

**FINAL ENVIRONMENTAL ASSESSMENT
AND
FINDING OF NO SIGNIFICANT IMPACT**

**KANUIKAPONO CHARTER SCHOOL PROJECT
KAUA'I ISLAND, HAWAI'I**



This environmental document has been prepared pursuant to
Chapter 343, Hawaii Revised Statutes

Prepared for:

Kanuikapono Learning Center

P.O. Box 12
Anahola, HI 96703

Prepared By:

RMBJ Consulting
46-304 Nahewai St.
Kāne'ohe, HI 96744

April 2006

SUMMARY INFORMATION

PROJECT: Kanuikapono Charter School Project

APPLICANT: Kanuikapono Learning Center
P.O. Box 12
Anahola, HI 96703
Contact: Kamahalo Kauhane

APPROVING AGENCY: Hawaiian Homes Commission

AGENCY CONTACT: Department of Hawaiian Home Lands
1099 Alakea Street, Suite 2000
Honolulu, Hawaii 96813
Contact: Noel Akamu, Tel. (808) 587-6432

LOCATION: Anahola, Kaua'i, Hawai'i

TAX MAP KEY: 3-acre portion of a 121-acre parcel TMK:
(04)04-8-03:019

LAND AREA: 3-acre parcel

LANDOWNER/LICENSOR: Department of Hawaiian Home Lands

LICENSEE: Kanuikapono Inc.
5-year license (expiring June 22, 2007)

EXISTING USE: Vacant

STATE LAND USE DESIGNATION: Urban

KAUA'I ISLAND PLAN DESIGNATION: Residential

COUNTY OF KAUA'I ZONING: Agricultural District / Open / Residential
District

SPECIAL MANAGEMENT AREA: None

ANTICIPATED DETERMINATION: Finding of No Significant Impact (FONSI)

This page intentionally
left blank.

TABLE OF CONTENTS

SUMMARY

| | | |
|------|--|----|
| 1 | Introduction | 1 |
| 1.1 | Purpose of the Environmental Assessment..... | 1 |
| 1.2 | Applicant and Approving Agency | 1 |
| 1.3 | Public Involvement | 1 |
| 1.4 | Purpose and Need for the Project..... | 1 |
| 1.5 | Alternatives Considered..... | 2 |
| 2 | Project Description..... | 3 |
| 2.1 | Environmental Setting | 3 |
| 2.2 | Description of the Proposed Action..... | 5 |
| 2.3 | Project Phasing and Construction | 6 |
| 3 | Description of the Affected Environment..... | 11 |
| 3.1 | Climate..... | 11 |
| 3.2 | Topography and Soils | 11 |
| 3.3 | Hazardous Materials | 12 |
| 3.4 | Surface Water and Groundwater Hydrology | 13 |
| 3.5 | Natural Hazards | 15 |
| 3.6 | Vegetation and Fauna | 16 |
| 3.7 | Historical, Archaeological and Cultural Resources..... | 16 |
| 3.8 | Air Quality | 19 |
| 3.9 | Noise | 19 |
| 3.10 | Aesthetic and Visual Resources..... | 20 |
| 3.11 | Social Characteristics..... | 21 |
| 3.12 | Utilities and Public Services | 22 |
| 3.13 | Traffic Circulation | 23 |
| 3.14 | Land Use Controls | 26 |
| 4 | Necessary Permits and Approvals | 29 |
| 5 | Findings and Determination..... | 31 |
| 6 | Individuals, Community Groups, and Agencies Consulted..... | 34 |
| 6.1 | Consultation | 34 |
| 6.2 | Environmental Assessment Preparation | 35 |

APPENDICES

| | | |
|------------|---|------------|
| Appendix A | Correspondence..... | Appendix-A |
| Appendix B | Draft Environmental Assessment Comment Letters..... | Appendix-B |
| Appendix C | Individual Wastewater System | Appendix-C |

FIGURES

| | | |
|----------|-----------------------------------|---|
| Figure 1 | Project Location | 4 |
| Figure 2 | Project Site | 7 |
| Figure 3 | Master Plan | 8 |
| Figure 4 | Conceptual Building Sections..... | 9 |

PREFACE

This Final Environmental Assessment (EA) has been processed as a Finding of No Significant Impact (FONSI) by the State of Hawai'i, Department of Hawaiian Home Lands (DHHL). As a result, the preparation of an Environmental Impact Statement (EIS) is not required.

To facilitate the readers' ability to distinguish revisions made to the Draft EA, substantive changes and additions are underlined. Text that has been deleted is indicated by a ~~strikethrough~~.

1 INTRODUCTION

1.1 PURPOSE OF THE ENVIRONMENTAL ASSESSMENT

The evaluation of projects to determine their effects on the environment is required by the Hawai'i Revised Statutes (HRS), Chapter 343. An Environmental Assessment (EA) is a "written evaluation to determine whether an action may have a significant effect" (HRS §343-2). The agency with primary responsibility over the project (the proposing agency) is required to prepare an EA and makes a final determination according to significant impacts, or lack of significance. As stated in HRS §343-1:

An environmental review process will integrate the review of environmental concerns with existing planning processes of the State and counties, and alert decision makers to significant environmental effects which may result from the implementation of certain actions. ...The process of reviewing environmental effects is desirable because environmental consciousness is enhanced, cooperation and coordination are encouraged, and public participation during the review process benefits all parties involved and society as a whole.

As described above, the basic purpose of an EA is to provide information to the public and decision makers on proposed actions. The EA must also disclose: potential significant adverse environmental impacts, the expected primary and secondary consequences, and the cumulative as well as the short and long-term effects of the action.

1.2 APPLICANT AND APPROVING AGENCY

The proposed action applicant is the Kanuikapono Learning Center (KLC). The State of Hawai'i, Department of Hawaiian Home Lands (DHHL), Hawaiian Homes Commission will make an acceptance determination for the proposed Kanuikapono Charter School Project.

1.3 PUBLIC INVOLVEMENT

Consultation with community residents located adjacent to the project parcel occurred in December 2000 and January 2001 via door-to-door canvassing. Signatures from these residents were collected documenting their knowledge of the proposed charter school project.

The Draft EA was circulated to the agency and the public from February 23, 2006, to March 28, 2006. Comments generated during circulation of the Draft EA are included in Appendix B, *Draft Environmental Assessment Comment Letters*.

1.4 PURPOSE AND NEED FOR THE PROJECT

The applicant has identified the following goal in proposing the project:

- To create a school facility to house the Kanuikapono Charter School that reflects and fosters a love of nature and Traditional Hawaiian culture.

1.5 ALTERNATIVES CONSIDERED

This section considers alternatives to the proposed action, including the No Action Alternative.

NO ACTION ALTERNATIVE

Under the No Action Alternative, the project site would remain in its existing condition as a vacant agricultural lot. While DHHL could potentially allow development of residential uses on the project site at some time in the future, these uses would be subject to environmental evaluation at that time.

ALTERNATIVE SITE SELECTION

An alternative site was considered for the charter school project on a portion of TMK (04) 4-7-04:02 as part of the larger Project Faith, a mixed use project including commercial, cultural and community space, senior assisted living, and school. However, because the timeline for Project Faith would not accommodate the need for Kanuikapono to establish immediate school facilities, a license at the proposed project site was obtained.

2 PROJECT DESCRIPTION

2.1 ENVIRONMENTAL SETTING

PROJECT LOCATION

The project area is located on the east side of the island of Kaua'i, in Anahola, Hawai'i (see Figure 1). The project site is located southeast of Kukuihale Road, and comprises a 3-acre rectangular portion of a 121-acre parcel, TMK: (04)04-8-03:19. The 3-acre project site is situated on undeveloped land within the Hawaiian homestead community of Anahola.

