1: Facilitate the full development of the Primary Urban Center.

- Policy 2: Encourage development within the secondary urban center at Kapolei and the Ewa and Central Oahu urban-fringe areas to relieve developmental pressures in the remaining urban-fringe and rural areas and to meet housing needs not readily provided in the Primary Urban Center.
- Policy 4: Encourage the construction of school facilities that are designated for flexibility and high level use.
- Policy 5: Facilitate the appropriate location of learning institutions from preschool through university levels.



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The Kapolei High School is also supported by the <u>First Biennial Report</u>: <u>On the Condition of the City and County General Plan and Development Plans</u> (June 1995), which predicted that with public school enrollment on Oahu projected to rise 10,000 in the next seven years (i.e. 1996-2003), an eventual need for at least 11 new schools is anticipated in the high-growth areas of Ewa and Central Oahu.

The 1992 Oahu General Plan's goal for the population distribution on the island in the year 2010 is the following:

Primary Urban Center	450,800 - 497,800		45.1-49.8 % of pop.
Ewa	119,800 - 132,900		12.0-13.3 % of pop.
Central Oahu	148,900 - 164,900		14.9-16.5 % of pop.
		Total	72.0-79.6 % of pop.

According to these figures, the Primary Urban Center's share of the total Oahu population would decline from its present 51 percent to the projected 45 to 49 percent in 2010. Ewa's share of the total Oahu population would increase from its present 5 percent to the projected 12 to 13 percent in 2010.

Overall, the State of Hawaii supports the city's policy with the argument that the Ewa plain is a logical location for a secondary urban center based on the qualities of proximity to urban Honolulu, major employment basis in the surrounding area, and subterranean caprock which prevents pure groundwater supplies from becoming contaminated. In the long run, it is argued, Ewa's large areas of marginal agricultural lands to the west and in the makai direction will provide additional suitable lands for urbanization. The State also supports directing growth to Ewa and Central Oahu. (State Land Use District Boundary Review Report: Oahu, March 1992)

KAPOLEI HIGH SCHOOL

To this end, and for planned use purposes the City and County of Honolulu has designated and projected the project site area and the surrounding area for Urban Use which is compatible with school use.

D. <u>COUNTY ZONING</u>

The City has zoned the site AG-1, and the site is also zoned R3.5 Residential District under Act 15, Session Laws of Hawaii 1988. A public school is compatible with and can exist over such zoning.

The 1992 City and County of Honolulu General Plans Objective B, to provide a wide range of educational opportunities for the people of Oahu, is compatible with and supports the development of the Kapolei High School in the Ewa Region.

- Policy 4: Encourage the construction of school facilities that are designed for flexibility and high level use.
- Policy 5: Facilitate and appropriate location of learning institutions from preschool through university levels.

E. EWA DEVELOPMENT PLAN

The 1997 City and County of Honolulu <u>Ewa Development Plan</u> outlines the Planning Principles (Section 4.7.2) most relevant to school development in the Ewa area.

The following principles should be followed in planning and operating schools in Ewa:

Schools as Community Centers. Because of the difficult financial problems for all sectors, new communities are likely to have fewer churches, private social halls and recreation facilities. As a result, schools may have to assume important functions as cultural and recreational

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centers and as meeting facilities. The State DOE should design school facilities to facilitate community use during non-school hours and weekends.

Co-location with Parks. Elementary and intermediate schools should be co-located with neighborhood or community parks, and designs of facilities should be coordinated by the State DOE and the Department of Parks and Recreation when needless duplication of parking and of athletic, recreation and meeting facilities can be avoided.

Shared Facilities. The Department of Parks and Recreation should coordinate the development and use of athletic facilities such as swimming pools and gymnasiums with the DOE where such facilities would maximize use and reduce duplication of function.

Fair Share Contribution. The City will support the State Department of Education's request for fair share contributions from developers of residential projects to insure that adequate school facilities are in place at existing and new schools to meet the needs of residents.

The development of Kapolei High School is compatible and in accordance with all of the above Planning Principles. It should be noted that the Public Facilities Map of the <u>Ewa Development Plan</u> identifies the project site as a future high school site.

F. KAPOLEI MASTER PLAN

The revised 1997 Kapolei Master Plan shows the 45-acres project site area designated for the Kapolei High School. (See Figure 4, Villages of Kapolei Master Plan.) This is in keeping with the 1990 Kapolei Master Plan which planned for a high school as part of the Villages of Kapolei Development Plan.

KAPOLEI HIGH SCHOOL

G. <u>COMMUNITY INPUT</u>

State's and County's guidelines and policy encourage community input as part of the planning process. To this end the design of the Kapolei High School planned and received community input that involved the State, the developer, educators, students and the communities in a collaborative planning process known as a Charette. This process consisted of a series of intense, brainstorming, project design sessions, in which all appropriate groups came together for periods of concentrated time. The process facilitated and accelerated communication and decision-making, and provided the opportunity for significant input by more people than the traditional design process allows.

The design charette for Kapolei High School was scheduled in three sessions, and was held over a four-month period, from November 1997 through February 1998. During this time, a Steering Committee translated the ideas and themes, developed by a Task Force, into the physical design of the school. (See Appendix A, Community Input Diagram, and Appendix B, Design Charette Participants.)

This progressive approach has resulted in a new kind of school design; one that is humanistic as well as future-oriented, infused with local culture as well as advanced technologies. The community input process has continued throughout the planning of the High School project. For further details on the design charette process see <u>Kapolei High School: Creating a Dynamic Learning</u> <u>Community (Design Charette and Master Plan Report) (May 1998)</u>, for Makai Villages Partnership by Mitsunaga and Associates, Inc.

KAPOLEI HIGH SCHOOL

5.0 DETERMINATIONS, FINDINGS AND REASONS FOR SUPPORTING DETERMINATION

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V. DETERMINATION, FINDINGS AND REASONS FOR SUPPORTING DETERMINATION

A. SIGNIFICANCE CRITERIA

According to the Hawaii Administrative Rules (HAR 11-200-12), an applicant or agency must determine whether an action may have a significant impact on the environment, including all phases of the project, its expected consequences both primary and secondary, its cumulative impact with other projects, and its short- and long-term effects.

In making the determination, the Rules established "Significant Criteria" to be used as a basis for identifying whether significant environmental impact will occur. According to the Rules, the proposed Kapolei High School project was evaluated if it meets any one of the following 13 criteria:

1. Involves an irrevocable commitment to loss or destruction of any natural or cultural resources;

The project site is currently vacant, but no longer reflects a natural environment. It has been previously disturbed by agricultural use and the Villages of Kapolei development.

No significant archaeological or historic sites are known to exist within or in the vicinity of the project site. Should any archaeologically significant artifacts, bones, or other indicators of previous on-site historic or cultural activities be uncovered during the construction phase, their treatment will be conducted in strict compliance with the requirements of the State Department of Land and Natural Resources.

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2. Curtails the range of beneficial uses of the environment;

Agricultural land is an important natural resource. Although still suitable for agricultural uses, the project site has been designated for urban use and identified as a future high school site on the City and County's Ewa Development Plan. From both an environmental and social/ economic perspective, it is not practical or beneficial for the community to return the site to agricultural use or a natural condition.

The impacts of the project will be significantly positive in terms of beneficial uses of the environment as compared to the "no action" alternative.

3.

Conflicts with the state's long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders;

The proposed development of Kapolei High School is consistent with the Environmental Policies established in: Chapter 344, HRS; Chapter 200, HAR; and the National Environmental Policy Act.

4. Substantially affects the economic or social welfare of the community or state;

Schools are the backbone of every community since education is critical to the community's future. The proposed Kapolei High School is planned to meet the educational needs of surrounding communities, responding to projected fast population growth. It will not negatively or significantly affect the economic or social welfare of the community or state.

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KAPOLEI HIGH SCHOOL

5. Substantially affects public health;

Public health may be affected by the changes in air and water quality and noise levels if any. However, these will be insignificant or not detectable, especially when weighed against the positive social implications associated with the project.

6. Involves substantial secondary impact, such as population changes or effects on public facilities;

Existing and planned large-scale housing development projects in Kapolei areas will contribute to a significant population growth that will require expansion of public facilities and services. The proposed project will not in itself generate new population growth by stimulating in-migration, but provide needed educational facility responding to projected population growth

There will be no significant secondary impacts on public facilities. Infrastructure for the entire Villages of Kapolei is already in place which includes water, sewer and drainage lines along Kapolei Parkway, sidewalks, street lights, potable/non-potable water allocation, and drainage channel.

7. Involves a substantial degradation of environmental quality;

Honoring the history of the region, the proposed Kapolei High School will be designed with simple roof forms, deep overhangs and articulated windows of the Ewa plantation residential style. The school will be harmoniously blended with the surrounding master planned communities. The school will be also fully landscaped to create a facility visually and aesthetically integrated with the surrounding communities.

KAPOLEI HIGH SCHOOL

8. Is individually limited bµt cumulatively has considerable effect upon the environment or involves a commitment for larger actions;

By planning now to address the future educational needs of the community and the State, provision of the high school is consistent with the long term plans for the Kapolei areas. Cumulative effects will be positive.

9. Substantially affects a rare, threatened , or endangered species, or its habitat;

No endangered plant or animal species are known to exist in the vicinity of the project site. The presence of any of those species is unlikely because of the continuous cane cultivation for nearly 70 years.

10. Detrimentally affects air or water quality or ambient noise levels;

Potential impacts on air quality attributed to the project include dust generated by short-term, construction-related activities. A dust prevention plan will be provided by contractor in accordance with Department of Health (DOH) Standards and Rules. Dust prevention measures such as temporary dust screens around the site and regular watering will be implemented during the construction period.

Storm runoff from the project site will be routed to the existing drainage channel which runs along the southern border of the site. The internal drainage system will be designed to comply with the C&C of Honolulu Drainage Standards and Standard Details and Department of Education maintenance personnel recommendations.

KAPOLEI HIGH SCHOOL

Construction activities and hours will be in accordance with the 11.46 Rules of Department of Health (DOH) regulating noise impacts. In addition, appropriate mitigative measures such as landscaping, acoustical enclosure and exhaust silencers will be taken to minimize any noise impacts of the school on adjacent residential neighborhoods. The hours of school facility use should be limited to avoid noise sensitive hours and will be controlled by the Department of Education (DOE).

11. Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters;

There are no environmentally sensitive areas in the vicinity of the project site. The project site is located outside of the County's Special Management Area or 100-year flood plain as determined by the Federal Emergency Management Agency. Shoreline, valleys, or ridges will not be impacted by the proposed project. Development of drainage systems will follow established design standards to avoid the destruction of any natural resources.

12. Substantially affects scenic vistas and viewplanes identified in county or state plans or studies;

Impacts on public views of the school facilities would not be significant although they will be visible. The school will be visible from higher elevations by the general public or from persons driving along the H-1 highway. However, the school buildings will not affect mauka or makai views due to topographical characteristics of the project location at a low lying area.

KAPOLEI HIGH SCHOOL

One- or two-story school buildings would be comparable to the existing or future two-story townhouse structures in the vicinity of the school site. Public views will not be significantly affected.

13. Requires substantial energy consumption.

The school buildings will be designed in a manner to encourage the efficient use of energy resources. The school buildings will have the high-pitched Hawaiian style roofs, deep overhangs and large windows. Plumbing fixtures such as water closets, urinals and lavatories will be selected to meet ultra-low flow requirements. Energy-efficient, high-pressure sodium luminaires will be provided around the exterior of the buildings. General interior illumination will be provided by energy-efficient fluorescent luminaires.

Β. FINDINGS AND DETERMINATION

The proposed project will involve earthwork and construction activities. In the short-term, these activities may create temporary nuisances normally associated with construction activities. However, dust control measures, such as dust screens, regular watering and sprinkling, will be implemented to minimize wind-blown emissions. Appropriate erosion control measures will be also incorporated during the construction phase to minimize soil loss associated with construction activities. All construction activities are anticipated to be limited to normal daylight working hours. Short-term Impacts generated from construction activities are not considered adverse.

From a long-term perspective, the proposed project is not anticipated to result in adverse environmental impacts. There are no known significant habitats or rare, endangered or threatened species of flora or fauna or archaeological sites located on the project site. With regard to infrastructure systems and public

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services, the proposed project should have no adverse environmental impacts. Overall, the proposed project is consistent with the environmental policies of the Federal, State and County governments.

In light of the foregoing findings, it is concluded that the proposed action will not result in any significant adverse environmental impacts. Therefore, HCDCH will file a Finding of No Significant Impact (FONSI). 7

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6.0 AGENCIES CONTACTED PRIOR TO / DURING THE PREPARATION OF THE ENVIRONMENTAL ASSESSMENT

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VI. AGENCIES CONTACTED PRIOR TO/DURING THE PREPARATION OF THE DRAFT ENVIRONMENTAL ASSESSMENT

For the planning and design of the Kapolei High School, a design charette process was utilized which provided the opportunity for significant input by the community and government agencies. More people than the traditional planning/design process allows, including DOE staff, parents, students, public officials and representatives from community businesses and organizations, had opportunity to share their visions and interests in planning and design of the school.

The following agencies and organizations were involved in the master planning and design charette process or contacted prior to/during the preparation of the Environmental Assessment:

A. Federal Agencies

1. U.S. Naval Air Station Barbers Point (NASBP)

B. State Agencies

- 1. Department of Accounting and General Services (DAGS) Central Services
- 2. Department of Accounting and General Services (DAGS) Public Works Division
- 3. Department of Defense (DOD)
 - Civil Defense Division
- 4. Department of Education (DOE)
 - Barbers Point Elementary School Campbell High School Ilima Intermediate School Kapolei Elementary School Makakilo Elementary School Nanakuli High & Intermediate School Waianae High School Waianae Intermediate School Waipahu Community School

Environ	mental A	Assessment KAROLEL HIGH SOLIDA	
		KAPOLEI HIGH SCHOOL	
		Waipahu High School Waipahu Intermediate School	
	5.	Department of Education (DOE)	
		Leeward District Office	
	6.	. Department of Education (DOE)	
		Office of Accountability and School Instructional Support	
	7.	Department of Education (DOE)	
		Office of Business Services	
		Facilities Branch Operations & Maintenance Section School Food Service Branch	
	8.	Department of Hawaiian Home Lands (DHHL)	
	9.	Department of Health (DOH)	
		Office of Environmental Quality Control	
	10.		
	11.	Housing and Community Development Corporation of Hawaii	
		(HCDCH)	
C.	City	/ & County Agencies	
	1.	Planning Department (DPL)	
	2.	Department of Planning and Permitting (DPP)	
	З.	Department of Transportation Services (DTS)	
	4.	Honolulu Police Department (HPD)	
D.	Othe	er Agencies/Organizations	
	1.	Estate of James Campbell	
	2.	Kapolei Hope Chapel	
	3.	Kapolei Rotary Club	
	4.	Ko 'Olina Resort	
	5.	Makai Village Partnership	
	6.	Makakilo Lions Club	
	7.	Neighborhood Board #34	

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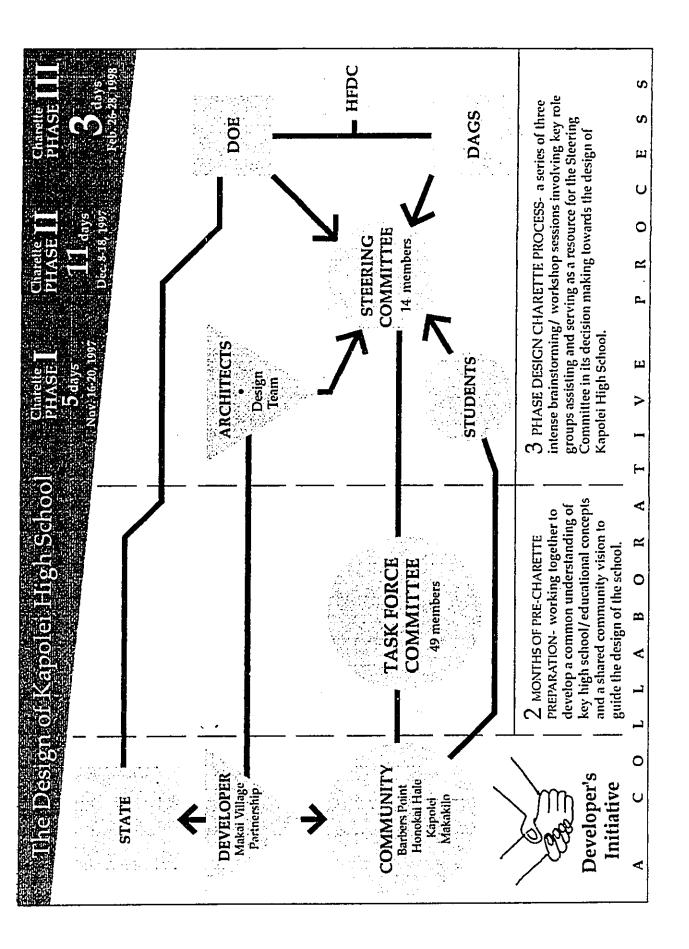
KAPOLEI HIGH SCHOOL

APPENDIX A

Community Input Diagram

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KAPOLEI HIGH SCHOOL

APPENDIX B

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Design Charette Participants