Adjacent existing land uses include residences to the west; vacant land to the east; vacant land and residences to the south; and Kukuihale Road and residences to the north.

SITE HISTORY

The project has been historically used for agricultural purposes and was previously planted in sugarcane. According to a USGS map dated 1910, the project site was vacant and possibly cultivated in sugarcane (BEI, 2004).

EXISTING SITE CONDITIONS

The site is located in the Anahola-Kamalomalo Region, Kawaihau District. The site is currently vacant, and no developed uses occur on the site. The site is characterized by grass cover and wild cane, evidence of its previous use as agricultural land used to cultivate sugarcane. The project site is relatively level, with drainage flowing in a general easterly direction toward the ocean. There are no natural surface waters located on the project site.

DHHL LICENSE AGREEMENT

The 3-acre project parcel is owned by DHHL and is licensed to the project applicant via a 5-year license expiring on June 22, 2007. According to the license agreement, the licensor may extend the license for an additional 5-year period upon a satisfactory evaluation of the licensee's use of the parcel.

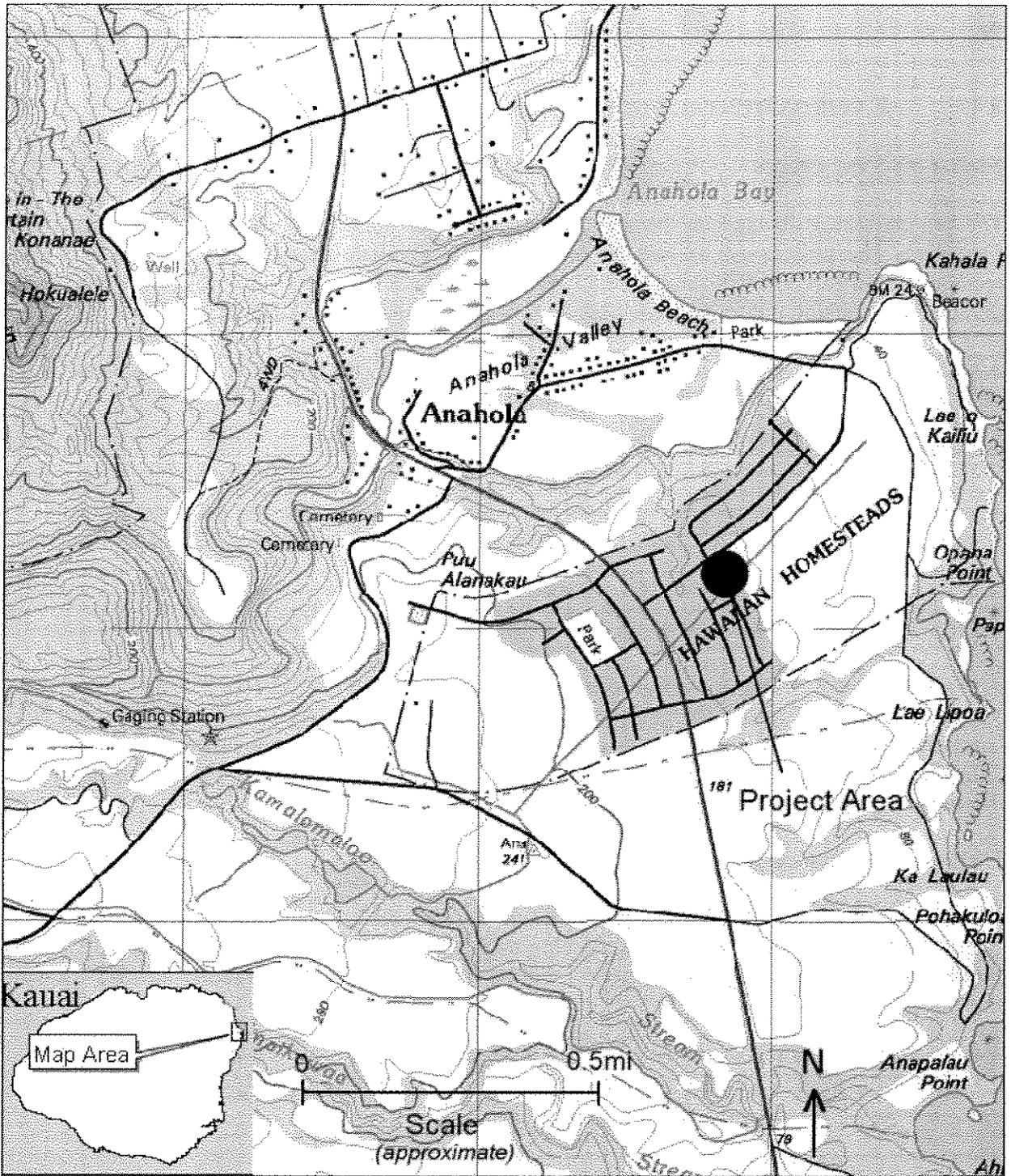


Figure 1 Project Location

Source: USGS Anahola Quadrangle, 1996

2.2 DESCRIPTION OF THE PROPOSED ACTION

EXISTING PUBLIC CHARTER SCHOOL

Kanuikapono Learning Center and Public Charter School is currently operated out of three temporary sites. Students attend the Ko'olau Learning Center at Ko'olau Hui La Church in Anahola for formal academic instruction. In addition, the Kalalea Uka Learning Center in Anahola is an outdoor tent site where the students complete projects on environmental stewardship, agricultural science, and health. The Waipa Learning Center in Hanalei is also an outdoor site where students complete hands on projects in science and social studies such as water quality studies or taro farming.

Currently, there are approximately 45 students and 9 staff using these three sites. The distribution of students is from 4th through 8th grade levels, with approximately half of the students in a 4th and 5th grade level grouping, and half in a 6th to 8th grade level grouping. The applicant's vision for the school is to be a model for first-rate education using both Traditional Hawaiian and 21st Century resources.

PROPOSED PROJECT

Kanuikapono Inc. proposes to relocate the Kanuikapono Charter School, currently operated out of three temporary sites described above, to the 3-acre portion of TMK: (04)04-8-03:19 located southeast of Kukuiahale Road (see Figure 2). The proposed facilities would accommodate up to 60 students in addition to staff. (See Figure 3 for a proposed Master Plan and Figure 4 for conceptual building sections that feature portability and passive solar design¹.) The proposed school facilities would include:

- Two classrooms for approximately 18 to 30 students, including classroom storage
- Resource room (for projects, performances, etc.)
- Administration Building (includes reception, offices, kitchenette, staff restroom, copy/printer area, sick bed, and conference room)
- Food preparation area (certified kitchen) and serving facilities.
- Restrooms (boys and girls)
- Playfield
- Playground equipment
- Outdoor lab spaces (for assembly, gardens, woodworking, and greenhouse facilities, etc.)
- Maintenance shed and recycle center
- Parking area per County requirements
- Student drop-off/pick-up area.

¹ These building sections are conceptual designs that have not been finalized. These design concepts incorporate the sustainable building goals and strategies identified by students and teachers at Kanuikapono with the assistance of Ferraro Choi and Associates.

The distribution of students would be from K through 5th grade levels, with approximately 10-12 students in each grade level. Each class would consist of mixed-grade levels to be taught either in the classrooms or in outdoor lab spaces.

Water services would be provided via an approved water meter for the project site as managed by the County Department of Water and apportioned to DHHL. Extension of water infrastructure as coordinated with the County would be required. Wastewater would be provided via an onsite septic system.

As provided by DHHL, a 50-foot buffer easement would surround the 3-acre school site to minimize disturbance to surrounding residential uses (see Figure 2).

Local access to the project site would be via an entrance off of Kukuihale Road. There would be two main circulation routes provided at the proposed school site. The first route would provide a one-way traffic only driveway together with a loading and receiving area and drop-off/pick-up with appropriate stacking. The second route would provide access to off-street parking for staff and visitors, in addition to bus parking (according to County standards). Regional access to the site would be via Kūhiō Highway.

2.3 PROJECT PHASING AND CONSTRUCTION

Construction of the proposed charter school is scheduled to begin during 2006. The project would be constructed in two phases over the duration of three years. Key elements of each phase are described below.

Phase I: Temporary Occupancy (mid 2006)

- Extension of water, sewer, power to site.
- Parking as per County standards.
- Two rental buildings with bathrooms to serve as classrooms.
- One rental building with a bathroom and kitchenette to serve as administration, food preparation, and storage or resources.
- A big blue tent for sheltered outdoor space.

Phase II: Basic Facility (2006-2008)

- Two classrooms.
- Classroom storage and special needs area.
- Resource room.
- Covered outdoor space.
- Bathrooms and food prep facilities.
- Storage for both indoor and outdoor supplies and recyclables.
- Administration space.
- Astronomy observation space/tower.
- Hula mound.
- Shade trees.
- Continued site development -- fields, gardens.

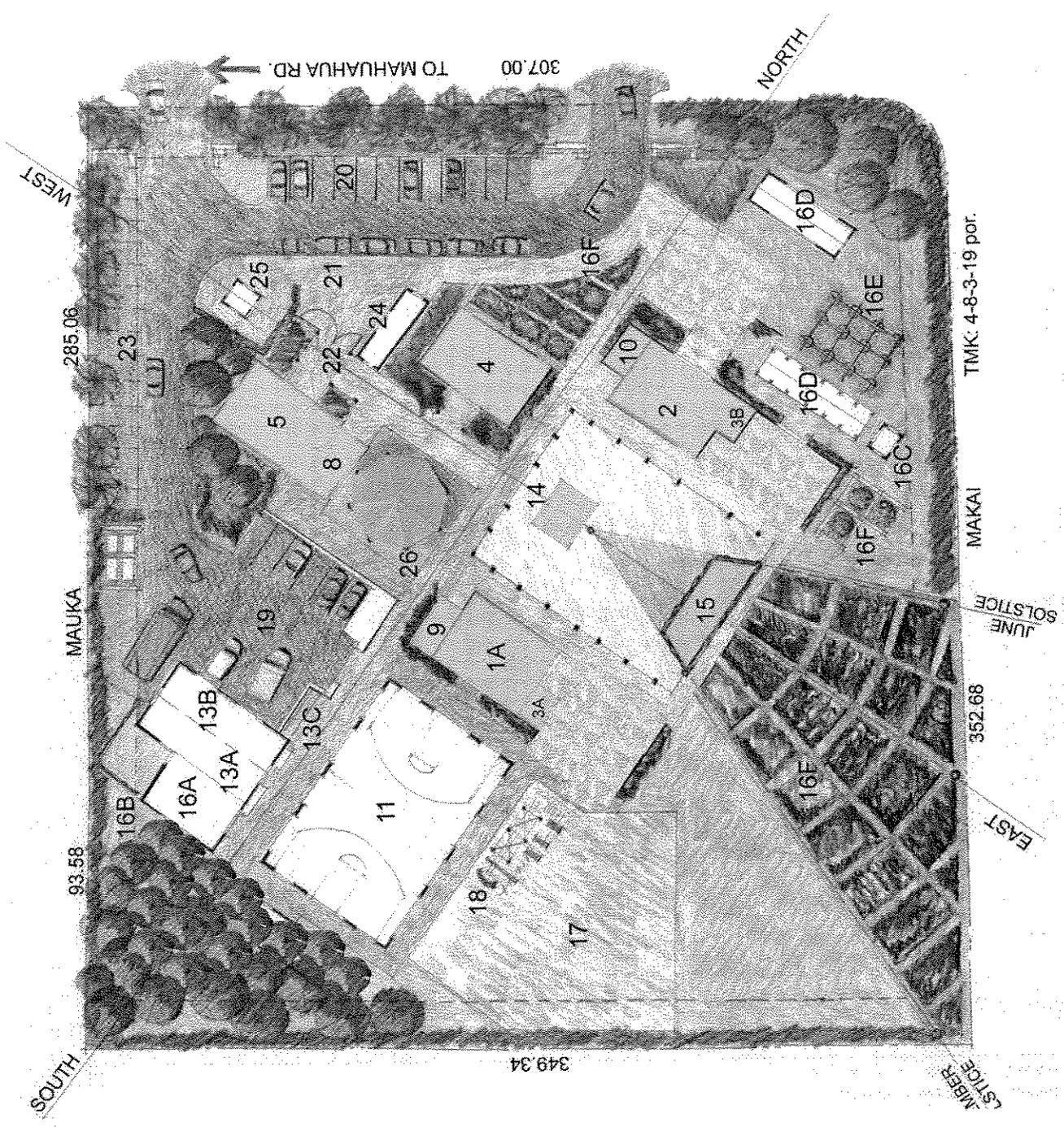
KanuiKapono Learning Center Master Plan

Proposed for Phase 2

Estimated Enrollment (Max):

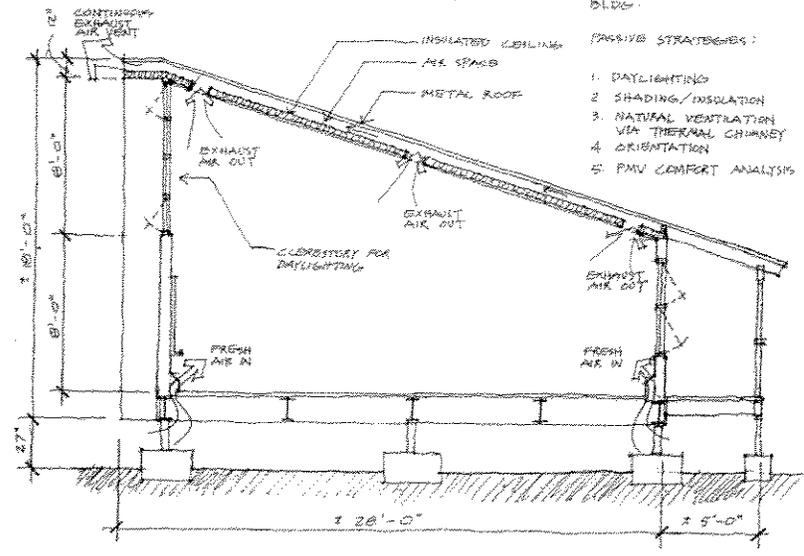
Preliminary Program (Reference Same Numbers on Master Plan):