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KAPOLEI HIGH SCHOOL

STEERING COMMITTEE

Carol Jean Ching, DOE Facilities Branch Anthony Chun, Education Specialist, DOE Leeward District Office Chuck Erhorn, the Estate of James Campbell David Gibert, Waipahu High Senator Brian Kanno, State Senate Roy Kimura, DAGS Patty Leahey, Campbell High Gordon Lum, Waipahu Community School Aaron Mersberg, Campbell High Mark Moses, State House Representative Nick Nichols, DOE Facilities Branch Ryan Oshita, Waianae High Linda Wilkinson, Barbers Point Elementary Vernon Young, Campbell High

STUDENT REPRESENTATIVES

Ciress Cuevo, Waianae High Haydee Epan, Campbell High Kimberly Erice, Waianae High Christine ford, Waianae High Donovan Gaboya, Ilima Intermediate Ryan Jackson, Campbell High

Janice Japasen, Waianae High Cheryl Labuguen, Waianae High Mary Respicio, Campbell High Michelle Tenorio, Campbell High Sarah Watters, Ilima Intermediate

TASK FORCE

JoAnn Abrazado, Kapolei Elementary Donna Awana, Makakilo Lions Club Kelly Barry, Villages of Kapolei/Campbell High Brent Buckley, Kapolei Elementary Bill Chang, Mitsunaga & Associates, Inc. Carol Jean Ching, DOE Facilities Branch Leroy Ching, Waipahu Intermediate Anthony Chun, DOE Leeward District Office Chuck Erhorn, the Estate of James Campbell David Gilbert, Neighborhood Board #34 Daven Hee, Kapolei Hope Chapel Joyce Higashi, Campbell Ranelle Ho, Makai Village Partnership Keith Horita, Ko Olina Resort Kathy Inoue, Makai Village Partnership Tess Kaji, Waianae High Senator Brian Kanno, State Senate Laurie Katagiri-Hoshino, Campbell High Kathy Kawaguchi, Makai Village Partnership Roy Kimura, DAGS

Carolyn Kirio, Waianae High Leila Kuboyama, Waianae Intermediate Linda Kumasaki, Campbell High Patty Leahey, Campbell High Wendie Liu, DOE Leeward District Office Paula Loring, Villages of Kapolei Gordon Lum, Waipahu Community School Daryl Mandela, Waianae High Robin Martin, Campbell High Mike Mazzone, Carpenters Union Aaron Mersberg, Campbell High Keith Morioka, Waipahu High Mark Moses, State House Representative Al Nagasako, DOE Leeward District Office Bruce Naguwa, Nanakuli High & Intermediate Laurel Nahme, Mitsunaga & Associates, Inc. Flora Nash, Campbell High Nick Nichols, DOE Facilities Branch Barbara Nosaka, Ilima Intermediate Ryan Oshita, Waianae High

Ilalo Parayno, Campbell High
Wendell Staszkow, DOE Leeward District
Office
Michelle Toyooka, Waianae High
Delta Westcot, Villages of Kapolei

Kapolei Vernon Young, Campbell High

Isaac Wise, NASBP

AD HOC EDUCATIONAL PROGRAM COMMITTEE

Leroy Ching, Waipahu Intermediate Anthony Chun, DOE Leeward District Office Joyce Higashi, Campbell High Laurie Katagiri-Hoshino, Campbell High Kathy Kawaguchi, Makai Village Partnership Linda Kumasaki, Campbell High Patty Leahey, Campbell High Wendie Liu, DOE Leeward District Office Gordon Lum, Waipahu Community School Robin Martin, Campbell High Aaron Mersberg, Campbell High Keith Morioka, Waipahu High Flora Nash, Campbell High Pauline Oasay, Campbell High Ilalo Parayno, Campbell High Wendell Staszkow, DOE Leeward District Office Vernon Young, Campbell High

Linda Wilkinson, Barbers Point Elementary

Steve Wong, Mitsunaga & Associates, Inc.

Dexter Yee, Kapolei Rotary Club

AD HOC CURRICULUM COMMITTEE

James Carter, Nanakuli High & Intermediate Anthony Chun, DOE Leeward District Office Frank Coprivnicar, Waipahu High Joyce Higashi, Campbell High Tess Kaji, Waianae High Laurie Katagiri-Hoshino, Campbell High Kathy Kawaguchi, Makai Village Partnership Carolyn Kirio, Waianae High Leila Kuboynama, Waianae Intermediate Patty Leahey, Campbell High Daryl Mandela, Waianae High Robin Martin, Campbell High Aaron Mersberg, Campbell High Ryan Oshita, Waianae High Walden Zane, Campbell High

SPECIAL CONSULTANTS

Michael Barros, DOE - OASIS Anthony Calabrese, DOE - OASIS Frank Coprinvnicar, Waipahu High Ted Fukushima, OIA Helen Gokan, DOE - OASIS Cleighton Goo, DHHL Sam Higa, DTS Mel Higayama, DTS Norman Ishikawa, State Civil Defense Larry Kanda, State Civil Defense Sharon, Kaohi, DOE - OASIS Tess Kaji, Waianae High Gene Kaneshiro, DOE - School Food Service Branch Lauri Katagiri-Hoshino, Campbell High Carolyn Kiro, Waianae High

Kerry Koide, DOE - OITS Leila Kuboyama, Waianae Intermediate Karl Kunishige, DOT Lucretia Leong, DOE - OASIS Daryl Mandela, Waianae High Robin Martin, Campbell High Claude Matsuo, DTS Howard Mau, Austin Tsutsumi & Associates Keith Morioka, Waipahu High Keith Niiya, Austin Tsutsumi & Associates George Okano, DAGS Michele Otake, DHHL Sandy Pfund, HCDCH Candy Suiso, Waianae High George Tonaki, DOE - Operations & Maint. Walden Zane, Campbell High

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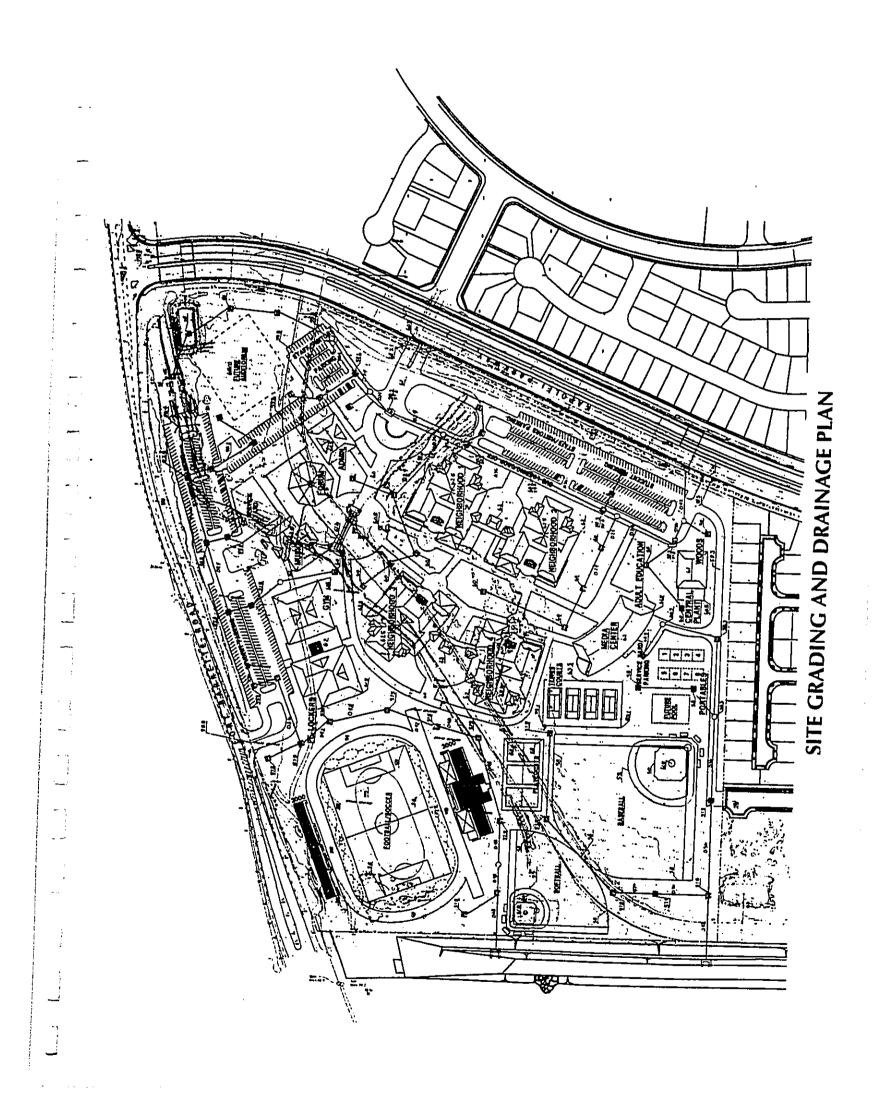
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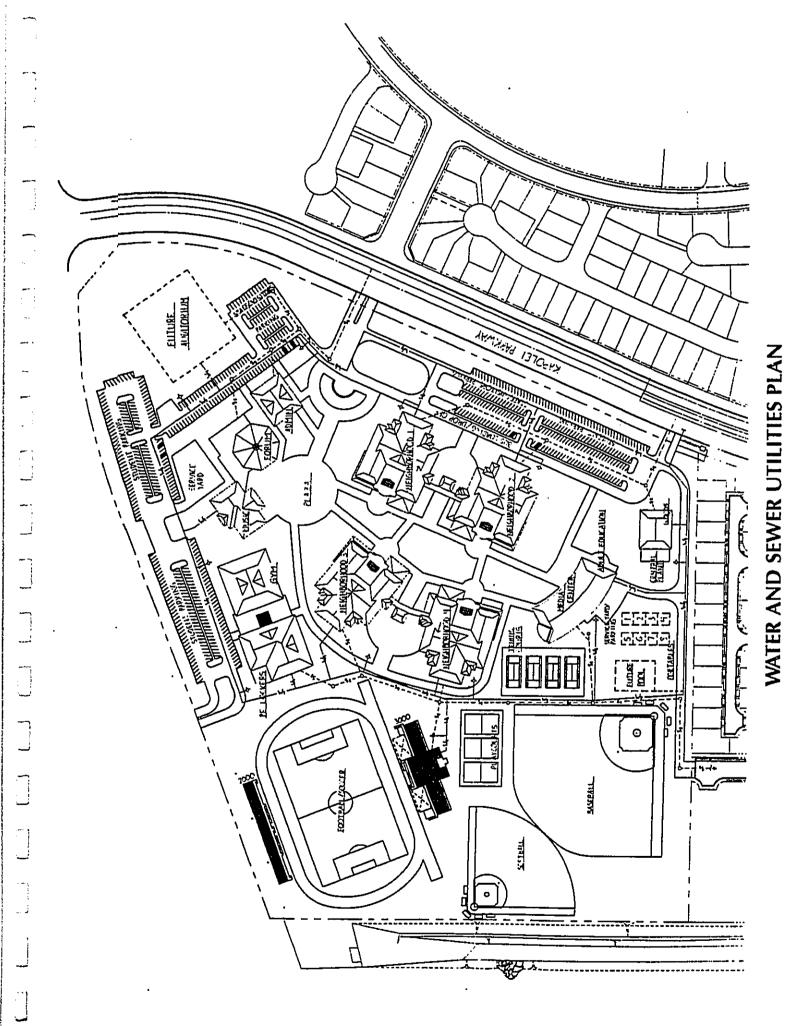
KAPOLEI HIGH SCHOOL

APPENDIX C

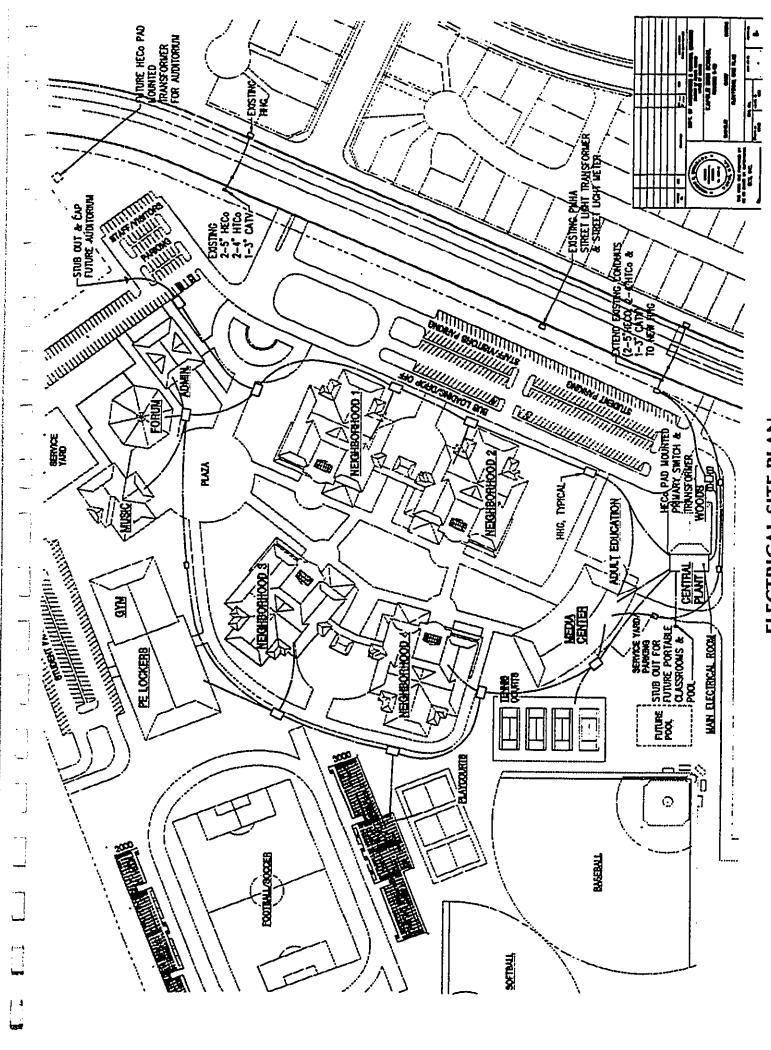
Site Plans

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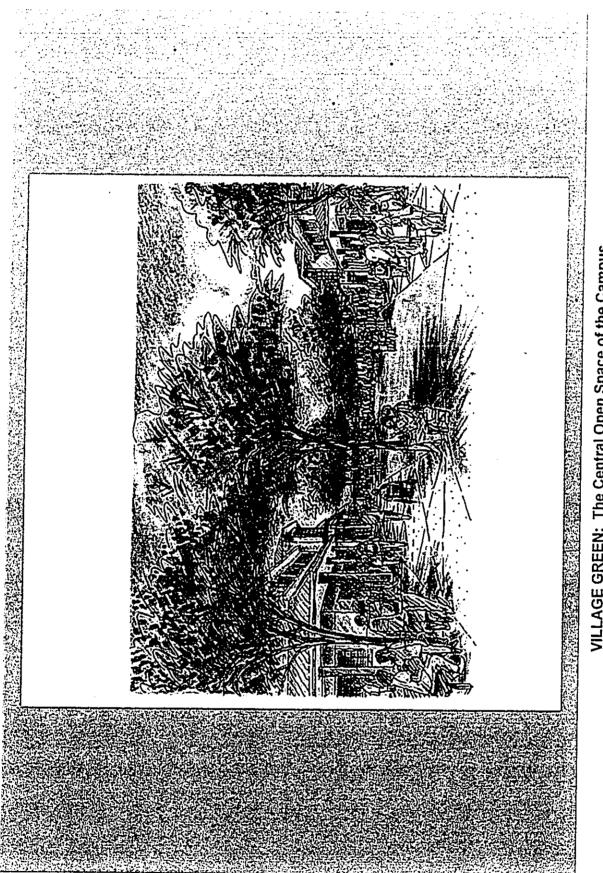




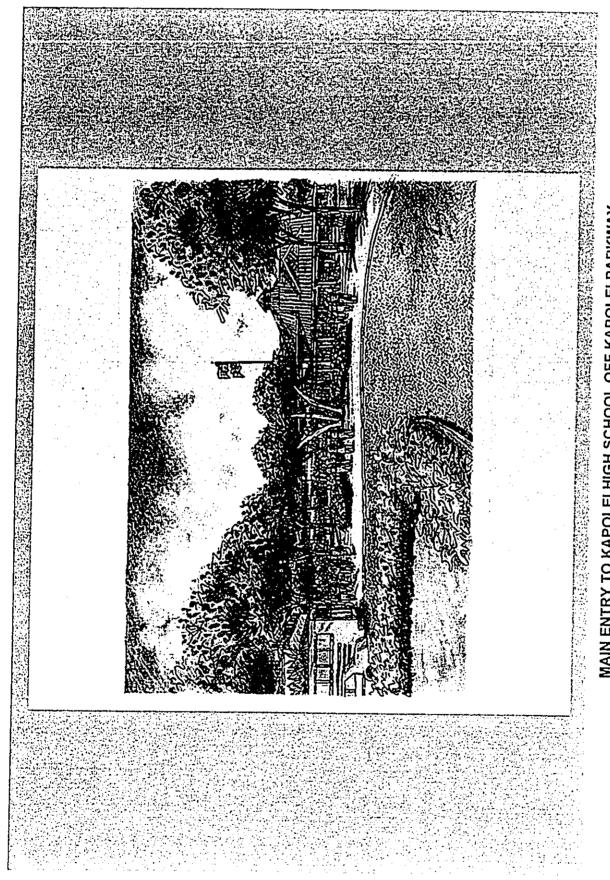
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ELECTRICAL SITE PLAN



VILLAGE GREEN: The Central Open Space of the Campus The center courtyard/ mall which is defined by the four Neighborhood Houses and the Media/ Library Center creates a safe space for social gathering for students.



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MAIN ENTRY TO KAPOLEI HIGH SCHOOL OFF KAPOLEI PARKWAY The entry to the school is clearly defined and the school's signature piece welcomes students, faculty and guests.

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APPENDIX D

Photos of Project Site

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KAPOLEI HIGH SCHOOL

Facing south (makai) from the northwest corner of school site, shows project sign on Kapolei Parkway.

Proposed school project is in accordance with the 1997 Kapolei Master Plan and the 1997 Villages of Kapolei Master Plan.



Facing north (mauka) from the northeast corner of school site, shows new housing project (Village 6) across Kapolei Parkway.

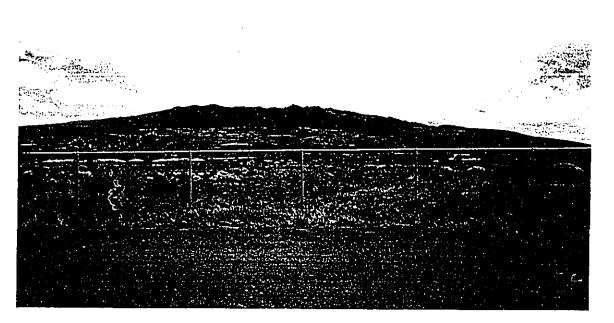
Future Site of

Kapolei High School

To be designed by the

peopletofikapolei

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Facing north (mauka) from the southeast corner of school site, shows the Waianae Mountain Range approximately three miles to the north.



Facing southwest from the intersection of Fort Barrette Road and Kapolei Parkway. Future school site is visible in the background.

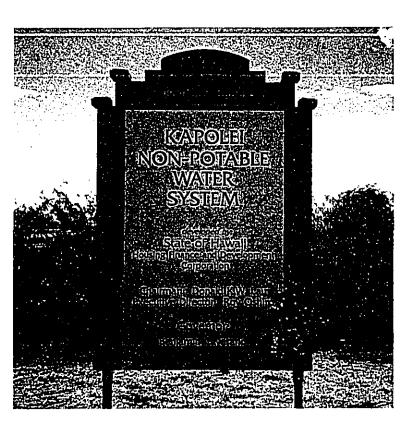
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Facing southeast from the northwest corner of school site, School site is to the right fronting Kapolei Parkway. Shows sewer, drainage and electrical fixtures.



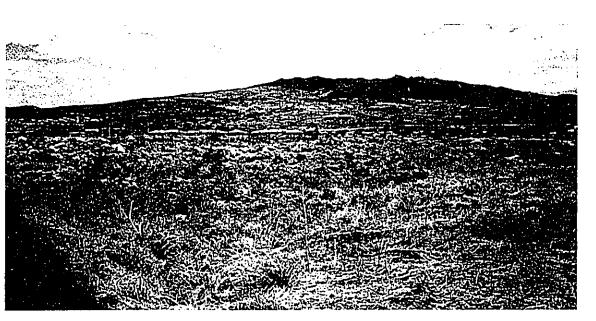
Facing east from the northwest corner of school site, shows street lights and six-feet wide sidewalks along Kapolei Parkway.



KAPOLEI HIGH SCHOOL

Sign of existing Non-Potable Water System at the northwest corner of school site.

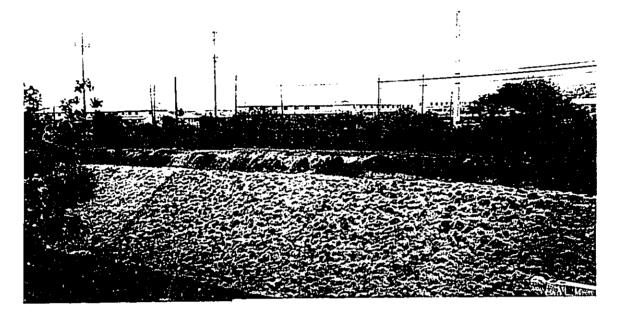
Irrigation for the school will be connected to the existing system along Kapolei Parkway.



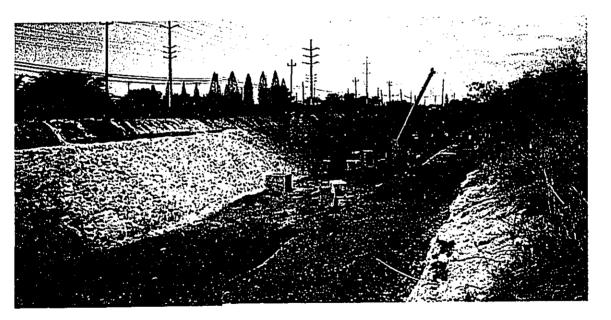
Facing northwest from the southeast corner of school site, shows sparse grassy, coral/clay surface.

Environmental Assessment

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Facing southeast from the southwest corner of school site, shows buildings at Barbers Point south of school site.



Facing west from the southeast corner of school site, shows drainage channel along the boundary with Barbers Point. The drainage channel has been improved under the Villages of Kapolei development.

KAPOLEI HIGH SCHOOL

Environmental Assessment

APPENDIX E

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Kapolei High School

Facilities Assessment and Development Schedule (FADS)

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DISTRICT	Leeward	COMPLEX: Kapolei	Kapolei	Air-Con 7 YES	YES
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District Superintendent PROGRAM - Page 1

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Kapolei High School

31-Dec-97

DATA – Page 1

Kapolei High School

Required: Existing Soversion Crediti Clum No. | % st Service GENERAL NOTES DESIGN ENROLLMENT

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Required: Existing Selection Credit Cirm No. | % si 242/225

DESIGN ENROLLMENT

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(2) Adjustment

HOME ECONOMICS Family Living Foods Laboratory Clothing Laboratory

BUSINESS EDUCATION Business, Notetaking, Mgt, Revert 1995 Advertising, Business Law, Revert 1995 Records, Salas, Marketing, Revert 1995 Accounting, Re

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12 12| 12 <u>12</u> 91 DETAILED PROGRAM / CLASSROOM SUMMARY FOLLOWS ------(2) Adjustment G. Clrm 1002-34-825-141 2003:30-22238 (1) Adjustment LANGUAGE ARTS Latiguage Arts Matbernatics SOCIAL STUDIES Social Studies

-6 1 600 (2ct) 2 450 (2ct) (1) Adjustment G. Clr (2) Adjustment G. Clrr With 1/22:551 GUIDANCE and HEALTH Health Guidance Physical EDUCATION

4 6 4 1 150 (1ct) (1) Adjustment ELECTIVE PROGRAMS Foreign Language (GCH) Newswriting Drama

 INDUSTRIAL AFTS
 (7)
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 Dratting and Design Lab
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PRACTICAL ARTS and FINE ARTS ON NEXT PAGE

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Horticulture Agricutural Technology

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Kapolei High School 31-Dec-97

Kapolei High School

PROGRAM - Page 2

PROGRAM - Page 3

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 MINIMUM PERMANENT CLAM(S) REQUIRED BY EDSPEC
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 PERMANENT CLAMS REQUESTED BY SCHOOL PLAN
 B5

 Selected Area = EDSPEC
 77

 Selected Area = EDSPEC
 85

 School Summary - Classrooms
 New Area: (+/-) Excess/Deficit, (e) EDSPEC

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Kapolei High School

PROGRAM - Page 4

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Kapolei High School

31-Dec-9/

31-Dec-97

SUMMARY - Page 1

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31-Dec-97

SUMMARY - Page 3

The Unit areas and ED SPEC areas shown on the school summary and on the individual facility component tables are net Educational Program and School Support floor areas and do not include area required for building structure, systems, service enclosur auxiliary rooms, corridors, and passageways unless specifically shown otherwise in the tables.

THIS SCHOOL DOES NOT QUALIFY FOR COVERED WALKWAYS

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101AL SUPPORTS ADDITION AREA 46 201 BOE Support Facilities Edspect Optional Support Faci. Edspect

Kapolei High School

31-Dec-97

SUMMARY – Page 2

Kapolei High School

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CLASSROOMS - Page 2 school

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CLASSROOMS - Page 1

School Kapolei High

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31-Dec-97

CLASSROOMS - Page 4

Kapolei High School

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CLASSROOMS - Page 3 Kapolei High School

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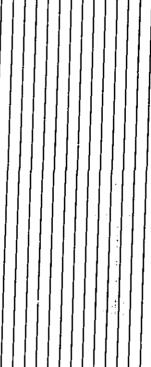
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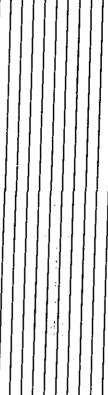
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31-Dec-97 CLASSROOMS - Page 8 Kapolei High School 31-Dec-97 CLASSROOMS - Page 7 Kapolei High School

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31-Dec-97

CLASSROOMS - Page 10

Kapolei High School

31-Dec-97

CLASSROOMS - Page 9

Kapolei High School

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31-Dec-97 Kapolei High School 31-Dec-97

CLASSROOMS - Page 12

	Selected Area. = EDSPEC BUDGET \$ Selected Area. = EDSPEC BUDGET \$ Home Economics. Notes and Comments
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CLASSROOMS - Page 14 Kapolei High School

31-Dec-97

CLASSROOMS - Page 13

31-Dec-97

Kapolei High School

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31 - Dec - 97
CLASSROOMS - Page 16
Kapolei High School
31 - Dec - 97
CLASSROOMS ~ Page 15
Kapolei High School

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31-Dec-97
- Page 17
CLASSROOMS - Page 17
Kapolei High School

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CLASSROOMS - Page 18 Kapolei High School

31-Dec-97

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31-Dec-97 CLASSROOMS - Page 20

Kapolei High School

31-Dec-97

CLASSROOMS - Page 19

Kapolei High School

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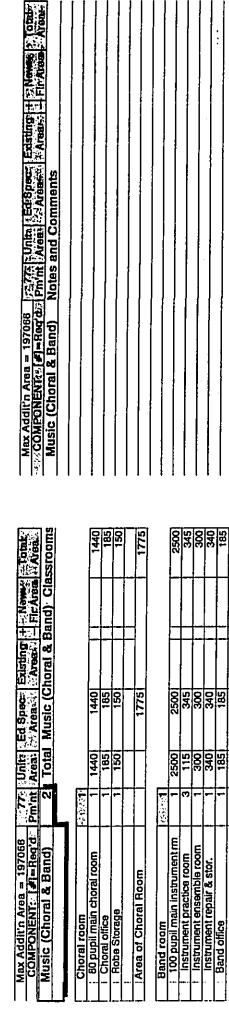
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Common facilities	1 - S - A - A - A - A - A - A - A - A - A			
Library	-	125	125	125
Vestibule	1	160	160	160
Mechanical room	1	150	150	150
Toilet (boys/girls)	2	8	192	192
Janitor's closet	I	40	40	\$
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Area of Common Facilities	_		667	867

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Area of Common Facilities		667		867
Area of Common Facilities	Ŧ	1 687		667
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Area of Choral Room	-	1775	-	1775
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Area of Common Facilities	1	687		667
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of Common Facilities	-		667	667
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Area of Choral Room	-		1775			1775
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31-Dec-97

CLASSROOMS - Page 22

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Kapolei High School

CLASSROOMS - Page 21

31-Dec-97

Kapolei High School

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31-Dec-97

31-Dec-97 CLASSROOMS - Page 23

 Max Addit'n Area = 197066
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Kapolei High School

CLASSROOMS - Page 24

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Kapolei High School

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Kapolei High School 31-Dec-97

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31-Dec-97

CLASSROOMS - Page 26

CLASSROOMS - Page 25

Kapolei High School

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31-Dec-97

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SUPPORTS – Page 2

Kapolei High School

31-Dec-97

SUPPORTS – Page 1

Kapolei High School

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SUPPORTS - Page 3	
Kapolei High School	

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SUPPORTS – Page 4

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31-Dec-97 SUPPORTS - Page 6 Kapolei High School 31--Dec-97

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Notes and Comments

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Faculty Center Work area Lounge area Gen. cr storage room Wornen's toilet Men's toilet

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SUPPORTS - Page 5

Kapolei High School

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Max Addit'n Area = 197066 / 77 0 Units Ed Spect Existing 1 Nover 120tab COMPONENT: 7 = Reg'd= Pm'nt Arear 200 Areas 2	F CENTERS A* 5 SCHOOL OPTIONS FOR TE rf stations (Each) 4 60 240 1 1 20 80 1 1 1 20 80 1 1 1 20 80 1 1 20 80 1 1 20 1 1 20 80 1 1 20 80 1 1 20 1 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20 60 1 1 20 1 1 20 60 1 1 1 1 1 20 60 1 1 1 1 1 1 20 60 1 1 1 1 1 1 1 1 1 1 1 1	School ared rhovide: 100 Soft OF CENTER AREA / CORE TEACHER Area a of All New Teacher Center(s): Provester Provester Provester Provester Selected Area = EDSPEC BUDGET \$ PROJECT: PROJECT: PROJECT: Teacher Center (YRE – M1Notes and Comments PROJECT: PROJECT: PROJECT:	Provide a total of (26) teacher stations based on a YRE-MT with 4 tracks. If more than one Teacher Center is provided reduce the number of stations porcenter proportionately. Locate Teacher Work Center near Faculty Center(s)
Max Addit'n Area = 197066 - 277: Unite Ed Spece Existing + Newe Schalt COMPONENT: 151=Reo'd Pm'nt Area: Area	Computer Resource Center Arrive General requirements 4 Group activity area 1 Common activity area 1 Circulation area 1 Circulation area 1	I Total All: New Computer. Centers 900 900 Selected Area EDSPEC BUDGET PROJECT: Cumputer Resource Cartr Notes and Comments 1	

07-Jan-98

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Kapolei High School

Kapolei High School

SUPPORTS - Page 7

SUPPORTS – Page 8

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31-Dec-97

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Kapolei High School SUPPORTS - Page 10

31-Dec-97

School SUPPORTS - Page 9

Kapolei High School

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COMPONENT: [#]=Raq/d P.E. Locker room Girts' tocker/shower (Girt) Shower room Shower room Drying room Shower room Cover/shower/shower/toilet Toilet Jamitor's closet Circulation area Circulation area Circulation area Circulation area Circulation area Selected Area = EDSPEC P.E. Locker/Shower Shower room Drying r						-	-	-	-	-	1	= -	-				r./ shwr	2 0 0		-					-		-	-	-	-	-	-		cr/ shwr
	COMPONENT: [F]=Req'd: P.E. Locker/Shower (Girl)	Girts Tocker/shower	- Charles Foom			Shower boott	PE Office	Faculty/locker/shower/toilet	Ioilet	Towel/supply stor.	General storage	: Janitor's closet	Circulation area				Area: of New, Girls: PE-Lck		Selected Area = FUSPEC	L.E. LOCKER/SHOWER (BOY)	Bovs' locker/shower	Locker room	Shower room	Drying room	Shower booth	PE office	: Faculty/locker/shower/toilet	I Toilet	I ToweVsupply stor.	General storage	Janitor's closet	Circulation area		Areas of News Boys PEstick

Language Laboratory	-					
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Selected Area = EDSPEC RUNGET &	RUDGE				A CONTRACTOR AND A CONTRACT OF	068351
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Unity Ed.Space Existing H & Newest In Totale Area: # Area & Area & Area & Area & Area &	
Max Addit'n Area = 197066 77 COMPONENT: [Al=Regider Pm'nt Language Laboratory 1	

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CTV: Junit: EdiSpect. Existing Pmint: Area: Evisting 1	·····································	0/Shurris (5:80-270 (2019-227	270	3043	A Control of the second se	hower booths and decrease the girls Locker / Shower Facilities
Max Addit'n Area = 197068 COMPONENT:: [#]=Req'd> Pr P.E. Locker/Shower (Com	Common Areas Laundry room Heater/elec. room First-Aid room	Area/of/News Common/PEtckn/Shwmail 5 to 270 roth the area water	Area of Comm PE Lckr / Shwr	Area of Boys PE Lckr / shwr Area of Boys PE Lckr / shwr	Total Area of PE Lokr / Sthars with the second seco	Increase the area for individual shower booths and decrease the area of the gang shower rooms for both boys and girls Locker / Shower Facilities during design if more shower booths are required.