| | | | |
|------------------------------------|----|-------|-------|
| 1. Classrooms: Standard | 1 | 1,200 | 1,200 |
| 1A. Classroom | 1 | 1,200 | 1,200 |
| 2. Classrooms: Special Needs | 1 | 1,200 | 1,200 |
| 3. Classroom Storage | 1 | 75 | 75 |
| 3A - Storage | 1 | 75 | 75 |
| 3B - Storage | 1 | 75 | 75 |
| 4. Resource Room | 1 | 1,200 | 1,200 |
| 5. Administration: | | | |
| Reception | 1 | 120 | 120 |
| Offices (Private) | 2 | 120 | 240 |
| Offices (Open) | 2 | 80 | 160 |
| Kitchenette | 1 | 100 | 100 |
| Staff Restroom | 1 | 65 | 65 |
| Copy/Printer | 1 | 100 | 100 |
| Sick Bat | 1 | 80 | 80 |
| Conference | 1 | 200 | 200 |
| 6. Food Prep | 1 | 300 | 300 |
| 9. Restroom - Girls | 1 | 200 | 200 |
| 10. Restroom - Boys | 1 | 200 | 200 |
| 11. Open Air Gymnasium | 1 | 200 | 200 |
| 13. Maintenance | 1 | 3,600 | 3,600 |
| 13A Shop | 1 | 400 | 400 |
| 13B Storage | 1 | 400 | 400 |
| 13C Recycle Center | 1 | 120 | 120 |
| 14. Observation Tower | 1 | 150 | 150 |
| 15. Halls Mound | 1 | 800 | 800 |
| 16. Outdoor Lots | | | |
| 16A - Storage Area | 1 | 200 | 200 |
| 16B - Wash Area | 1 | 100 | 100 |
| 16C - Composting WC | 2 | 25 | 50 |
| 16D - Shade Area | 1 | 400 | 400 |
| 16E - Aquaculture Tanks | 12 | 25 | 300 |
| 16F - Gardens | | | |
| 17. Playground | | | |
| 18. Playground Equipment | | | |
| 19. Staff Parking/Loading/Bus Park | | | |
| 20. Visitor Parking | | | |
| 21. Drop-off/Pick-up | | | |
| 22. Main Entry to School | | | |
| 23. Lawn Event Parking | | | |
| 24. Student Waiting Area | | | |
| 25. Entry Feature | | | |
| 26. Covered Outdoor Space | | | |

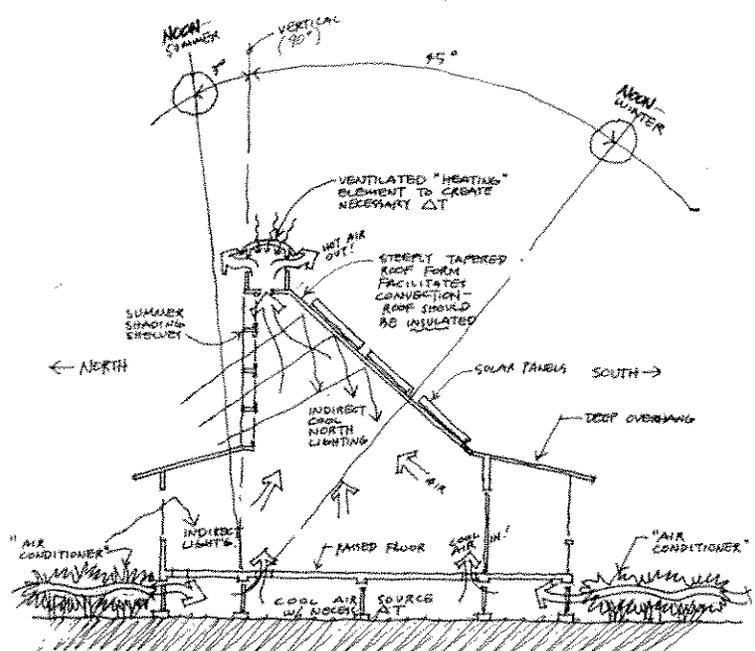


TMK: 4-8-3-19 par.

11/18/01
CONCEPT SKETCH FOR
A MODULAR, PASSIVELY
DESIGNED CLASSROOM
BUILDING.



- PASSIVE STRATEGIES:
1. DAYLIGHTING
 2. SHADING/INSULATION
 3. NATURAL VENTILATION VIA THERMAL CHIMNEY
 4. ORIENTATION
 5. PMV COMFORT ANALYSIS



PASSIVE DESIGN CONCEPTS
(CROSS VENTILATION CAN BE GOOD, BUT IT CAN ALSO BE NOISY, DUSTY, WINDY, IMPRACTICAL)

GOAL IS TO BE COMFORTABLE, THROUGH PASSIVE DESIGN, FOR ALL OUTSIDE WEATHER CONDITIONS, INCLUDING:

1. WARM, BREEZY
 2. HOT, STILL
 3. HOT, WINDY
 4. WINDY, RAINY, COOL
 5. ETC.
- DAY OR NIGHT

Figure 4 Conceptual Building Sections

Source: Ferraro Choi and Associates, June 15, 2005

As stated above, the extension of the license agreement for an additional 5-year period beyond the existing license expiration date would be based upon a satisfactory evaluation of the licensee's use of the parcel.

3 DESCRIPTION OF THE AFFECTED ENVIRONMENT

The intent of this chapter is to describe the existing physical and social environment which is affected by the proposed action. Potential impacts which may result from implementation of the proposed action and mitigation measures to minimize the adverse impacts are described below.

3.1 CLIMATE

The climate of Kaua'i is mild and semitropical with prevailing northeast trade winds. Rainfall in the Anahola area occurs seasonally, generally from November through April, and annual rainfall averages near 50 inches. Daily temperatures range from the lower 60 degrees Fahrenheit to the high 80 degrees during the summer. Prevailing winds blow from a northeast direction at an average 10-15 miles per hour during approximately 80 percent of the year.

3.2 TOPOGRAPHY AND SOILS

The entirety of the site has been previously disturbed. The project site is relatively level with drainage flowing in a general easterly direction toward the ocean, approximately 3,000 feet to the east. Elevations on the site average approximately 120 above mean sea level (msl). There are no natural surface waters located on the project site. The site is currently vacant, and no developed uses occur on the site. The site is characterized by grass cover and wild cane, evidence of its previous use as agricultural land used to cultivate sugarcane.

According to the *Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii* (USDA, 1972) the soils in the project area are classified as Lihue silty clay, 0 to 8 percent slopes (LhB). The Lihue Series consists of well-drained soils on uplands on the island of Kaua'i. These soils developed from the weathering of the Koloa Volcanic Series lavas.

The Lihue silty clay is found on the tops of broad interfluves in the uplands. The surface layer of a representative profile is dusky red silty clay about 12 inches thick. The subsoil is generally more than 48 inches thick and is a dark-red and dark reddish-brown, compact silty clay. The substratum is soft, weathered rock. The surface layer is strongly acid, with a slightly acid to neutral subsoil. Soil permeability is moderately rapid, runoff is slow, and the erosion hazard is no more than slight (USDA, 1972).

IMPACTS AND MITIGATION MEASURES

Implementation of the proposed action would result in the clearing, grubbing, and grading of approximately 3 acres. There would be limited cut and fill required to create a relatively level area for the proposed school site. There would be a short-term increase in soil erosion during construction since grading associated with construction of the proposed facilities would result in the exposure of bare soil to potential erosion. Though the project would entail grading over a majority of the project site, this would not result in a significant impact due to soil erosion and offsite sediment transport with implementation of best management practices in accordance with County of Kaua'i requirements. All grading operations would be conducted in compliance with dust and erosion control requirements of County of Kaua'i. Engineering measures to control soil

erosion and storm runoff would be implemented by the contractor during construction. An erosion control plan and drainage plan shall be submitted prior to grading activities and shall specify best management practices in accordance with County of Kaua'i Sediment and Erosion Control Ordinance as set forth in the *Interim Best Management Practices for Sedimentation and Erosion Control for the County of Kaua'i* (April 2, 2004). Prior to the initiation of construction, the County would review proposed grading and construction plans for consistency with County requirements and good engineering practice.