SCOMPONENT: [#]=Req'd: ATHLETIC LK/Shwr (Boy)	tu,ula	Pm'nt Area: Area: Area: Area	Area	Area	- FICATOR SALER	Vient
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Boys' locker/shower	1.423					
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Locker Room / Meeting Area	-	990	066		 -	500
i Toilet	•	1601	160			
Toweling Room	-	300	300		 	
Shower Room	5	1001	200			
Equipment Storage Room	•	250	250			250
Shower Booth Room	4	40	160			227
Janitorial Closet	1	ą	40			34
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ATHLETIC LK/Shwr (Girl)	1					
Girls' tocker/shower	1. See 1					
Coach's Office	1	110	110			110
I Locker / Shower / Toilet	-	8	6			8
Locker Room / Meeting Area	-	782	782			782
Toilet	-	160	160			

Girls' locker/shower						
Coach's Office	-	110	110			110
I Locker / Shower / Toilet	-	8	6		-	5
Locker Room / Meeting Area	F	782	782			787
Foilet	=	160	160			181
Toweling Room	-	240	240		Ť	240
Shower Room	4	8	04		Ţ	3
Equipment Storage Room	-	250	250			200
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Janitorial Closet	Ē	\$	4			9
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Areas of: Girls: Athletic: Lokr/ shwrc.2004 (N.) 2222 (2002)	-Shwrc.	「おき」の	X.0		GECONTE SALES	626627
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31-Dec-97

SUPPORTS – Page 12

Kapolei High School

31-Dec-97

SUPPORTS – Page 11

Kapolei High School

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s and decrease the area of the ge Shower Facilities during design			
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Increase the area for individual shower booths and decrease the area of the gang shower rooms for both boys and girls Locker / Shower Facilities during design if more shower booths are required.			
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31-Dec-97

SUPPORTS - Page 14

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Kapolei High School

31-Dec-97

SUPPORTS ~ Page 13

Kapolei High School

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Pm'nt Area		1 500	1 150	11 1300	1 1800	800	20		1 235		ommons	_	Lckr / shwr		er/Shower -	BUDGET \$	Notes and Com		to be as follows:					nd Birls Athletic Lo		
COMPONENT: FI-FROTU	Common Areas Heater Room	arindar Baant Hoom	Irainer's Room (Nate at	the Training Base	Multi-Use Machine Area	Squat Rack Area	Power Bench Area	Free Standing Rack Area	Rehab Machine Area		Athlatic	Area of Boys Athletic Lckr	Area of Girls Athietic Lckr		Selected Area Of Athletic / Locker / Shower	FTIC I MChine /	The state of the s	<u>#1:</u>	Irainer's Room components to be as follows:				te the area for individua-	shower rooms for both boys and girls Athletic Locker / Shower Facilities during design more shower booths are required.		

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197066 77 - Unit 1-Req1d Pm'nt Area Notes and	
Max Addir'n Area = COMPONENT:: GYMNASIUM	Designer to provid

Max Addit'n Area = 197066 277+ Unit? Ed Specific Ed Specific 1 (News) Total COMPONENT: [J=Req d= Pm/nt Area 274

	<u>pace in locker rooms as required to</u>	iedos,		
Jesigner to provide hallway and the	accomodate the school interscholastic meeting space in			

Max Addit'n Area = 197066 77 Unity Ed Spece Existing + Mereir Total COMPONENT: [#]=Req'd< Pm'nt Area Area GYMNASIUM Notes and Comments Designer to provide hallway and team meeting space in locker rooms as required to accomodate the school interscholastic program needs.		Selected Area = EDSPEC BUDGET \$ PROJECT: MBDIAN ANNIAL BAIMEALL EDUCATION FACILITIES
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 Swimming: Pool

 Swimming: Pool

 Swimming: Pool

 Pool Deck Area

 Pool Deck Area

 Bleachers

 Eleachers

 Eleachers

 Store

 Pool Deck Area

 Bleachers

 Eleachers

 Eleachers

 Eleachers

 Store

 Boy's Shower

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31-Dec-n/

SUPPORTS – Page 16

Kapolei High School

07-Jan-98

SUPPORTS - Page 15

Kapolei High School

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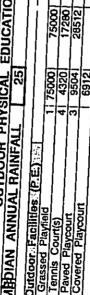










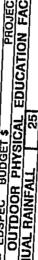














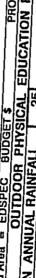


















Environmental Assessment

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KAPOLEI HIGH SCHOOL

APPENDIX F

Traffic Assessment: Kapolei High School

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KAPOLEI HIGH SCHOOL TRAFFIC ASSESSMENT DAGS JOB NO. 12-16-1646 KAPOLEI, OAHU PART II

Prepared For

STATE OF HAWAII DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES

July 1998

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Austin, Tsufsumi & Associates, Inc. Civil Engineers • Surveyors 501 Sumner Street, Suite 521 Honolulu, Hawaii 96817-5031 Prepared By

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TABLE OF CONTENTS

Page

		-
÷	PROJECT DESCRIPTION	2
,	METHODOLOGY	3.6
Ν.	ROADWAYS	9
.,	TRAFFIC ANALYSIS	7-14
		~
	1. Base Traffic Volumes	7-14
	Trip Generation	5.9
	School Accesses	9-10
	The Distribution	10-13
		13-14
'n,	DISCUSSION	14-15
VII.	RECOMMENDATIONS	15-19
FIGURES	8	

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PROJECT LOCATION MAP	PROJECT SITE MAP	SITE PLAN	TRIPS, WITHOUT VILLAGE 7 OR HIGH SCHOOL WITH RELOCATED ROAD "8"	PROJECT GENERATED TRAFFIC 3 ACCESS DRIVEWAYS, REVISED	TRIPS VATH PROJECT GENERATED TRAFFIC 3 ACCESS DRIVEWAYS, REVISED	SCHEMATIC LAYOUT • RECOMMENDED IMPROVEMENTS • KAPOLEI PARKWAY	SCHEMATIC LAYOUT - RECOMMENDED IMPROVEMENTS - FORT BARRETTE RD.
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APPENDICES

- LEVEL OF SERVICE DEFINITIONS
- THIP GENERATION AND DISTRIBUTION
- TRAFFIC ANALYSIS < m U

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TRAFFIC ASSESSMENT

KAPOLEI HIGH SCHOOL

PART II

KAPOLEI, OAHU

INTRODUCTION <u>.</u>:

access driveways to the site. Additionally, a new connector street designated Relocated Road "B" will be added connecting Kaiau Avenue to Kapolei Parkway across the The purpose of this report is to assess the traffic impacts of the proposed Kapolei High School and appurtenant facilities on the adjacent streets, and evaluate proposed parkway driveway to the high school.

parts. Part i examined the impact of providing an additional access to the school from Fort Barrette Road. Part I also examined the impacts to area traffic which may result The traffic assessment report for Kapolel High School has been prepared in two from the addition of other facilities, primarily a football stadium and an auditorium.

from charrettes conducted by the developer with architects, community leaders and Part II examines the impact of revised school parking and access layouts resulting government agencies to finalize the layout for the school.

PROJECT DESCRIPTION ≓

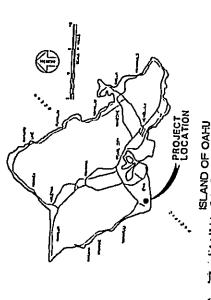
as a major planned community on the west side of Oahu, which will provide residential The State of Hawaii Department of Accounting and General Services (DAGS) and Department of Education (DOE) are in the process of planning for the Kapolei High School to be constructed in Kapolei, Oahu. This area is presently under development and employment opportunities away from the existing central and east Honolulu areas. Figure 1 shows the project location.

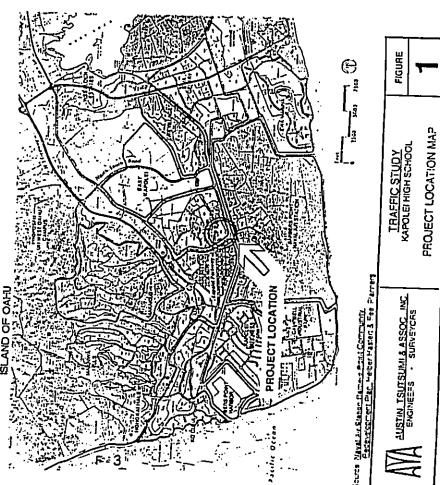
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The high school is to be localed an a 45-acre parcel in the area known as the Villages of Kapolel, and is bounded on the west by Fort Barrette Road, on the north by Kapolei Parkway, on the east by Village 8 of the Villages of Kapolei and on the south by Barbers Point Naval Air Station (BPNAS.) The parcel is identified as TMK 9-1-16:74 and por. 75. Construction of various portions of the Kapolei development are on-going. Figure 2 shows the project stile.

The district boundaries, or the limits of the area for the student population for the high school, are Nanakal Gardens to the west, Makakiio to the north, the Kapolel boundary to the east and Barbers Point to the south. The BPNAS is in the process of being decommissioned, with turnover to the State by the U.S. Navy scheduled in 1999.

The high school is being planned to serve 1,800 students, with a maximum enroltment of 2,400 students, operating on a four-track schedule with three tracks in attendance at arry one time. It is proposed that, In addition to the classrooms, the campus will include a 5,000-seat stadium, a gymnasium, and other facilities, including a 1,000-seat auditorium. Figure 3 shows the proposed high school site plan.

Access to the site will be primarily by two driveways - one on Kapolei Parkway approximately 800 feet east of Fort Barrette Road, and the other from Fort Barrette Road; a secondary access will be from Road "A" on the east side of the campus through Village 8. Parking lots in the current layout plan will be located on the Kapolei Parkway and Fort Barrette Road sides of the school grounds; the Road "A" access wil connect to a service road to the Kapolei Parkway-side parking lots.

The site is presently undeveloped and overgrown with scrub growth. It is anticipated that DAGS and DOE witt begin construction in early 1999 with completion of the school in Year 2000.

METHODOLOGY

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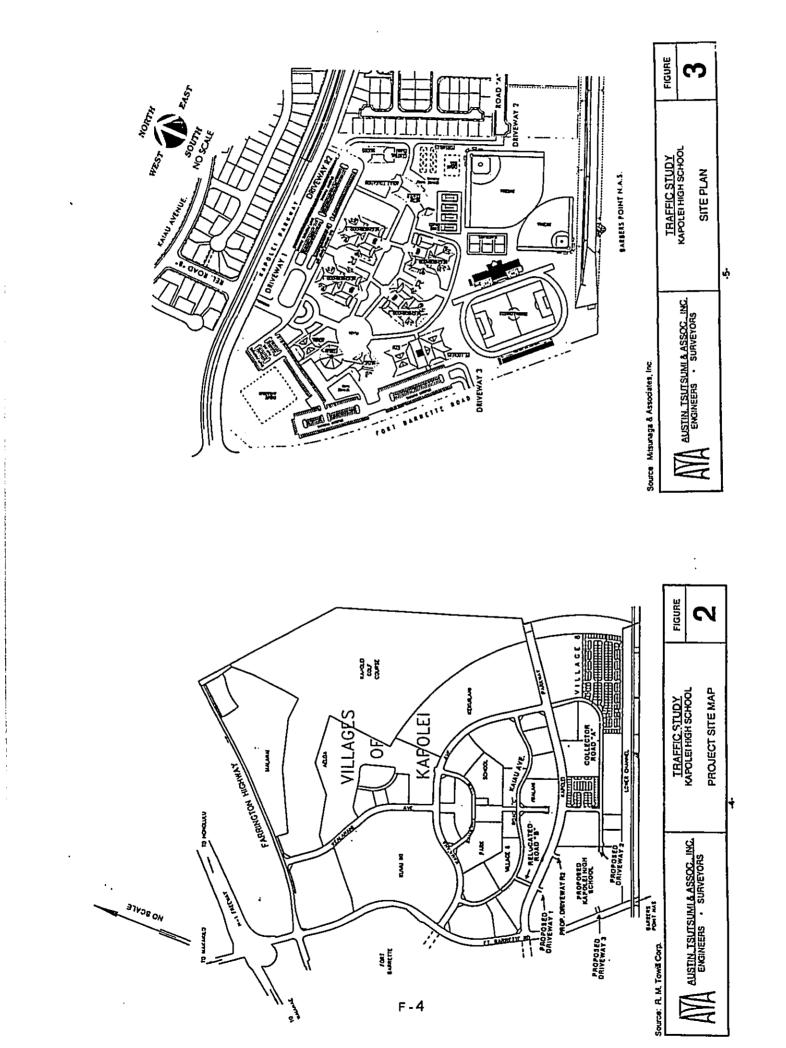
This report is based upon available data from the following sources and no traffic counts were taken:

- Iratific impact Study. Villages of Kapolei, R.M. Towill Corp. July, 20, 1994.
- <u>Villages of Kapolel Update of Traffic Impacts.</u> State of Hawail Housing and Finance Development Corp. and R.M. Towill Corp., April 1996.

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- <u>Iraffic Survey Dala Island of Oahu 1996</u>, State Highways Division.
- Additional information was obtained from the following sources:
- <u>Naval Air Station Barbers Point Community Redevelopment Plan Summary</u> Report, Barbers Point Redevelopment Commission, March 1997.
 - Kapolel Area Long Range Master Plan, The Estate of James Campbell.

ROADWAYS ≥́

Fort Barrette Road is a 1.38-mile long, two-lane, two-way major collector road, Route 901, under the jurisdiction of the State Highways Division (SHD) and is the main access to Barbers Point Naval Air Station. It begins at the main gate to BPNAS and ends at its intersection with Farrington Highway, where the roadway continues as Makakilo Drive. With the development of the Kapolei area, Fort Barrette Road serves as a major collector/distributor road. Under the Campbell Estate master plan, Fort Barrette Road will be widened to a four-lane divided arterial with a right-of-way of 100 feet. The posted speed limit is 40 miles per hour (mph) between Fartington Highway to Kamaaha Avenue and 45 mph from Kamaaha Avenue to the BPNAS gate. Kapolei Parkway wil areas. Portions of the parkway have been constructed, primarily through the Villages of be a four- to six-lane City divided arterial joining the Ewa communities with the Kapolei Kapolei, but not yet opened to public traffic. The posted speed limit will be 35 mph. Presentry, the Parkway terminates at Fort Barrette Road at a T-intersection; however, future plans include its extension west through the Campbell Estates' City of Kapolei development to Ko Olina.

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Road "A" is a local 2-lane two-way collector road through Village 8. It begins at the intersection of Kapolei Parkway and Kamaaha Avenue, extends south, then turns westerly terminating in a cui-de-sac and driveway Into the Kapolei H.S. grounds. This roadway has not been constructed.

Relocated Road "B" is a local four-lane, two-way connector road between Kalau Avenue and Kapolei Parkway. It has been relocated from its former location about 2,300 Road and across from the proposed main driveway to Kapolei High School on Kapolei feet east of Fort Barrette Road to a new location about 800 feet east of Fort Barrette Parkway. It has not been constructed at this time. HFDC will construct Relocated Road

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- TRAFFIC ANALYSIS >
- A Existing Traffic

All roadways Immediately surrounding the project site are non-existent or not open to traffic, except Fort Barrette Road. State DOT traffic counts in 1996 Indicated that approximately 328 vehicles are northbound and 867 vehicles are southbound during the AM peak hour of traffic and 645 vehicles are northbound and 163 vehicles are southbound during the PM peak hour of traffic. This traffic distribution reflects BPNAS as an employment center in this region.

- Future Traffic Conditions ш,
 - Base Traffic Volumes ÷

The base traffic volumes reflect the anticipated utilimate traffic volumes on the existing and planned roadways without the project. Figure 4 shows the projected base traffic without the high schoci at ultimate build-out. The base traffic volumes were based on data from the report <u> Villages of Kepolei Update of Traffic Impacts. April 1996</u>, State of Hawail, Housing Finance and Development Corporation and R.M. Towill Corporation, with adjustments due to the inclusion of Relocated Road "B".

Trip Generation N

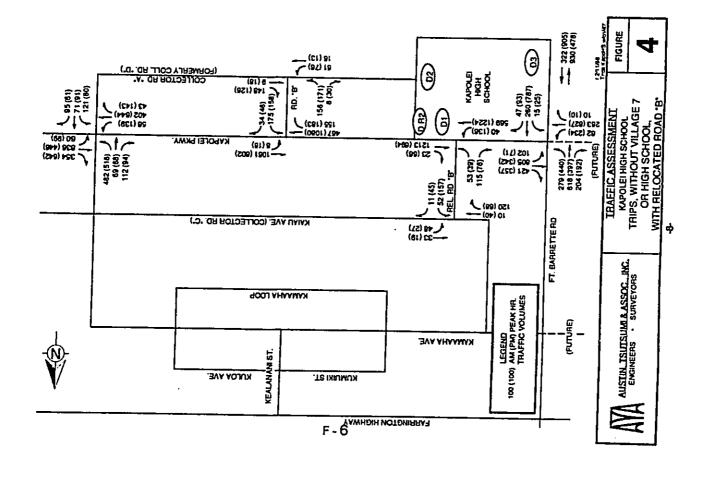
Trip generation for the school is based on factors in the publication <u>Trio Generation, 5th Edition, 199</u>1, Institute of Transportation Engineers.

Kapolei High School is being planned to accommodate 1,800 students, with a maximum euroliment of 2,400 students. The school will operate on a mutti-track schedule, that is, it will have four tracks of students, with 3 In attendance at any one time while the fourth is on vacation. Therefore, the maximum student attendance at any one time will be 1,800 students.

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Trips generated by the high school are estimated to be as follows:

TABLE 1

School
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20	EXIT	236	Ę
Vehicle Trips Generated	ENTER	205	42
Vehicles/Hour Per Student	EXIT	0.13	0.06
Vehicle Per Si	ENTER	0.28	0.02
Students: 1,800		AM Peak Hour	PM Peak Hour

3. School Accesses

Accesses to the school's parking areas are proposed from three driveways - from Kapolel Parkway, Road "A" and Fort Barrette Road. Parking lots for student and facutty parking will be situated along the Fort Barrette Road and the Kapolei Parkway sides of the campus. Approximately 590 parking spaces will be provided. The Kapolei Parkway and Fort Barrette Road accesses will be the primary accesses to the school grounds and parking lots; the Road "A" access will be a secondary access.

The parking areas will also be used for special event parking, such as football games, other athletic events and productions at the future auditorium. These events will primarily occur during non-school hours and are not examined in this report.

The Kapolei Parkway access(Driveway 1) is proposed as a fullservice main entrance, located approximately 800 feet east of the Fort Barrette Road/Kapolei Parkway intersection and across from Relocated Road "B." An additional right turn-only exit to Kapolet Parkway (Driveway Fi2) is proposed on the eastern side of the school frontage. These parking fols will be primarily for staff and visitor parking, with some student parking allowed in designated areas.

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The Road "A" access (Driveway 2) is proposed at the end of Road "A". This access is proposed to connert to a connector road to the parking lots on the Kapolel Parkway side of the campus. Because this driveway will not have any parking area immediately adjacent to the driveway, it is expected that it will have very limited use.

The Fort Barrette Road access (Driveway 3) is proposed to be a fullservice access to parking facilities along the west (Fort Barrette Road) side of the campus. These parking tots will be primarily for student parking and special events parking. The campus parking lots are planned to be connected with connector roads.

Trip Distribution

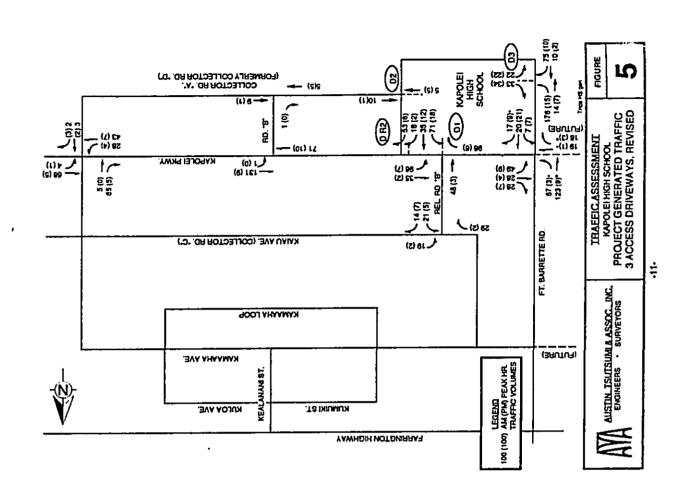
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Traffic generated by the school was calculated and distributed to the three proposed general accesses, as shown in Figure 5. It is anticipated that Driveway 2 will see little traffic because it serves only as an access road to the Kapolei Parkway parking lots from Vittage 8 roadways.

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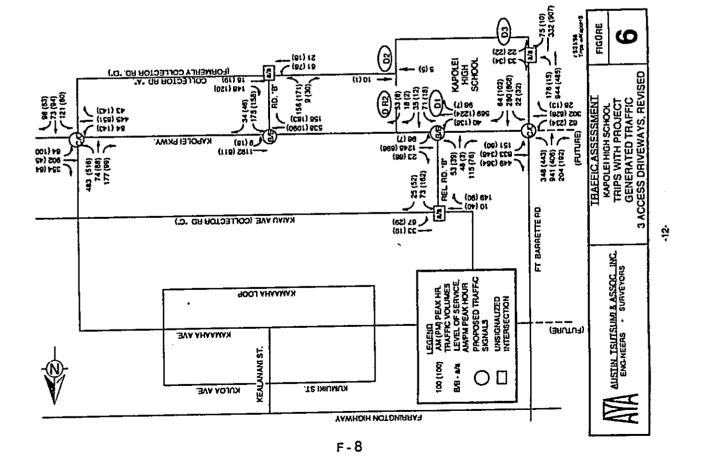
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Figure 6 shows the traffic distribution with base traffic plus project traffic at the access driveways to the school campus. The AM peak hour of traffic will be the period which will be the most affected by the school; school-generated traffic will not significantly impact the PM commuter peak hour of traffic. Trip assignments for project-generated traffic to the proposed access driveways are shown in Table 2.



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Access Traffic Assignment Table 2

Access Location	AM Enter	AM EXIT	PM ENTER	PM Exit	
1. Kapolei Parkway	241	177	17	41	
2. Road 'A'	10	5	1	5	
3. Fort Barrette Road	251	54	24	56	

ei

and its subsequent update in April 1996 developed traffic data in the area projections and distribution for this report. Development phases are The Villages of Kapolei, the City of Kapolei and other portions of the Ē previously mentioned TIAR for the Villages of Kapolei prepared in 1994 of the high school and these were utilized as the basis for traffic uncertain at this time and therefore are not considered in this report. Kapolei development are in various stages of development.

Level of Service

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conditions of traffic flow, The 1994 Highway Capacity Manual - Special delays and corresponding levels of service were utilized in this study. LOS Level of Service (LOS) is a qualitative measure used to describe the Report 209 procedures for calculating volume-to-capacity (v/c) ratios, definitions for signalized intersections are provided in Appendix A. This study is based on ultimate traffic volumes, therefore it was assumed that intersections which would warrant traffic signals at ultimate build-out would have traffic signals installed.

The traffic projections indicate that the following intersections would meet traffic signal warrants at ultimate build-out and their LOS levels will be as indicated for the AM and PM peak hours of traffic:

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Table 3

Signalized Intersections Level of Service (LOS)

Intersection	AM Peak Hour of Traffic	PM Peak Hour of Traffic
Fort Barrette Road at Kapolei Parkway	U	0
Kapolei Parkway at Reloca- ted Road "B"/Driveway t	œ	-
Kapolei Parkway at Road *8*	6	۵۵ (۱
Kapolei Parkway at Kamaaha Avenue	υ	0

Level of service analysis was also performed for the unsignatized Intersections immediately adjacent to the project, including the Fort Barrette Road access to the school, and all were found to operate at LOS A in the AM and PM peak hours of traffic. The Fort Barrette Road access to the school was assumed to have a left-turn storage lane for left turns ۰, Into the school.

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generation resulting from special events at the foolball/soccer stadium were examined This report primarily addresses the traffic generated by the school; traffic in Part I. This report also does not address phased construction in the development of the Kapolel region nor its effect on the high school. The preliminary locations for parking lots on the campus provide easy access from the school's main entrances at Kapolei Parkway and Fort Barrette Road. The accesses on Kapolei Parkway and, to a lesser extent Road "A," will serve staff, visitor and student parking areas. The Fort Barrette Road access will primarily serve the student parking areas adjacent to Fort Barrette Road. The Kapolei Parkway entrance will be the main public entrance to the campus. It is being designed to accommodate visitors and student drop-offs by private vehicles

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and buses, as well as access to the parking areas. The main entrance/exit driveway will be located across from relocated Road •B• and an exit-only driveway to Kapolei Park way eastbound will be located on the eastern corner of the Kapolei Parkway parking area. Intersection improvements will be required, such as left-turn storage lanes and a traffic signal system, when it is warranled. Because of the anticipated use of this access adjusted to reflect this. Figure 7 shows the proposed improvements at this access. The Fort Barrette Road access is needed to properly distribute project traffic and not as the primary location for student drop-offs, the AM peak hour exiting traffic was overload any accesses.

It is anticipated that most students will utilize the Fort Barrette Road driveway to get to the designated student parking areas. It is further assumed, for this report, that the Fort Barrette Road access will be allowed by the State Highways Division. This accass would raquire construction of intersection improvements, such as a teff-turn deceleration and storage tane for southbound traffic and a right-turn deceleration lane icr northbound traffic on Fort Barrette Road, in order to miligate the effects of school and special events traffic on Fort Barrette Road. Figure 8 shows the proposed improvements at this access.

through this roadway. This access should remain a secondary access to the school Because Road "A" is a residential road, it is undesirable to route school traffic campus.

The redevelopment of BPNAS will change traffic patterns in the area, particularly areas to BPNAS. These additional public accesses are being studied by the Barbers Point Redevelopment Commission and are described in the report <u>Naval Air Station</u> when additional roadways are extended from the City of Kapolel and other adjacent <u>Barbers Point Community Redevelopment Plan Summary Report, March 1997,</u>

RECOMMENDATIONS

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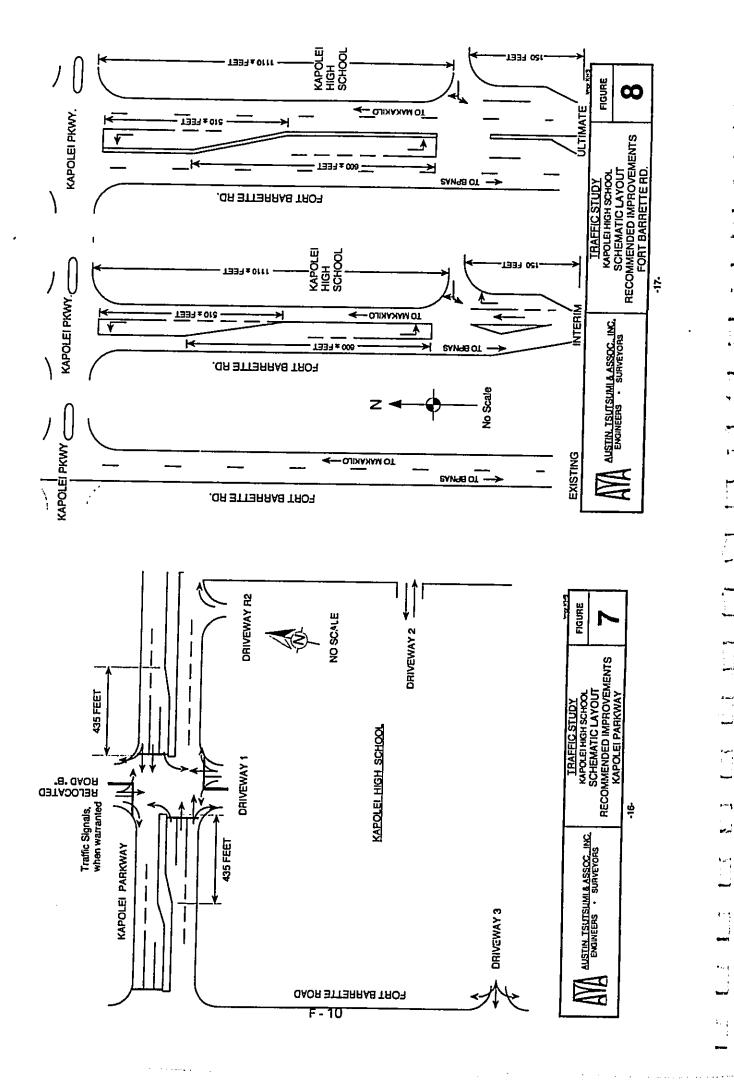
Based on the foregoing, the following measures are recommended to mitigate the impact of school traffic.

Widen and Improve Fort Barrette Road to provide adequate capacity for a left-turn deceleration and storage lane for southbound traffic using the Fort Barrette Road access. This left-turn lane should be coordinated with ÷

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the requirements for northbound Fort Barrette Road traffic turning left into the future Kapolei Parkway extension to the City of Kapolei. The length of the left-turn storage lane for the school should be approximately 600 feet long. to accommodate the requirements of an average crowd attending the football games at the stadium.

- The present speed timit of 45 mph on Fort Barrette Road should be lowered to 35 mph. Traffic code changes must be approved and promulgated by the State Department of Transportation.
- If traffic conditions indicate they are warranted, install SCHOOL signs and flashers, with appropriate School Zone speed limit signs (25 mph) on Fort Barrette Road and Kapolel Parkway.
- On campus, interior road traffic controls should give preference to incoming vehicles in order to reduce the possibility of vehicles overflowing and backing up onto the public roadways.
- The entrance driveways should be at least 50 feet long to provide reservoir storage space for entering vehicles, particularly at the Kapolei Parkway entrance.

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- Provide a 150-foot right-jum deceleration lane, including a 100-foot taper, for northbound motorists on Fort Barrette Road turning right into Driveway 3.
- 7. Provide laft-turn deceleration and storage lanes in the median at the intersection of Kapolei Parkway and Relocated Road "B". The eastbound left-turn storage and deceleration lane should be 435 feet long including a 180-foot taper. The westbound left-turn storage lane should be the same.
- If feasible, locate local bus stops on Kapolei Parkway on the far side of the intersections. Bus pultouts are not necessary.
- When traffic studies indicate that warrants are met, install traffic signals at the intersection of Kapolei Parkway and the entrance to Kapolei High

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School (Driveway 1). Initial construction of the intersection can include installation of conduits across the roadways for the future traffic signals.

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LEVEL OF SERVICE OF SIGNALIZED INTERSECTIONS

Level of service for signalized intersections is defined in terms of delay. Delay is a measure of driver discomfort, frustration, fuel consumption and lost travel time. specifically, level-of-service criteria are stated in terms of the average stopped delay per vehicle for a 15-minute analysis period. The criteria are given in Table A-1.

Table A-1. Level-of Service Criteria for Signalized Intersections

Stopped Delay for Vehicle (SEC)	5.1 to 15.0 5.1 to 15.0 15.1 to 25.0 25.1 to 40.0 40.1 to 60.0 > 60.0
Level of Service	≪ ¤0 © m r

Delay is a complex measure, and is dependent on a number of variables, including the quality and forogression, the cycle length, the green ratio, and the v/c ratio for the lane group or approach in question. Number of service A describes operations with very low delay, i.e., less than 5.0 seconds per vehicle. This occurs when progression is extremely favorable, and most vehicles arrive during the green phase. Most vehicles do not stop at al. Short cycle lengths may also contribute to low delay.

Level-of-service B describes operations with delay in the range of 5.1 to 15.0 seconds per vehicle. This generally occurs with good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.

Level-of-service C describes operations with delay in the range of 15.1 to 25.0 seconds per vehicle. These higher delays may result from fair progression and/or longer cycle langths. Individual cycle failures may begin to appear in this level. The number of vehicles stopping is significant at this level, atthough many still pass through the intersection without stopping.

Level-of-service D describes operations with delay in the range of 25.1 to 40.0 seconds per vehicle. At tevel D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.

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Level-of-service E describes operations with delay in the range of 40.1 to 60.0 seconds per vehicle. This is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths and high v/c ratios. Individual cycle failures are frequent occurrences.

Level-of-service F describes operations with delay in excess of 60.0 seconds per vehicle. This is considered to be unacceptable to most drivers. This condition often occurs with oversaturation, i.e., when arrival flow rates exceed the capacity of the intersection. It may also occur at high v/c rates below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

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SUMMARY OF THIP GENERATION RATES

Kapolal High School	Kapolei, Oahu
Land Use or Bidg. Type:	Location:

ITE CODE: 530

Students Independent Variable:

Independent Variable:	ble:	Students		UNITS: 1800	1800
			TRIP RATE		VOLUME
AVERAGE WEEKDAY VEHICLE TRIP ENDS	DAY VEHICL	E TRIP ENDS	1.38	1987	
PEAK	A.M.	ENTER	585		
RUCH	between	EXIT	2		36
Ч,	7 and 9	RATE	0.41		3
ADJACENT	P.M.	ENTER	20%		
STREET	Between	EXIT	71%		
TRAFFIC	4 and 6	RATE	0.0		144
PEAK	YW.	ENTER	74%	3	
Hour		EXIT	26%	84	
t 3		RATE	00.0	220	
GENERATOR	P.M.	ENTER	34%	104	141
		EXIT	66%	202	273
		RATE	0.23	- Soc	414
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Reference: ITE TRIP GENERATION", 5TH ED. Comments: Per feleptione conversation v	IP GENERAT	IP GENERATION", 5TH ED. Per telebrone conversation with DOF 10/21/07 Account account			

10013:

Per teleptione conversation with DOE, 10/2/197, planned student body will be 1,800 to 2,400, 4 tracts (600 per track) with 3 tracts attending at any one time. Schools in ITE trip-gen study indicated 57% of students used bus/transit.

KapoleiHS.530

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Kapolei Prwy/Drtveway 1 AM Exit is estimated high % due to student drop-offs.