Included in the proposed action is landscaping with primarily native plants. Following construction of the project, vegetative cover and paving would reduce the potential for sediment from stormwater runoff.

3.3 HAZARDOUS MATERIALS

The project has been historically used for agricultural purposes and was previously planted in sugarcane. There are no natural surface waters located on the project site. The site is currently vacant, and no developed uses occur on the site. The site is characterized by grass cover and wild cane, evidence of its previous use as agricultural land used to cultivate sugarcane. There are several abandoned vehicles located on adjacent residential lots located at least 400 feet away.

IMPACTS AND MITIGATION MEASURES

Several Environmental Site Assessments were completed for the project parcel to evaluate the existing conditions within and around the project site and to identify the presence or likely presence of any hazardous substances from previous agricultural uses of the property. A combined Phase I and Phase II Site Assessment and Site Characterization Study was completed in December 2003, which found slightly elevated levels of metals (arsenic, chromium, iron, and manganese). The study found that arsenic in the surface soil for the 3-acre project site ranges from 4.2 parts per million (ppm) to 24 ppm with an average concentration of 15.8 ppm. This average value (15.8 ppm) is below the current EPA Region 9 Preliminary Remediation Goals (PRGs) for non-cancer of 22 ppm². Further, the PRGs for arsenic conservatively assume that 100 percent of the arsenic present in the soil is absorbed in the body. According to Department of Health (DOH), a mounting body of evidence, however, indicates that the so-called bioavailability of arsenic is actually more likely in the range of 25 percent to 50 percent. Because levels of arsenic were not significantly higher than the Environmental Protection Agency (EPA) limits, they would not pose a health threat (AMEC, 2003; Melody Calisay, Department of Health Environmental Health Specialist, *pers. comm.*). It is possible that the levels of metals found are typical background levels for this area because of exposure to volcanic ash, but further testing would be required to verify this assumption (AMEC, 2003).

A Phase I Environmental Site Assessment (ESA) conducted for the proposed project site in October 2004 confirmed the conclusion of the Site Characterization Study that the project site would not pose any environmental concerns due to presence of hazardous materials (BEI, 2004).

² PRGs are risk-based concentrations, derived from standardized equations combining exposure information assumptions with EPA toxicity data. They are considered by the Agency to be protective for humans (including sensitive groups), over a lifetime. They are used for site "screening" and as initial cleanup goals if applicable.

The Phase I ESA determined there is no evidence of “the presence or likely presence of any hazardous substances or petroleum products” that might be released into the ground or groundwater of the project site (BEI, 2004).

As stated above, the abandoned vehicles located on adjacent residential lots are located at least 400 feet away. Because of their distance from the project site and their downgradient location, these environmental conditions would not create hazardous conditions at the project site (BEI, 2004).

3.4 SURFACE WATER AND GROUNDWATER HYDROLOGY

The charter school project site is located on vacant land. The project site stormwater drainage system currently consists of naturally occurring surface drainage; there are no existing drainage facilities on site. There is an unnamed stream located approximately 25 feet south of the project site that runs in a northwest-northeast direction. At the time of the site visit, the stream was dry and appears to be an intermittent tributary off of Kamalomalo‘o Stream, located approximately 5,625 feet south of the project site. This stream is not included on the *List of Impaired Waters in Hawaii Prepared under Clean Water Act §303(d)* (DOH, 2004). Surface water runoff drains from the property in a mauka to makai (mountain to ocean) direction, with the Pacific Ocean located approximately 3,000 feet to the northeast.

Coastal waters in the vicinity of Anahola Bay were classified “A” in State Department of Health water quality regulations (Hawaii Department of Health, 1987). The objective of Class A waters is that their waters be protected for recreational purposes and aesthetic enjoyment. According to HAR §11-54-3(c), Class A waters “shall not act as receiving waters for any discharge which has not received the best degree of treatment or control compatible with the criteria established for this class.” Stormwater discharges covered by a NPDES general permit that meet the requirements of basic water quality criteria set forth in HAR §11-54-4 are considered acceptable discharges.

As stated above, the project area averages an annual rainfall of about 50 inches per year, with much of the rain falling in the winter months. However, only about 16 percent of the rainfall infiltrates the soil layers to recharge the groundwater. Approximately 60 percent of rainfall is lost to surface runoff and 24 percent to evapotranspiration (AMEC, 2003).

The project site is located above the Anahola aquifer system, which has both upper and basal aquifer systems. The upper aquifer is classified as unconfined, and the status is listed as a currently used fresh drinking water source that is irreplaceable and has a high vulnerability to contamination. The basal aquifer is classified as confined. The status of this aquifer is listed as a currently used fresh drinking water source that is irreplaceable and has a low vulnerability to contamination (AMEC, 2003).

The Underground Injection Control (UIC) line in the Anahola area is generally located along Kūhiō Highway. This indicates that groundwater below the project parcel is not used as a drinking water source, even though it is still a part of the Anahola aquifer system. The depth to groundwater at the project site is estimated to be approximately 100 feet below ground surface (bgs) (AMEC, 2003). According to the State of Hawaii Department of Health (DOH) UIC

Program Map (DOH, 1983), there are two drinking water wells located within one mile west and upgradient of the project site (BEI, 2004).

The project site is located a Critical Wastewater Disposal Area, which prohibits the construction and operation of any new cesspools in the area.

IMPACTS AND MITIGATION MEASURES

Construction activities disturbing one or more acres are regulated under the National Pollutant Discharge Elimination System (NPDES) stormwater program and are required by the State to obtain a NPDES permit. Prior to the initiation of grading, the project applicant shall prepare and implement a stormwater pollution prevention plan and best management practices designed to reduce potential impacts to water quality during construction of the project. The following mitigation measures may include, but not be limited to, the onsite use of the following best management practices:

- Maintain storage areas that keep construction materials, equipment, and maintenance supplies (e.g., fuels, lubricant, paints, solvents, and adhesives) out of the rain and/or protected from the wind to minimize contact of these materials with stormwater.
- Avoid paving during wet weather.
- Employ soil stabilization practices designed to prevent the loss of disturbed soil through the use of vegetation and/or geotextiles.
- Retain ground cover until the last possible date.
- All construction-related materials shall be free of pollutants.

Specific best management practices would be determined during design and construction phases. With implementation of NPDES permit requirements and best management practices, the construction of the project would not result in a violation of water quality standards. For a discussion of impacts due to soil erosion and offsite sediment transport, see Section 3.2, *Topography and Soils* above.

The project site stormwater drainage system currently consists of naturally occurring surface drainage; there are no existing drainage facilities on site. Grading for the proposed project would interrupt natural drainage features on the site. Implementation of the proposed project could potentially result in up to 30 percent lot coverage with impervious surfaces (and, hence, changes in the quantity and timing of stormwater runoff). Stormwater would be directed to onsite drainage facilities constructed consistent with County standards. A grading and drainage plan shall be submitted to the County for review and approval prior to grading activities.

To meet the wastewater treatment service needs for the school project, the proposed action includes construction of onsite wastewater collection and treatment facilities regulated by the Department of Health Wastewater Branch and in accordance with Hawaii Administrative Rules (HAR) Title 11, Chapter 62, Wastewater Systems. The proposed wastewater system would consist of two septic systems and associated absorption fields, one for each proposed classroom. Estimated wastewater generation for each classroom would be 540 gallons per day (gpd), with an 800 gpd estimate used for design purposes (see Appendix C). The proposed wastewater system

has been designed by a licensed engineer, and would be constructed by a licensed contractor. The following measures would be required:

- Prior to construction, plans for the wastewater system shall be submitted to the DOH Wastewater Branch for review and approval
- The proposed wastewater systems shall be inspected as specified by the wastewater system design engineer and pumped when necessary.

This wastewater system design would allow minimal impact to groundwater. Solids are allowed to settle in the septic tank where some bacterial digestion occurs (and would be removed periodically), and the wastewater percolates through the soil in the absorption field, acting as a natural filter. With implementation of the above measures, the proposed septic system would not result in adverse effects to groundwater.

The proposed charter school project would connect to the existing County water system that runs along Kukuihale Road with an approved water meter for the project site as managed by the County Department of Water and apportioned to DHHL. There is adequate capacity to serve the proposed project in the DHHL allocation of water from the County system, and the project applicant has paid necessary fees for use of an allocation equivalent to that of a 5/8 inch water meter. Further, the project applicant has initiated coordination for extension of water infrastructure with the County. All County requirements for connection to the County water system would be implemented, and no adverse impacts would occur. Groundwater resources would not be adversely affected by the project.

3.5 NATURAL HAZARDS

Earthquake – The Uniform Building Code (UBC) provides minimum design criteria to address potential for damages due to seismic disturbances. The UBC scale is rated from Seismic Zone 0 through Zone 4, with 0 the lowest level for potential seismic induces ground movement. The majority of earthquakes in Hawai‘i are directly related to volcanic activity. The island of Kaua‘i is located within Seismic Zone 1, meaning that this area has a low susceptibility to earthquakes.

Hurricanes – Pacific hurricanes seasonally affect the Hawaiian Islands from the late summer to early winter months. Kaua‘i has been hit by several severe storm events, including Hurricane Iwa in 1983 and Hurricane Iniki in 1992. During a significant storm or hurricane event, direct wind pressure, wind driven debris, storm surge, and flooding all pose potential hazards to the proposed project facilities.

Flooding – The Federal Emergency Management Agency has not designated any flood zones within the project area. Proposed project improvements are not expected to exacerbate conditions that would contribute to flooding.

IMPACTS AND MITIGATION MEASURES

Construction of the proposed charter school project would not result in increased flooding or hazards from flooding in surrounding areas. In addition, because proposed facilities would be constructed in accordance with County of Kaua‘i Building Code, there would be a less than

significant impact. Prior to the initiation of construction, the County would review proposed grading and construction plans for consistency with County requirements and good engineering practice. Once plans were approved by the County, implementation of the approved plans would be monitored during periodic building inspections. No significant environmental effects would result, and no mitigation would be necessary.

3.6 VEGETATION AND FAUNA

The project site is characterized by grass cover and wild cane (*Saccharum officinarum*), evidence of its previous use as agricultural land used to cultivate sugarcane. This area may provide habitat for common animals, including, but not limited to introduced (non-native) birds, mice, rats and feral domestic animals such as cats and dogs. No known endangered plants or animals are known to occur on the project site.

IMPACTS AND MITIGATION MEASURES

Implementation of the proposed action would result in the removal of existing vegetation. Birds and other common animals frequenting the area may move to nearby undisturbed areas during construction and would probably return when disturbances cease. Because none of the existing plant species is considered a significant habitat resource, no significant wildlife would be present, and no mitigation would be necessary.

3.7 HISTORICAL, ARCHAEOLOGICAL AND CULTURAL RESOURCES

This cultural impact assessment follows the methodology and protocol set forth by the Office of Environmental Quality Control's (OEQC) *Guidelines for Assessing Cultural Impacts* (November 19, 1997) and is compliant with Section 343-2, Hawai'i Revised Statutes (as amended by Act 50). The purpose of a cultural impact assessment is to identify traditional cultural practices and resources which could be affected by a proposed action.

METHODOLOGY

Information obtained through interviews and documentary research was used in assessing the potential impact of the proposed development on existing cultural practices and beliefs. The tasks undertaken include: (1) identifying individuals with expertise concerning the types of cultural resources, practices, and beliefs found in the area; (2) conducting informal interviews with identified individuals; (3) conducting documentary research; (4) identifying the cultural resources, practices, and beliefs located in the project area; and (5) assessing the impact of the proposed action and mitigation measures.

Nancy McMahan, Archaeologist for Kaua'i for the State Historic Preservation Division (SHPD), and La France Kapaka-Arboleda, Office of Hawaiian Affairs (OHA) Community Affairs Coordinator for Kaua'i, were contacted for references to individuals recommended for consultation. Interviews were conducted via telephone. Cultural practitioner Kehaulani Kekua was identified as a long-time community resident with extensive historical and cultural knowledge of the area. Literature, historic documents, and previous archaeological studies were also reviewed at the SHPD.

HISTORICAL PERSPECTIVE

Kaua'i, together with Ni'ihau, is considerably isolated from the rest of the Hawaiian Islands. The channel that separates Kaua'i from O'ahu is 63 miles wide, while the next widest channel – between Hawai'i and Maui – is only 26 miles. Due to this geographic isolation, there was limited communication with the other Hawaiian Islands, and Kaua'i has historically been politically independent from the other islands (Bennett, 1931).

As reported by Bennett (1931), the scarcity and inaccuracy of the genealogies and the lack of accurate legendary knowledge about the ruins and artifacts of the island make it difficult to connect archeological resources with political history. In general, archaeological remains indicate historic dwelling sites on Kaua'i in regions along the “hot and barren sea side” and in areas unoccupied in more modern settlement (Bennett, 1931).

Traditional Land Use History

There were six separate political districts, or moku, on the island of Kaua'i: Kona, Puna, Ko'olau, Halele'a, Nāpili, and Waimea. Within these moku were further land divisions called ahupua'a (land division usually extending from the uplands to the sea). Ko'olau was the traditional name for the district of Kawaihau. The Anahola ahupua'a was the largest land division located in the district.

The earliest land use on the eastern area of Kaua'i and the Anahola area likely consisted of settlement clusters near the shoreline and fresh water sources, with some inland expansion for the cultivation of taro and dryland agriculture. In a recent archaeological survey study, McGerty and Spear (1999) describe a typical Hawaiian river valley settlement pattern for the Anahola ahupua'a. This includes taro (kalo) cultivation along the tributaries and delta area of the Anahola River, and tree crops and dryland crops were grown in the dryer portions of the valley. The lower and dryer portions of the valley were most likely used for permanent habitation sites (Scientific Consultant Services, 1999).

Western Contact and the Plantation Era

Kaua'i was the first known Hawaiian island to receive western visitors. In 1778, Captain James Cook landed his ships Resolution and Discovery at Waimea Bay on the west coast of Kaua'i.

In 1835, the south shore of Kaua'i was the site of the first successful commercial sugar mill in Hawai'i. Due to the limited supply of local labor, sugar plantation owners contracted immigrant labor elsewhere. This included importation of first the Chinese, then the Japanese, Koreans, Spanish, Germans, Puerto Ricans, Portuguese, Norwegians, and Filipinos (Kauai Historical Society). The Chinese were said to have used some of the old wet taro terrace systems for the cultivation of rice, and Anahola became a rice farming district in 1892. However, Chinese rice farming declined in the 1930s due to competition from California and Louisiana (Archaeological Consultants of the Pacific, 2003).