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School TRIP DIST. 97-68

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<pre>Kapolei High School 3 Access Driveways - Revised D AM PEAK HOUR SIGNAL94/TEAPAC[V1 L1.4] - Sum Intersection Parameters for METROAREA NONCED LEVELOFSERVICE C 3.0 LEVELOFSERVICE C 5 NODELLOCATION 0 0</pre>	Approach Parameters AppLABELS SRADES SRADES PEDLEVELS PARKINGSIDES PARKINGSIDES PARKOLUMES EUSVOLUMES RIGHTIURNONREDS RIGHTIURNONREDS MOVEMENT PARAMETERS	MOVLABELS VOLLANES VOLUMES UTILIZATIONS UTILIZATIONS UTILIZATIONS TRUCKFREATTONS PEAKHOUREACTORS ARRIVALITYPES ARRIVALITYPES ARRIVALITYPES ARRIVALITYPES ALTORS MINIMUNS MINIMUNS MINIMUNS ACTURATIONS MINIMUNS MINIMUNS MINIMUNS ACTURATIONS MINIMUNS MINIMUNS ACTURATIONS MINIMUNS ACTURATIONS MINIMUNS ACTURATIONS MINIMUNS MINIMUNS ACTURATIONS MINIMUNS MINIMUNS ACTURATIONS MINIMUNS MI	SEQUENCES PERMISSIVES OVERLAPS CYCLLAP CYCLLAP TREENTIMES TELLONTIMES VELLONTIMES CRITICALS EXCESS
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Kapolei High School 3 Access Driveways - Revised Distribution 2/13/98 AM PEAK HOUR

02/13/98 13:12:57

SIGNAL94/TEAPAC[V1 L1.4] • Capacity Analysis Summary

Intersection Averages for Int # 0 - Kapolei Pkwy & Ft Barrette Rd
Degree of Saturation (v/c) .66 Vehicle Delay 19.8 Level of Service C+

				8ec = .0%	L 90t Max S Queue	2 2	+C+ 451 ft	Ð	B+ 43 ft B+ 120 ft D+ 26 ft	C+	B 303 ft C+ 363 ft +D 170 ft	Ċ
	Phase 5		2=.289 26.0= 2=5.0*	Ped= .0	Delay	22.7	31.8	14.1	8.6 14.5 25.7	1.91	12.9 19.3 36.1	
	古 一			20.0\$	v/c		.840 .799		-233 233 286		. 719 . 719 . 766	
	Phase 4	* +++ *> * *	G/C= 100 G= 9.0° Y+R= 4.0° OFF=51.18	tec =	Volume		1146		280 280 22		449 833 151	
	_	*	0.01	Y=18.0	Rate () @E		1364		718 1200 104		718 1159 186	
	Phase 3	< + + + • • • > • • •	G/C= .3 G= 27. Y+R= 5. OFF=15.	80.0 t	Service @C (vph)	-	1259		650 1071 1	1 7 9 1 1	650 1025 84	
			5.0	860	Used		.378		.467 .322 .067		467	
	Phase	+++>	G/C= G= Y+R= OFF=1	G= 72.0	g/C Reqd		.152		161.		.151	
	Phase 1	, + , + , + , + +	C= .056 R= 4.0" F= .01	0 sec	Width/	ų	24/2 24/2	f	12/1 24/2 12/1	ch ch	12/1 24/2 12/1	
, , ,	!		G/C= G= V+R= OFF=	8 7	Lane 9	Approach	TH+RT LT	Approach		Approach		3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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ULILLEALTONS TRUCKPERCENTS PEAKHOURFACTOR	ARRIVALTYPES ACTUATIONS DECCT.FARANCES	MINIMUMS IDEALSATFLOMS FACTORS	DELAYFACTORS NSTOPFACTORS GROUPTYPES	SATURATIONFLOM Phasing Par	SEQUENCES PERMISSIVES OVERLAPS	CYCLES JREENTIMES YELLONTIMES CRITICALS	EXCESS	
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oueu Queu		451 192		43 ft 120 ft 26 ft			8	•
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Delay S Queue	22.7	19.9 +C+	14.1	8.6 14.5 25.7	19.1	12.9 19.3 36.1	16.6 C+	15.2 Ct
v/c		.799		.089 .233 .186		.719		.315
Service Rate Adj &C (vph) &E volume v/c		1146		64 280 22		449 833 151		330
Rate V	.,	1364 433		718 1200 104		718 1159 186		1142
Service C (vph		1259 232		650 1071 1		650 1025 84		1009
Used		.378 1259 .122 232	, , , , ,	.322		111	 	112.
g/C Reqd Used		.350		101.		.349	 	144
Hidth/ Lanes	E	/2/	E	12/1 24/2 12/1	ų	12/1 24/2 12/1		TH+RT 24/2 144 LT 12/1 099
Lane ^O Width/ Group Lanes	SB Approach	TH+RT 24			WB Approach		EB Approach	TH+RT LT
	8		e	1	BN	i	: 8	i i

Kapolei High School 3 Access Driveways - Revised Distribution 2/13/98 2M PEAK HOUR

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02/13/98 13:14:56

	tte Rd			EB LOON NONE 0 0 0 0		RT TH LT 13 828 234 0 24.0 12.0 25.05 .95 25.05 .95 13 33 NO YES YES 4.0 5.0 4.0 1.00 1.00 1.00 1.00
lues	. Pkwy & Ft Barrette			NB NONE NONE NONE		RT TH LT 102 808 32 12.0 24.0 12.0 12.0 24.0 12.0 12.0 2.0 2.0 3 3 3 80 YES YES 4.0 5.0 15.0 15.0 15.0 1.00 11.00 11.00 11.00 11.00 11.00 11.00 11.00 11.00 15.0 15.0 15.0 15.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0
of Parameter Values	# 0 - Kapolei Pkwy			WB CON NON O O O O O O		RT TH LT 364 346 80 12.0 24.0 12.0 12.0 24.0 12.0 12.0 24.0 12.0 13 3 3 10 5.0 2.0 1.00 1.00 1.00 1.00 1.0
L1.4) - Summary of	Intersection Parameters for Int	NORCBD 3.0 3.0 0 0	eters	SB NOIN NOIN NOIN	eters	TH LT 4.05 4.10 24.05 24.05 24.05 295 295 295 295 295 295 295 29
SIGNAL94/TEAPAC [V1 L1.4]	Intersection Pa	YETROAREA JOSTTIME LEVELOFSERVICE NODELOCATION	Approach Parameters	APPLABELS FRADES FEDLEVELS PEDLEVELS PARKYOLUMES AUSVOLUMES AIGHTTURNONREDS	Movement Parameters	MOVLABELS RT MOVLABELS RT AUDITHS 0192 AUDITHS 0192 AUDITHS 095 AUTUATIONS 095 ARRIVALTYPES 095 PEAKHOURFEATORS 095 ARRIVALTYPES 00 ACTUATIONS 00 ACTUATIONS 1000 REQUERTERANACES 1.000 FACTORS 1.0000 FACTORS 1.0000 FACTORS 1.00

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Kapolei High School | Access Driveways - Revised Distribution 2/13/98 M PEAK HOUR

02/13/98 13:15:08

ilGNAL94/TEAPAC[V1 L1.4] - Capacity Analysis Summary

Intersection Averages for Int # 0 - Kapole1 Pkwy & Ft Barrette Rd
Degree of Saturation (v/c) .61 Vehicle Delay 20.2 Level of Service

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11.2 B 77 ft 19.8 *C+ 358 ft 26.1 *D+ 38 ft 2 1 Phase 2 Phase 3 Phase 4 Phase 5 Phase 6

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3 C+ 343 ft

16.3 38.8

.268 .356 1206 1321 842 637 .197 .156 160 269 234 .851

EB Approach TH+RT 24/2 LT 12/1

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21.2

02/13/98 13:19:00 NONE 1 0 EB LOW NONE NONE 00 щ 0 - Kapolei Parkway & Rel. Rd LEADLAGS OFFSET PEDTIME RT TH 18 135 0 20 0 21 0 25 0 25 190 25 100 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 NONE NONE NONE 3IGNAL94/TEAPAC{V1 L1.4] - Summary of Parameter Values Intersection Parameters for Int # 0 - Kapolei Par Kapolei High School 3 Access Driveways - Revised Distribution 2/13/98 MM PEAK HOUR XC YES 38.00 5.00 5 MOI NONE 0 YES YES 10 4.00 0 NO YES 180 8.00 4.00 6 NONCED 3.0 C 5.5 C SB LOW NONE 0 0 0 0 15 XES 75 26.00 2 5.00 0 2 2 0 0 Uo Approach Parameters Movement Parameters Phasing Parameters MOVLABELS VOLUMES VOLUMES VIDTHS LANES TRUCKPERCENTS PEAKHOURFACTORS ARRIVALTYPES ARRIVALTYPES ARRIVALTYPES ARTUATIONS FIDELSATELOWS FIDELSATELOWS FIDELSATELOWS FIDELSATELOWS FIDELSATELOWS FIDELSATELOWS FIDELSATELOWS SATURATIONELOWS SATURATIONELOWS APPLABELS JRADES PEDLEVELS PARKINGSIDES PARKINGLUMES BUSVOLUMES BUSVOLUMES R I GHTTURNONREDS 4ETROAREA LOSTTIME LEVELOFSERVICE VODELOCATION SEQUENCES PERMISSIVES OVERLAPS CYCLES CYCLES GREENTIMES CRITICALS EXCESS EXCESS

Kapolei High School 3 Access Driveways - Revised Distribution 2/13/98 3M PEAK HOUR

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3IGNAL94/TEAPAC[V1 L1.4] - Capacity Analysis Summary

Intersection Averages for Int # 0 - Kapolei Parkway & Rel. Rd B Degree of Saturation (v/c) .57 Vehicle Delay 13.3 Level of Service B

			Ped* .0 sec = .0\$	Belay S Queue	58 Approach , 17.5 C+	17.5 *C+ 189 ft		16.0 C+ 108 ft		0 12.4 *B 411 ft 22.9 *C 104 ft
4			15.6%	°/`		524		. 383		.375
Phase 4	< • • • • • • • • • • • • • • • • • • •	G/C= .422 G= 38.0* Y+R= 5.0* OFF=52.2\$	Y=14.0 sec = 15.6%	volune		217		124		1271
-	++ ++ +++ +++>		Y=14.	Service Rate ec (vph) eE		414		324		1816 249
Phase	ŶŶŶ	G/C= .044 G= 4.0 Y+R= .0 OFF=47.8	84.4%	Service Rate ec (vph) eE		327		247		141
		.089 8.0° 4.0°	sec =	Used		115.		.311		489
Phase		G/C= .089 G= 8.0° Y+R= 4.0° OFF=34.4%	G= 76.0 sec	g/C Reqd		.233		.196		·
Phase 1	*** *** *** ***	G/C= .289 G= 26.0° Y+R= 5.0° OFF= .01	90 sec	up Hidth/	SB Approach	LT+TH+RT] 12/1 .	NB Approach	LT+TH+RT 12/1 .	WB Approach	22
5q 15	North				SB Apr	11+1-1	NB Apr	11+11	WB Api	F3

Rd B			N N N N N N N N N N N N N N N N N N N		RT TH LT 7 1224 135 0 24.0 12.0 0 24.0 12.0 35 95 95 95 2.0 2.0 2.0 3 95 100 100 1.00 1.00 1.00 1.00 1.00 1.00 1
æter Values Kapolei Parkway & Rel.			anon Nolon Nolon		RT TH LT 2 12 12 0 12.0 0 12.0 0 2 12 0 2 2 5 25 2 0 2.0 2 0 2.0 2 0 2.0 2 0 2.0 2 0 2.0 1 0 1.00 1 0 0
Рагал 0 -			MDI NON NOI NOI NOI NOI NOI NOI NOI NOI NO		RT TH LT 66 696 7 0 24.0 12.0 95 95 95 95 95 95 95 95 95 95 95 95 95 95 95 96 100 100 100 100 100 11.00 1.00 1.00 11.00 1.00 1.00 11.00 1.00 1.00 11.00 1.00 1.00 11.00 1.00 1.00 11.00 1.00 1.00 120 1.00 1.00 100 1.00 1.00 100 1.00 1.00 100 1.00 1.00 100 1.00 1.00 100 34.00 5.00 100 5.00 5.00
NAL94/TEAPAC[V1 L1.4] - Summary of Intersection Parameters for Int #	NONCED 3.0 5 0 0	leters	SB NON NON NON NON NON	neters	RT TH LT 75 3 35 75 3 35 0 12.0 0 0 22.0 0 2.0 2.0 2.0 2.0 2.0 2.0 3 3 3 8 NO YES YES 4.0 5.0 4.0 5.0 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.
SIGNAL94/TEAPAC[V1 L1.4] Intersection Paramete	4ETROAREA LOSTTIME LEVELOFSERVICE NODELOCATION	Approach Parameters	APPLABELS JRADES PEDLEVELS PARKINGSIDES PARKVOLUMES BUSVOLUMES RIGHTTURNONREDS	Movement Parameters	MOVLABELS WOLLTER VOLUMES VOLUMES VOLUMES VOLUMES TRUCKPERCEATS TRUCKPERCEATS TRUCKPERCEATS SATUATIONS PEAKHOURFACTORS ACTUATIONS ACTUATIONS ACTUATIONS MINIMUMS ACTUATIONS PEAKTORS TI 000 FICATRAS TI 000 FI

EB Approach TH+RT 24

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02/13/98 13:17:14

Kapolei High School 3 Access Driveways - Revised Distribution 2/13/98 3M PEAK HOUR

02/13/98 13:19:15

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Phasing Parameters Movement Parameter HOVLABELS VOLUMES VOLUMES VIDTHS ANES TRUCKPERCENTS PEACHONF REUCKPERCENTS PEACUATIONS RATUATIONS PEACUARANCES INNUMS FACTORS FACTORS FACTORS SATURATIONFLOMS SATURATIONFLOMS APPLABELS 3RADES 3EDLEVELS PARKINGSIDES PARKVOLUMES 3USVOLUMES 3USVOLUMES XIGHTTURNONREDS METROAREA LOSTTIME LEVELOFSERVICE NODELOCATION CEQUENCES ERMISSIVES VERISSIVES VERLAPS CYCLES REENTIMES LETLOMTIMES LETLOMTIMES LETLOATS EXCESS 02/13/98 13:17:25 Averages for Int # 0 - Kapolei Parkway & Rel. Rd B of Saturation (v/c) .59 Vehicle Delay 13.6 Level of Service B 2/1 | .153 | .322 | 366 | 454 | 118 | .260 | 14.6 | 8 | 101 ft| 2/1 361 478 1715 1778 1230 692 12.7 8 406 ft 405 12/1 361 432 21.9 7 18 405 ft 141 ft $\begin{bmatrix} G/Ce & .300 & G/Ce & .089 & G/Ce & .078 & G/Ce & .378 & G= 34.0^{\circ} \\ G= & 27.0^{\circ} & G= 8.0^{\circ} & 7+R= & .0^{\circ} & 7+R= & .0^{\circ} \\ 0FF & .04 & 0FF=35.64 & 0FF=48.94 & 0FF=56.74 \\ T= 90 \ \text{sec} & G= 76.0 \ \text{sec} & 84.44 \ \text{Y}=14.0 \ \text{sec} & 15.64 \ \text{Ped}= & .0 \ \text{sec} & = .04 \\ T= 90 \ \text{sec} & G= 76.0 \ \text{sec} & 84.44 \ \text{Y}=14.0 \ \text{sec} & 15.64 \ \text{Ped}= & .0 \ \text{sec} & = .04 \\ T= 90 \ \text{sec} & G= 76.0 \ \text{sec} & 100 \ \text{sec} & 000 \ \text{sec$ 13.5 B 289 ft 2/1 | .088 | .322 | 360 | 448 | 32 | .071 | 13.7 | B | 27 ft 14.6 B Д æ æ 13.7 3.61 13.6
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 iq 16 | Phase 1 | Phase 2 | Phase 3 | Phase 4 | ## SIGNAL94/TEAPAC[V1 L1.4] - Capacity Analysis Summary - Revised Distribution 2/13/98 . . . ۶ 4/2 .251 .400 1372 1468 2/1 .075 .100 65 155 · • • • • • • • :, • ‡ + +++ +++ +++ Kapolei High School 3 Access Driveways -3M PEAK HOUR ¢ SB Approach NB Approach WB Approach EB Approach TH+RT 24 LT 12 • • • • • • • • • Intersection Degree ÷ North

02/11/50 72:00:E1 NONE 1 0 EB LOW NONE NON 00. Intersection Parameters for Int # 0 - Kapolei Parkway & Road B LEADLAGS OFFSET PEDTIME NB LOW NONE NONE SIGNAL94/TEAPAC[V1 L1.4] - Summary of Parameter Values Kapolei High School 3 Access Driveways - Revised Distribution 2/13/98 AM PEAK HOUR XES YES HA HOL NONE 0 XES YES 37.00 5.00 NO YES 180 13.00 4.00 6 NONCBD 3.0 C 5 0 0 SB LOW NONE vo 12 NO YES 90 5.00 5.00 0 Approach Parameters

Kapolei High School 3 Access Driveways - Revised Distribution 2/13/98 AM PEAK HOUR

SIGNAL94/TEAPAC[V1 L1.4] - Capacity Analysis Summary

Intersection Averages for Int # 0 - Kapolei Parkway & Road B
Degree of Saturation (v/c) .47 Vehicle Delay 8.9 Level of Service B+

			Tu 90 sec G= 76.0 sec = 84.4% Y=14.0 sec = 15.6% Ped= .0 sec = .0%	Lane ^O [Width/] g/C Service Rate Adj V/C BEAV E 404 Kax Group Lanes Reqd Used &C (vph) &E volume v/C Delay S Queue
Phase 3	· · · · · · · · · · · · · · · · · · ·	G/C= .411 G= 37.0" Y+R= 5.0" OFF=53.3\$	84.41 Y=14.	Service Rate &C (vph) @E
Phase 2	*** *** ***	G/C= 144 G= 13.0° Y+R= 4.0° OFF=34.4\$	G= 76.0 sec	g/c Reqd Used
Phase 1	+++ •••	G/C= .289 G= 26.0 Y+R= 5.0 OFF= .01	UL 90 Sec	LaneO Width/ Group Lanes Re
39,12	///		е 19-2	Gro