Archaeological Sites and Cultural Practices

No archaeological research has been conducted directly for the project site. As recorded by Bennett, there are several archaeological sites located in the area of Anahola. These include the 'Aikanaka heiau (Site 113) located at Anahola Point near the end of the bluff on the south side of the bay; the Paeaea heiau (Site 114), located at the back of Anahola bay inland from the government road on the north side of the valley; the Kuhua heiau, (Site 115) located on the edge of the north bluff of Anahola Valley; dune burials, (Site 116), bones have been found in the shifting sand located in the dunes around Anahola bay; and taro terraces (Site 117), located at the inland part of Anahola Valley. In addition, a recent archaeological study documented a large rectangular walled enclosure (Site 473) located in an upland area of Anahola that was interpreted as an animal corral (Kukuchi, 1979). Stone terraces and a temporary shelter (Site 472 and Site 471) were also located in the upland portion of Anahola during an investigation of a reservoir site (Kukuchi, 1983).

The identified cultural practices occurring within the general project area include some gathering for lā'au lapa'au, or Hawaiian medicinal plants, and access to shoreline areas for coastal gathering. However, because the adjacent areas to the project site have been used to dispose of abandoned vehicles, the immediate project area is generally not considered ideal for these cultural practices.

Formal consultation with the SHPD has been conducted regarding potential impacts to historic and cultural resources in the project area. The Historic Preservation Review responses are included in Appendix A.

IMPACTS AND MITIGATION MEASURES

Grading of an approximate 3-acre project site is proposed as part of the project to level the area. There would be no impacts to access to cultural gathering sites. Archaeological resources are suspected to be minimal because the dominant land use has been for agricultural uses (including leveling and cultivation). Due to the previous intensive cultivation of the land and urbanization in the surrounding area, the SHPD has determined that no historic resources would be affected with implementation of the proposed charter school project. However, because there is the potential for discovery of unknown cultural resources, the following recommendations are included. It is emphasized that sensitivity to cultural concerns be employed when dealing with burial issues.

- Should any archaeological, cultural, historical resources, artifacts or other features, or human remains be discovered during the course of construction of the proposed project, work shall be suspended and the SHPD (Kaua'i and O'ahu offices) shall be notified.
- In the event of discovery of burial remains, prepare and implement a Burial Treatment Plan to be developed in consultation with SHPD, Kaua'i/Ni'ihau Island Burial Council, and interested Hawaiian organizations, including lineal and/or cultural descendants.

3.8 AIR QUALITY

The Department of Health, Clean Air Branch, monitors the ambient air in the State of Hawai'i for various gaseous and particulate air pollutants. The U. S. Environmental Protection Agency (EPA) has set national ambient air quality standards (NAAQS) for six criteria pollutants: carbon monoxide, nitrogen dioxide, sulfur dioxide, lead, ozone, and particulate matter (PM₁₀ and PM_{2.5}). Hawai'i has also established a state ambient air standard for hydrogen sulfide. The primary purpose of the statewide monitoring network is to measure ambient air concentrations of these pollutants and ensure that these air quality standards are met.

There is one monitoring station on the island of Kaua'i located in Lihu'e in a commercial and residential area with nearby agricultural areas; this monitoring station only monitors for PM₁₀ ambient particulate matter. In the year 2003, the State of Hawai'i was in attainment for all federal ambient air quality standards. In general, air quality in Hawai'i is rated as "good" with little potential to affect public health (Clean Air Branch, 2003). Air quality in localized areas may be occasionally temporarily impacted by exhaust from concentrated vehicle traffic.

IMPACTS AND MITIGATION MEASURES

Construction of the proposed charter school project could result in short-term air quality effects, including exhaust emissions from construction vehicles and dust generated by short-term construction related activities. Components of construction emissions include employee trips, exhaust emissions from construction equipment, and fugitive dust emissions. Grading of the project area could generate airborne dust particulates.

To minimize construction-related exhaust emissions, project contractors shall ensure that all internal combustion engines are maintained in proper working order. Dust control measures such as watering and sprinkling shall be implemented as needed to minimize wind-blown dust. In addition, the work shall be in conformance with the air pollution control standards contained in HAR, Title 11, Chapters 59, "Ambient Air Quality Standards," and Chapter 60, "Air Pollution Control."

Increased traffic volumes as a result of implementation of the proposed charter school project would increase vehicular emissions. However, the project site is located in a rural, low-density area with no major sources of potential air pollution. Furthermore, the planned project does not include any high potential pollution facilities. Air quality conditions are not expected to decline and no mitigation measures would be required.

3.9 NOISE

Surrounding noise levels in the vicinity of the project site are considered relatively low. Existing noise sources are vehicular traffic on Kukuihale Road, in addition to natural conditions due to wind. Generally, the rural character of the area does not generate extended periods of unacceptable levels of noise. The proposed action would introduce additional traffic generated noise to the project area, in addition to noise from school activities. Noise-sensitive receptors in vicinity of the project area include residences to the west, north, and south.

The noise level experienced at a receptor depends on the distance between the source and the receptor, presence or absence of noise barriers and other shielding devices, and the amount of noise attenuation (lessening) provided by the intervening terrain.

IMPACTS AND MITIGATION MEASURES

Noise impacts from a project can be categorized as those resulting from construction and those from operational activities. Construction noise would have a short-term effect; operational noise would continue throughout the lifetime of the project.

Implementation of the proposed charter school project could temporarily increase noise levels during construction above maximum allowable limits. Construction activities would be considered an intermittent noise impact throughout the construction of the project and would vary in their effects on sensitive receptors, depending on the presence of intervening barriers or other insulating materials. Construction-period noise would be minimized by project compliance with HAR Chapter 11-46, "Community Noise Control" of the State Department of Health. Furthermore, construction shall be confined to daytime working hours, Monday through Friday. No construction work shall occur on Saturdays, Sundays, and holidays without prior notice. The contractor shall submit a noise pollution control plan when applying for a construction permit.

There would be an operational noise increase due to intermittent noise from school children during outdoor activities. The State Department of Health HAR Chapter 11-46, "Community Noise Control" sets forth maximum permissible sound levels according to zoning district for excessive noise sources. However, according to HAR §11-46-5(7), the proposed charter school project activities would be exempt from these noise restrictions. Further, landscaping and the distance to nearest residences would provide a noise buffer and minimize school operational noise levels in the project vicinity.

3.10 AESTHETIC AND VISUAL RESOURCES

The project site is characterized by non-native grasses and wild cane. Views of the proposed development would be visible to motorists traveling along Kukuihale Road and from adjacent residences. Much of the area immediately surrounding the project site has been developed with rural-residential uses (to the north and west) or is vacant. There are no scenic resources located on the project site. Surrounding views from the project site include ocean views to the east and mountain views to the west.

IMPACTS AND MITIGATION MEASURES

Implementation of the project would change the site character from open space to developed school facilities. However, there are no significant scenic resources requiring preservation that exist onsite or in the site vicinity. Once developed, the charter school facilities would form a consistent element of the rural-residential landscape of which it is a part. Implementation of the proposed project would result in a less than significant adverse impact on the visual quality of the site and no mitigation would be required. Significant visual impacts can occur where project lighting affects adjacent residential properties. Sources of lighting can include security lighting, commercial lighting, and streetlights constructed as part of the project, and motor vehicles

accessing the project. Implementation of the proposed project may introduce nighttime lighting adjacent to residential properties. All lighting would be properly shaded to eliminate light trespass. Therefore, potential light and glare impacts from project lighting would be less than significant.