NB Approach					、			14.4 B	8		
-13	12/1	.182	.311	707 385	769 479	34 175	RT 12/1 .087 .500 707 769 34 .044 7.4 B+ 25 ft	7.4 15.8	<u>ئ</u> ة	153	122
IB Approach	ach							6.4	6.4 B+		!
TH 24/2 .351 .622 2315 2316 1192 .514 6.3 B+1 285 ft LT 12/1 .075 .156 160 269 1192 .033 20.8 +c 285 ft	24/2	.351	.622 .156	2315	2318 269	1192	TH 24/2 .351 .622 2315 2315 218 1192 .514 6.3 8+ 285 ft	20.8	<u>ي</u> بة ا	285	<u> </u>
"B Approach	ach							11.7 B	m		:
TH+RT 24/2] .239] .433] 1470 1552 693] .447 11.7	r 24/2	.239	433	1470	1552	693	TH+RT 24/2] .239 .433] 1470 1552 693 .447 11.7 *B 248 ft	11.7	- 8	248	E

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CON NONE NONE CONE NONE	RT 17H LT 183 1090 0 0 24.00 0 24.00 0 24.00 2.95 .95 .95 2.95 .95 3 3 3 3 3 00 1000 1900 1900 1 100 1100 1000 1 100 1000 10	NONE NONE .00 .00 0
N	RT TH LT 12.46 0 12.9 2.95 .95 .95 3.3 .95 .95 3.3 .95 .95 2.0 2.0 2.0 2.0 2.0 2.0 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	LEADLAGS OFFSET PEDTIME
MB KONE NONE 0 0 0	RT TH LT 0 24:1 12.0 1 0 24:1 12.0 1 0 24:1 12.0 1 2.95 .95 .95 .95 0 25:0 5:0 4:0 1 1.00 1:00 1:00 1 1.00 1:00 1 1.00 1:00 1:00 1 1.00 1:00 1:00 1 1.00 1:00 1:00 1 1.00 1 1.00 1:00 1 1.00 NO NO NO YES YES 10 5.00 5.00	
as Seven Sev	TH LT TH LT 0 0 0 0 0 0 2 0 2 0 2 0 2 0 2 0 0 1 0 0 1 0 0 1 0 0 0 0	12 ND NO YES YES 90 13.00 43 20.00 13.00 43 5.00 4.00 43 6 5.00 13.00 43
APPLABELS RADES EDLEVELS PARKINGSIDES PARKOLUMES USVOLUMES .IGHTTURNONREDS	riouldes related for the second secon	SEQUENCES ERMISSIVES ERMISSIVES CYCELES CYCELES TELOMTIMES TELOMTIMES CALLONTIMES CALLONTIMES CALLONTIMES CALLONTIMES

ی**دی**م ۱ ۱ **1734** 1 : 1 **6**:35 3. 1 **F**rii 3 4 I -¥ i بشم ş. I العيم العيم تحريرية im •---<u>ب</u>ريم . 1.14 **** $\theta \in \{$ * - ! 4.3 ، ، (میں

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02/13/98 13:31:54

Intersection Parameters for Int # 0 • Kapolei Parkway & Road B

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Kapolei High School 1 Access Driveways - Revised Distribution 2/13/98 20 PEAK HOUR

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7IGNAL94/TEAPAC[V1 L1.4] - Capacity Analysis Summary intersection Averages for Int # 0 - Kapolei Parkway & Road B Degree of Saturation (v/c) .53 Vehicle Delay 10.1 Level of Service B

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SIGNAL94/TEAPAC[V1 L1.4] - Capacity Analysis Summary

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Kapolei High School 3 Access Driveways - Revised Distribution 2/13/98 PM PEAK HOUR

SIGNAL94/TEAPAC[V1 L1.4] - Summary of Parameter Values

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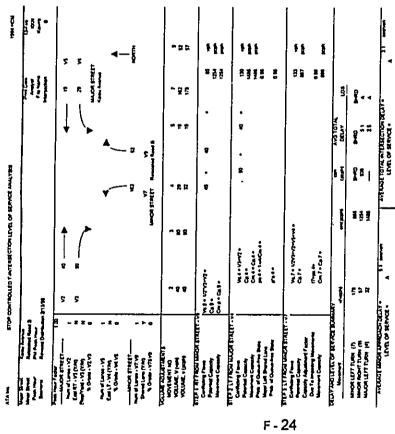
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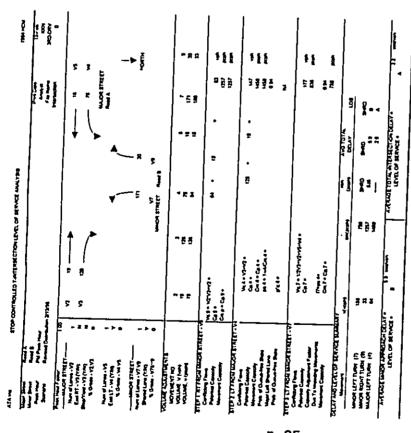
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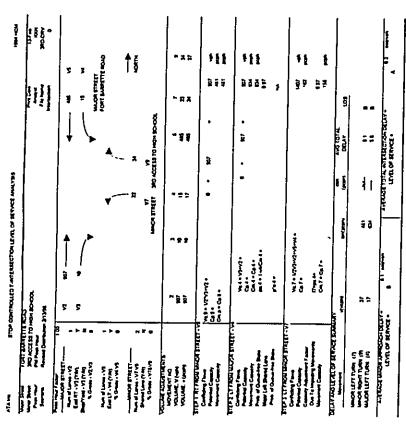
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Environmental Assessment

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APPENDIX G

Comments and Response Letter on Draft EA

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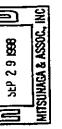
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OFFICE OF ENVIRONMENTAL QUALITY CONTROL



ſ September 28, 1998



Housing and Community Development Corporation of Hawaii 677 Queen Street, #300 Honolulu, HI 96813 Donald K.W. Lau

Attn: Sandy Pfund

Dear Mr. Lau:

Draft environmental assessment (EA) for Kapolei High School Subject:

We have the following comments to offer: G-1

- Figures 7 and 11: These figures (FIRM map and State Land Use Boundaries map) need to replaced with clear copies. The latter also requires a legend. ÷
- <u>Contacts</u>: Notify the City & County of Honolulu Planning Department of the proposed project. Document all contacts in the final EA and include copies of any correspondence. сi
- <u>Visual impacts:</u> Include drawings or diagrams of the proposed buildings and any proposed landscaping that show the final appearance of the project. We recommend the use of native Hawaiian plants and shrubs. ကံ

If you have any questions call Nancy Heinrich at 586-4185.

Sincerely,

GARY GILL Director

Byung Lee, Mitsunaga & Assoc. ដ

Mitsunaga & Associates, inc. Architecture • Planning • Engineering 147 AMAMA ST. SUITE 218 • HOHOLULU, HAWAH 9414 TELEPHONE (2021) 942-722 • FAX (2021) 542-2523

December 18, 1998

Office of Environmental Quality Control 235 South Beretania Street, Suite 702 Honolulu, Hawaii 96813 State of Hawaii Mr. Gary Gill Director

Ms. Nancy Heinrich Attention:

Kapolei High School Environmental Assessment (EA) Subject:

Dear Mr. Gill:

Thank you for your September 28, 1998 comments concerning the subject project. Our responses to your comments are as follows:

- FIRM map and State Land Use Boundary map will be replaced with clear copies. The latter will be with a legend.
- 2. The City's Planning Department has been consulted during the DEA Comment Period, and the Final EA will include copies of all correspondences during the comment period.
- An illustration will be included in Appendix C. It will show the main entry to the proposed Kapolel High School off Kapolel Parkway as well as the final appearance of the school.

Various native Hawaitan plants and shrubs will be used for the landscaping of the school, including True Kou, Loulu Lelo, Beach Naupaka, Kululi, Rockii Hibiscus, Akia, Beach Vitex, Ilima Papa, Kupukupu, Nehe and Pauoliiaka.

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Mr. Gery Gill Director Office of Environmental Quality Control December 18, 1998 Page 2	We appreciate your input for this project.	Very truty yours,	MITSUNAGA & ASSOCIATES, INC.	Byung S. Lee, AICP Project Planner				

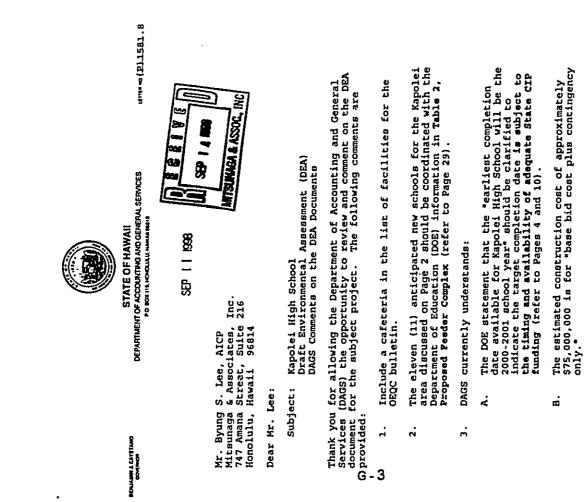
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Gincepely. GORDON MATSUOKA Public Morks Administrator

If there any guestions, please have your staff call Mr. Ralph Morita of the Planning Branch at 586-0486.

Ltr. No. (P)1581.8

Mr. Byung S. Lee, AICP Page 2

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RM:Jy c: HCDCH MVP DOE-Facilities Branch į

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The status on "available <u>potable</u> water allocation" for the school operations should be clarified in the text on Pages 35 and 51.

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Mitsunaga & Associates, Inc. Architecture • Planning • Engineering 14 Auana 51, suite 218 • HOROLULU, HAMAII 1841 TELEPHONE (1001) 545-7522 • FAX (1001) 546-2543

December 18, 1998

Mr. Gordon Matsuoka Public Works Administrator Department of Accounting and General Services State of Hawaii P.O. Box 119 P.O. Box 119 Honolulu, Hawaii 96810

•

Mr. Ralph Morita, Planning Br. Attention:

Kapolei High School Environmental Assessment (EA) Subject:

Dear Mr. Matsuoka: G-4

Thank you for your September 11, 1998 comments conceming the subject project. Our responses to your comments are as follows:

Cafeteria is called and listed in the Bulletin as a "Forum" which is a multipurpose gathering place with cafeteria function.

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The description on page 2 will be revised to read, "a dire need for new school is anticipated."

3. a. The description regarding the target completion date will be revised according to your statement. b. We concur with your statement regarding the estimated construction cost. 4. The description on page 35 will be revised to read, " Potable and non-potable water allocation for the school is presently available." The description on page 51 will be revised to read, "Potable and non-potable water allocation is already available."

Mr. Gordon Matsuoka Public Works Administrator State DAGS December 18, 1998 Page 2

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We appreciate your input for this project.

Very truly yours,

MITSUNAGA & ASSOCIATES, INC.

BTUNG S. UEE Byung S. Lee, AICP Project Planner

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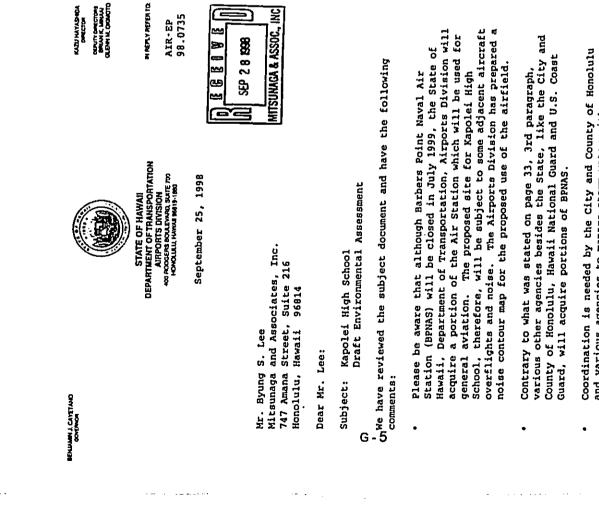
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and various agencies to manage storm water with respect to new development. The objective is to maintain the existing

runoff coefficient, which in turn will not change the hydrograph curves for this drainage basin.

September 25, 1998 Mr. Byung S. Lee Page 2

AIR-EP 98.0735

This objective can be achieved by requiring best management practices for new development which will retain a significant amount of precipitation on the site and then allow the overflow to the next level of the drainage system. This next level of drainage can be captured and retained in dedicated retention basins or retention basins incorporated within parks and open areas. The consequence of not addressing this issue is the increase in frequency and severity of flooding downslope, which in this case is where the airport is located.

Thank you very much for providing us the opportunity to review this document. Please contact Ben Schlapak, Head Planning Engineer, at 838-8821 to clarify any questions you may have.

Sincerely,

AERRY M. MATSUDA, P.E. Dairports Administrator genta certes

Federal Aviation Administration (D. Welhouse) c: Aries Consultants, Ltd. (J. Sanders)

Mitsunaga & Associates, Inc. Architecture • Plantine • Envincerino

Archilecture = Planning = Engineering 141 AMANA 57. SUITE 210 = HOHOLUU, MAWAII 1421 TELEPHONE (2001 545-7242 = FAX (2001 546-2542

December 18, 1998

Mr. Jerry M. Matsuda Airports Administrator Department of Transportation, Airports Division State of Hawaii 400 Rodgers Boulevard, Suite 700 Honolulu, Hawaii 96819-1880

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Attention: Mr. Ben Schlapak, Head Planning Engineer

Subject: Kapolei High School Environmental Assessment (EA)

0 - Dear Mr. Matsuda: 0

Thank you for your September 25, 1998 comments concerning the subject project. Our responses to your comments are as follows:

- Brief discussion of noise impact as the result of NASBP Redevelopment Plan and noise contour map prepared by Aries Consultants will be added to the EA.
- The description on page 33 will be revised to read, "NASBP is in the process of being transferred to various State, City and County, and Federal agencies."
- For the entire Villages of Kapolei development including the proposed Kapolei High School, the Kapolei Drainage Master Plan was prepared by HCDCH, and the City and the Navy accepted the drainage master plan.

According to the plan, Kapolei Golf Course and lower channel were constructed as Best Management Practice to maintain the "predevelopment" drainage conditions for the downstream portions of the Makalapa and Makakilo watersheds.

Mr. Jerry M. Matsuda Airports Administrator State DOT, Airport Div. December 18, 1998 Page 2

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The City's DPP has been consulted during the DEA Comment Period, and the project design team will keep closely coordinating with the DPP during the design and permit phases of the proposed project.

We appreciate your input for this project.

Very truty yours,

MITSUNAGA & ASSOCIATES, INC.

Project Planner

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September 30, 1998



MITSUNAGA & ASSOC., INC.

Mr. Donald K.W. Lau Executive Director Housing and Community Development Corporation of Hawaii State of Hawaii State of Hawaii 677 Queen Street, Suite 300 Honolulu, Hawaii 96813

Dear Mr. Lau: D- -L

Draft Environmental Assessment Kapolei High School - Ewa, Oahu, HawaiiTax Map Key: 9-1-16:74 and pot. 75.... Thank you for the opportunity to review and comment on the Draft Environmental Assessment (DEA) for the Kapolei High School development.

Development of the Kapolei High School in the Villages of Kapolei is consistent with the City's General Plan and its new Ewa Development Plan. Specifically:

- The proposed development is consistent with the provisions of the City's 1992 General Plan Section I. Population, Objective C Policy 2 which encourages development within the Secondary Urban Center at Kapolei and the Ewa urban fringe, and with Section 1X: Health and Education, Objective B which supports the provision of adequate educational facilitie.
- The proposed project is consistent with the "Vision" for Ewa's future, as provided in the new Ewa Development Plan (DP) which became effective on October 22, 1997.
- a. The site for the proposed school is located within the Ewa DP's Urban Growth Boundary, in the Phase 1 area identified for Urban Expansion from 1997 to 2005.

Mr. Donald K.W. Lau Executive Director Housing and Community Development Corporation of Hawaii September 30, 1998 Page 2

- b. The school facilities are needed to support the growth of the City of Kapolei, the Secondary Urban Center, and the Ewa urban fringe areas which is a key element of the DP vision.
- c. The proposed high school will help implement the Ewa DP vision that adequate infrastructure be provided to address current deficiencies and meet the demand expected from planned development by meeting the need for at least one new high school by the year 2000 projected by the State Department of Education (DOE).
- d. Sections II.D.3 and III.C.2 (pages 34, 35 and 50, respectively) of the DEA state that a water allocation for the school is presently available, and that a dual water system is planned with connections to the existing Villages of Kapolei potable system and to the existing non-potable system along Kapolei Parkway.

Use of the dual water system, water efficient landscaping and possible extension of the dual water system to the adjacent multi-family residential areas will decrease the school's potable water demands and implement the Ewa DP vision and policies (pages 2-4, 2-17 and 4-16 to 4-21) to conserve the potable water supply in the area.

c. Sections III.A.2 and 3. (Page 41) of the DEA states that the project site was under sugar cane cultivation since the later 1800's prior to the initial grubbing and grading for the Villages of Kapolei site in 1980; and that there are no impacts associated with the project with regard to flora and fauna and archeological resources.

As per Section 3.4 of the Ewa DP, the following should be added to clarify the "Mitigation" discussion of the archeological resources:

- The State Historic Preservation Officer shall determine the method of preservation, the site boundaries, setback restrictions and criteria for adjacent uses and the appropriateness of public access.
- f. Section III.C.1 (page 49) of the DEA states that over 40% of the students would be from the Kapolei area and that automobile traffic would be reduced by students walking to/from school and the use of vans and buses.

Mr. Donald K. W. Lau Executive Director Housing and Community Development Corporation of Hawaii September 30, 1998 Page 3 The FEA should also include options to minimize student partials by encouraging car/van pooling and the use of bicycles as proposed in the Kapolei Area Bikeway Plan, first published by Campbell Estates (KABT) in 1991, which was part of the City of Kapolei Urban Design Plan adopted by the City Council in 1995. The July 1998 Traffic Assessment Kapolei High School prepared by Austin, Tautsumi and Associates, Inc., for the State Department of Accounting and General Services (DAGS) should be expanded to evaluate the long-term traffic impacts (especially on Fort Barrette Road and Kapolei Parkway) by incorporating the Barbers Point Redevelopment Commission's March 1997 Naval Air Station Barbers Point Community Redevelopment Plan Summary Report, and the completion of the City of Kapolei's roadway system master plan.

E. Sections III.C.4 and V.A.10 (pages 52 and 64, respectively) of the DEA state that the storm runoff would be routed to the existing drainage channel along the southern boundary of the project site and off toward the Barbers Point coral pit.

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The City's Department of Planning and Permitting (Permit Review Section at 527-6303) should be consulted for confirmation of the conclusions listed about the perceived negative impact on adjacent or downstream properties. For example, what are the ramifications of the apparent disparity between the potential in-flows (total cumulative runoff flow rate at the southern boundary of the project site which is estimated at 6,900 cfs from Matalapa and Matakilo gulch watershed) while the culvert structure at the southern boundary of the project site "limits flows into the pit to 1,600 efc?

The FEA should also discuss the long-range plans for the coral pit.

h. Section IV.E. of the DEA (pages 56 and 57) cites the planning and operating principles (Section 4.7.2, pages 4.32 of the City's August 1997 Ewa Development Plan Report) to be followed for the Ewa schools.

Mr. Donald K.W. Lau Executive Director Housing and Community Development Corporation of Hawaii September 30, 1998 Page 4 To indicate how these principles will be implemented, the comments from the Department of Parks and Recreation (DPR) and the surrounding neighborhood boards (Waipahu Neighborhood Board No. 22; EwaľKapolei/Honokai Hale Neighborhood Board No. 23 and Matakilo Neighborhood Board No. 34) on how the school will be used as a community center and the working agreements with DPR should be incorporated in the Final Environmental Assessment (FEA).

If you have any questions, please call Ray Sahai of my staff at \$23-4047.

Yours very truly,

Chief Manning Officer

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 Byung S. Lee, Mitsunaga and Associates, Inc. OEQC
 DPP/Permit Review Section

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Mitsuraga & Associates, Inc. Architecture • Planning • Engineering 117 AMMA 51. SUITE 216 • HOROLULL, HAWAII 4414 TELEPHONE (100) 145-7142 • FAX (200) 144-2541

December 18, 1998

Mr. Patrick T. Onishi Chief Planning Officer Department of Planning City & County of Honolutu 650 South King Street, 8th Floor Honolulu, Hawaii 96813-4950

Attention: Mr. Ray Sakai

Subject: Kapolei High School Environmental Assessment (EA)

n Dear Mr. Onishi: G

Thank you for your September 30, 1998 comments concerning the subject project. Our responses to your comments are as follows:

- Your confirmation of the proposed project being consistent with the City's 1992 General Plan (Section I. Population, Objective C, Policy 2) is noted and appreciated.
- a, b, c & d. Your confirmation of the proposed project being consistent with the City's Ewa DP vision and policies is noted and appreciated.
- e. The EA will be revised to read; "the State Historic Preservation Officer shall determine the method of preservation, the site boundaries, setback restrictions and criteria for adjacent uses and the appropriateness of public access."
- Regarding car/van pooling, the use of bicycles and traffic assessment report, we discussed the matter with the State DOE and DAGS and provide the following response:

Your statement regarding car/van pooling and the use of bicycles was brought to the attention of the State DOE. The State DOE indicated that high level of bicycle use is not anticipated in high schools.

Mr. Patrick 1. Ohishi Chief Planning Officer Planning Department City and County of Honokhu December 18, 1998 Page 2 especially in Hawaii. If there is a demand after the school is built, DOE is willing to provide bike racks accordingly.

DOE encourages car-pooting. However, it cannot be mandatory. It is anticipated that most students, who five beyond walking distance, will use school bus. Busing system would significantly reduce traffic volume generated by the students.

Your statement regarding traffic assessment report was brought to the attention of the State DAGS. The State DAGS indicated that the BPNAS Community Redevelopment Plan (CRP) could not be incorporated into the traffic assessment report since the Commission's March 1997 Summary Report did not provide traffic count data.

The Kapolei High School will be located as planned in the 1987 Kapolei Village Master Plan whereas various roadways and land uso recommended in the BPNAS CRP are still being finalized at this time according to the Commission's notice of October 28, 1998 public hearing. The CPR proposes several new connecting roadways from the base to various roadways to the north, west and east of the base. These additional public accesses will reduce traffic on Fort Barrette Road. It is also anticipated that proposed public and recreational uses of large areas of the base may further reduce peak hour traffic volumes on Fort Barrette Road.

9. The City and the Navy accepted the 1991 Kapolei Drainage Master Plan, prepared by HCDCH. According to the drainage master plan, the Kapolei Golf Course and lower channel were constructed to maintain the "pre-development" drainage conditions for the downstream portions of the Makalapa and Makakilo watersheds. The City's DPP has been consulted during the DEA Comment Period, and we have not received any comment from the DPP. However, the project design team will keep closely coordinating with the DPP during the design and permit phases of the proposed project.

The Coral Pit is an integral part of the BPNAS drainage system since it protects the base from flooding by Makakilo Gulch. At this time it is

Controlled access into specific areas of the media center will enable its The proposed Kapolei High School will be designed to accommodate various community uses to enable the school to be the heart of the community. The media center will be designed to accommodate adult For instance, the community education offices will include spaces for a education; the forum for community meetings and special events; the wood shop for self-help building projects; and the gym, athletic fields and play courts for game attendance as well as recreational use. registrar and counselor as well as flexible seminar/conference rooms. use by the adult education program at night. The media center will our understanding that the intent of the Navy is to keep the pit in service for regional drainage. unning Officer | Department County of Honolulu er 18, 1998 respectively. k T. Ohishi Mr. Patric Chief Pla Planning City and Decembe Page 3 G - 10

also include a cyber cafe, where access to state-of-the-art technology will be available to the students and the community throughout the day and evening. Special consideration will be given to providing convenient vehicular and pedestrian access for the community.

The State DOE indicated that formal application will be available for the community use of the facilities by the school administration.

We appreciate your input for this project.

Very t

truhy yours,

Project Planner a. cool occ cc: HCDCH

MITSUNAGA & ASSOCIATES, INC.

October 8, 1998 ,586MY HAAA?

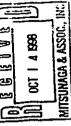
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CITY AND COUNTY OF HONOLULU PACIFIC PARK PLATA + 711 KAPOLAN BOULEVARD SAITE 1200 + MONOLULU MARAN 94813 PHONE 18011513 4539 + FAI 18011423 4730

DEPARTMENT OF TRANSPORTATION SERVICES

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TPD8/98-05146R



Mr. Byung S. Lee, Project Planner Mitsunaga & Associates, Inc. 747 Amana Street, Suite 216 Honolulu, Hawaii 96814

Dear Mr. Lee:

Subject: Kapolei High School

In response to your August 26, 1998 letter, the draft environmental assessment (EA) for the subject project vas reviewed. The following comments are the result of this raview:

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- There is a discrepancy between the description of the design charette presented on Page iii and that on Page 9. :
- The student drop-off/pick-up areas off of Kapolei Parkway need to be designed/configured whereby students can be dropped off/picked up in a safe and expeditious manner off of the city right-of-way (i.e., on the high school grounds). Otherwise, parents would likely drop their children off on Xapolei Parkway adversely affecting traffic flow and causin-potential traffic safety concerns. It is also, recommended that similar drop-off/pick-up areas be established for the school off of Fort Barrette Road. In this way, any one facility (i.e., Kapolei Parkway or Fort Barrette Road) would not be "overloaded" and the chances of the drop-off/pick-up areas working properly would be enhanced. . N
 - Safe bicycle routes within the campus site should be designed and also provided to connect the campus with the surrounding neighborhood areas. ÷

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Mr. Byung S. Lee October 8, 1998 Page 2

- As an additional consideration for improving safety in the project area, preliminary analysis should be conducted to determine whether traffic calming measures, e.g., roundabouts, may be appropriate for locations such as the Kapolei Parkway intersection with Relocated Road "B"/Proposed Driveway 1.
- To accommodate emergency situations and improve circulation within the campus, a perimeter roadway should be constructed around the baseball/softball fields and football/soccer field areas. ŝ
- On Page 9 of Appendix P, "Traffic Assessment: Kapolei High School", it is stated that approximately 590 parking spaces will be provided. Justification for the parking supply that is proposed should be provided. On-street parking problems may result due to lack of sufficient off-street parking. Contingency plans may need to be developed to provide additional off-street or on-site parking prove to be project's established off-street parking prove to be insufficient.
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- ^AShould you have any guestions regarding these comments, please contact Faith Miyamoto of the Transportation Planning Division at 527-6976.

sincerely,

Clerge , Bow CHERYL D. SOON Director

Mitsunaga & Associates, Inc. Architecture • Planning • Engineering 14 Autus 17, surte 218 • HOHOLUU, HAWAII 1943 14 Akabua 1400 140 - 7422 • FAX (1943) 444-2543

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December 18, 1998

Department of Transportation Services 711 Kapiolani Boulevard, Suite 1200 Honolulu, Hawaii 96813 City & County of Honolulu Ms. Cheryl D. Soon Director

Mr. Faith Miyamoto Attention:

Environmental Assessment (EA) Kapolei High School Subject:

Dear Ms. Soon:

Thank you for your October 8, 1998 comments concerning the subject project. Our responses to your comments are as follows:

- The description of the design charette on page ill will be revised to read, The design charette for Kapolei High School was held over a four- month period from November 1997 through February 1998.[•]
- Drop-off/pick-up areas will be located off of Kapolei Parkway, and student parking will be primarily along Fort Barnette Road. Visitor and facuity parking will be located off Kapolei Parkway. A roadway connecting the parking areas will alleviate any potential backup.

The project design team will closely coordinate with the DTS and DPP during the design and permit phases of the proposed project. Plans have been forwarded for review.

Walkways within the campus will provide near direct access from all points of entry to any building on campus. With widths of six to twelve feet, the walkways will be designed to be generous for both pedestrians and bicycle users. .

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Pepartment of Transportation Services lifty and County of Honokulu ecember 18, 1998 type 2 Cheryl D. Soon Pactor Constraints

- During the Design Charette sessions with DTS present, the provision of left turn lane going into the school was recommended by the DTS as a traffic calming measure at the Kapolei Parkway intersection with Relocated Road B/Proposed Driveway 1. The proposed master plan was revised accordingly.
- Your statement regarding perimeter road within the campus was brought to the attention of the State DOE. The DOE opposes your suggestion of a perimeter road for security reasons. (See attached DOE's letter.) ດ ອ
 - The DOE's Facilities Assessment and Development Schedule (FADS) for the proposed Kapolei High School requires 584 parking stalls whereas the DOE's Educational Specifications and Standards for Facilities (Vol. III, The High School) requires minimum 123 stalls fc: high schools.
- Total of 594 parking stalls will be provided per DOE's FADS, including 16 accessible parking stalls whereas ADA requires 12 accessible stalls.

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We appreciate your input for this project.

truly yours,

Very

<u> ZYUNG G. UEE</u> ung S. Lee, AICP oject Planner ₩Ĩ₽₽₽

Rt_dds 60c cc: HCDCH

MITSUNAGA & ASSOCIATES, INC.

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November 20, 1998

711 Kapiolani Blvd., Suite 200 Department of Transportation City and County of Honolulu Honolulu, Hawaii 96813 Pacific Park Plaza

Atten: Ms. Cheryl D. Soon, Director

Dear Mis. Soon:

The Department of Education, in concurrence with the steering committee of the charette in the design of Kapolei High School, opposes the suggestion of a perimeter road through the campus for the following reasons:

- School officials would like to limit traffic to designated parking and vehicular access areas. Avoiding a circuitous route would allow the school to provide better supervision and security of students and vehicles. The back area of the school is of particular concern with response to difficulty in supervising. •
- The site is already limited in size, given the requirements of a high school. A perimeter road would unnecessarily encroach upon space needed to fulfill program requirements of the school.

For the above reasons, the Department of Education feels that a perimeter road is not needed.

If you have any questions, please call Mr. Theron Nichols of the Facilities Branch at 733–4863.

Sincerely.

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Lester H. T. Chuck Facilities Director

LHTC:jml

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APPENDIX H

Bibliography

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Environmental Assessment

KAPOLEI HIGH SCHOOL

BIBLIOGRAPHY

Austin, Tsutsumi & Associate Inc., Traffic Assessment: Kapolei High School, July 1998.

- Barbers Point Redevelopment Commission, <u>Naval Air Station Barbers Point Community</u> <u>Redevelopment Plan Amendment 1</u>, December 1997.
- Barbers Point Redevelopment Commission, <u>Naval Air Station Barbers Point Community</u> <u>Redevelopment Plan Summary Report</u>, March 1997.

City and County of Honolulu, Department of Land Utilization, <u>Land Use Ordinance</u>, August 1997.

- City and County of Honolulu, Planning Department, <u>Development Plan Annual Report</u> <u>Fiscal Year 1996</u>, September 1996.
- City and County of Honolulu, Planning Department, <u>Ewa Development Plan</u>, August 1997.

International Conference of Building Officials, Uniform Building Code, May 1994.

Julian Ng, Inc., Draft Traffic Assessment Report: Kapolei Middle School, May 1997.

- Mitsunaga & Associate Inc., <u>Final Environmental Assessment of the Kapolei</u> <u>Intermediate School</u>, August 1997.
- Mitsunaga & Associate Inc., <u>Final Environmental Impact Statement for the Kapolei</u> <u>Sports and Recreation Center</u>, October 1992.
- Mitsunaga & Associate Inc., <u>Kapolei High School: Creating a Dynamic Learning</u> <u>Community (Design Charette and Master Plan Report</u>, May 1998.
- Mitsunaga & Associate Inc., <u>Kapolei Intermediate School Master Plan Report</u>, November 1997.
- Mitsunaga & Associate Inc., <u>The Making of Kapolei Middle School: Design Charette</u> <u>Final Report</u>, March 1997.

R. M. Towill Corp., Final Traffic Impact Study: Village of Kapolei, July 1994.

R. M. Towill Corp., Kapolei Village Master Plan Report, December 1987.

R. M. Towill Corp., Village of Kapolei Update of Traffic Impacts, April 1996.

Environment	al Assessment

- KAPOLEI HIGH SCHOOL
- State of Hawaii, Department of Education, <u>Educational Specification and Standards for</u> <u>Facilities: Vol. III: The High School</u>, September 1980.
- State of Hawaii, Department of Education, Facilities Branch, <u>Facilities Assessment and</u> <u>Development Schedule</u>, December 1997.
- State of Hawaii, Department of Education, <u>The Hawaii State Plan: State Functional</u> <u>Plan</u>, May 1989.
- State of Hawaii, Housing and Community Development Corporation of Hawaii, Kapolei <u>Village Drainage Master Plan</u>, December 1991.
- U.S. Architectural & Transportation Barriers Compliance Board, <u>American with</u> <u>Disabilities Act (ADA): Accessibility Guidelines for Buildings and Facilities</u>, 1990.
- U.S. Department of Navy, <u>Draft Environmental Impact Statement (DEIS) for Disposal</u> and Reuse of Naval Air Station, Barbers Point, August 1998.

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KAPOLEI HIGH SCHOOL

Environmental Assessment

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APPENDIX I

Project Team

Environmental Assessment

KAPOLEI HIGH SCHOOL

PROJECT TEAM

Developer: Makai Village Partnership Kathy Inoue, Chief Operating Officer Ranelle Ho, Project Manager Kathy Kawaguchi, Kapolei High School Project Coordinator

Planner: Mitsunaga & Associates, Inc. Byung Soo Lee

Architect: Mitsunaga & Associates, Inc. Steve Wong Laurel Nahme **Bill Chang**

Charette Facilitator: Cuningham Group John Cuningham Bruce Jilk

Civil Engineer: R.M. Towill Corp. Jim Yamamoto

Landscape Architect: Brownlie and Lee **Richard Brownlie**

Structural Engineer: Mitsunaga & Associates, Inc. Stuart Otake

Mechanical Engineer: Thermal Engineering Corp. Paul Fukunaga

Electrical Engineer: ECS, Inc. Vincent Miyagawa

Acoustic Engineer: Y. Ebisu & Associates Yoshi Ebisu

Soils Engineer: Geolabs, Hawaii Robin Lim

Graphic Designer: The Design' Ng Co. Wayne Ng

Cost Engineer: Cost Engineering of Hawaii, Inc. Victor Tsuha

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Accessibility: Accessibility Planning and Consulting, Inc. Bruce Clark

Food Facilities: Mizo & Associates, Inc. Irwin Mizo

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