3.11 SOCIAL CHARACTERISTICS

Surrounding land uses in the project vicinity include undeveloped agricultural lands and rural residences.

Anahola is an isolated community located approximately midway between the towns of Kapa'a and Kilauea. Besides a small general store, take-out lunch stand, and Post Office, community members must travel outside of Anahola for employment, day-to-day needs and activities. The nearest public school is located 8 miles from Anahola in Kapa'a town. Kapa'a is also the nearest commercial center and source of general medical services. Individuals must travel 22 miles to seek emergency medical services in Līhu'e.

The Anahola area serves a predominantly Native Hawaiian population. In 2000, the Anahola community consisted of approximately 1,932 persons, 72 percent of whom were Native Hawaiian (Census 2000). The Department of Hawaiian Home Lands' scheduled plan to develop lots adjacent to the existing Anahola homesteads will likely triple the area population in the next 10 years.

Unemployment rates of Anahola residents are higher than those of Kaua'i County. The labor force in Kaua'i County consists of 28,355 persons with a 3.3 unemployment rate, while the Anahola labor force consists of 909 persons and a 6.9 percent unemployment rate. Among native Hawaiians, there is a 31.6 percent unemployment rate across Kaua'i County. In 1999, approximately 8.4 percent of Kaua'i County families were living below the poverty level, while 12.4 percent of Anahola families living below the poverty level.

Educational attainment in Anahola is lower than that in Kaua'i County. In Anahola, approximately 82.5 percent of the population over 25 years old graduated from high school or the equivalent, and 11 percent went on to receive a Bachelor's degree or higher, while Kaua'i County had a 19.4 percent attainment of Bachelor's degree or higher (Census 2000). Household sizes tend to be larger in Anahola than the greater Kaua'i County (3.52 persons vs. 2.87 persons). Further, of the grandparents in Anahola, 49.7 percent are raising their grandchildren (Census 2000).

IMPACTS AND MITIGATION

Implementation of the proposed action would not displace any residents or businesses since construction would occur on a currently vacant parcel. While construction employment would be created during the project construction phase, needed employees could be expected to be provided by the local labor pool, without the importation of significant amounts of new labor. The proposed charter school project would provide school facilities in an area currently unserved with these facilities. No direct or indirect population growth beyond that anticipated by the *Kaua'i Island Plan* (2004) is expected to result from project completion.

3.12 UTILITIES AND PUBLIC SERVICES

Existing Power and Communications – Primary electrical and telephone services in the project area are provided by public utility companies (Kaua'i Island Utility Cooperative, Sandwich Isles Communication, and Hawaiian Telecom). These services are available from lines located along Kūhiō Highway.

Water Supply and Wastewater Treatment and Disposal – DHHL and the County Department of Water operate wells and storage facilities in Anahola. The proposed charter school project has secured from DHHL a credit for installation of a water meter on the project site. There are no existing facilities for wastewater treatment and disposal within the project area.

Solid Waste – There is one landfill on Kaua'i located in Kekaha. Solid Waste collection for the project site is handled by the Division of Solid Waste refuse collectors.

Police and Fire – There is an existing community fire station located in Kapa'a and one fire station located in Līhu'e, in addition to six additional fire stations located on the island of Kaua'i. The Kaua'i police department is located in Līhu'e.

IMPACTS AND MITIGATION

The proposed project includes extension of electric utilities for the charter school facilities. The extension of water services would occur via a new water meter as approved by DHHL from DHHL's water service allocation. Kanuikapono has paid applicable FRC fees for use of a 5/8 inch water meter. In addition, the project applicant has initiated coordination for extension of water infrastructure with the County. Proposed buildings and landscaping at the project site would be designed with water saving considerations, including, but not limited to:

- Installation of water efficient fixtures;
- Low-volume flush toilets and urinals;
- Landscaping with native drought tolerant plant species.

To meet the wastewater treatment service needs, the proposed action includes construction of onsite wastewater collection and treatment facilities regulated by the Department of Health Wastewater Branch and in accordance with Hawaii Administrative Rules (HAR) Title 11, Chapter 62, Wastewater Systems.

While implementation of the proposed charter school project would result in the need for increased levels of government services and utilities, the proposed project school facility is within the scope of development anticipated by DHHL, the County, and other service providers for the site. Therefore, no major new utility systems are necessary to serve proposed uses on the site. A fire service connection to the water system would be required by the County. Standard recommended measures from the State Department of Health Solid and Hazardous Waste Branch to reduce adverse impacts due to solid waste include: (1) the recycling of green-waste during clear and grub activities; (2) maximizing the recycling of construction and demolition wastes; (3) the use of locally produced compost in the landscaping of the project; and (4) the provision of recycling facilities in the design of the project.

In conclusion, no significant adverse impacts to existing utilities and public services are expected, and no mitigation would be necessary.

3.13 TRAFFIC CIRCULATION

The following traffic study evaluates the proposed Kanuikapono Charter School project's potential traffic impacts on existing operations along Kukuihale Road and Kūhiō Highway. This traffic study evaluates the impacts on levels of service at roadway segments as a screening analysis.

Existing Roadways

Current access to the project site is via Kukuihale Road off of Kūhiō Highway. Kukuihale Road is a paved two-lane state rural collector road. As described in the County of Kaua'i General Plan, rural roads are designed to retain their "country character." They are limited to two lanes, bordered with natural vegetation, and speed limits are kept low for safety reasons (25 miles per hour). The right-of-way may include grassed drainage swales, but there are no sidewalks, curbs or gutters. Traffic signage is minimal.

Kūhiō Highway is a two-lane arterial rural highway in the project vicinity. Traffic flow is generally uninterrupted by signals or other fixed elements. The speed limit surrounding the Anahola area is 50 miles per hour, and is reduced to 35 miles per hour in the town area. Highways in agricultural/rural areas are designed to retain a natural appearance, affording uncluttered views of the ocean and the countryside (Kaua'i County General Plan). State and county agencies have adopted "flexible highway design," in order to enhance scenic and historic qualities and to strike a balance between flow of automobile traffic and safe facilities for buses, bicycles and pedestrians. Highway signage is minimized and is designed to enhance the travel experience. Electrical utility poles and lines are designed to be unobtrusive, and, where feasible, utility lines are placed underground. Trees and other plantings have been added along highways in places where they enhance scenic qualities. Scenic pull-outs, built with natural materials, are placed in key locations.

Analysis Methodology

This analysis evaluates the Level of service (LOS) impacts on roadway segments. LOS is a term that describes the operating performance of an intersection or roadway. LOS is measured quantitatively and reported on a scale from A to F, with A representing the best performance and F the worst. In general, LOS "A" represents free-flow conditions with no congestion, and LOS "F" represents severe congestion and delay under stop-and-go conditions. Table 1 provides a general description of each LOS category.

Table 1 Level of Service Descriptions

| Level of Service | Description |
|------------------|---|
| A | Free flow conditions; Low volumes; High operating speed; Uninterrupted flow; No restriction on maneuverability; Drivers maintain desired speeds; Little or no delays. |
| B | Stable flow condition; Operating speeds beginning to be restricted. |
| C | Stable flow but speed and maneuverability restricted by higher traffic volumes. |
| D | Approaching unstable flow; Low speeds. |
| E | Lower operating speeds; Volume at or near capacity; Unstable flow. |
| F | Forced flow conditions; Low speeds; Volumes above capacity; Stoppages for long periods because of congestion. |

Source: *Highway Capacity Manual – Special Report 209 (Transportation Research Board, 1985).*

This traffic study uses the generally accepted condition of LOS C or better as the goal for traffic operations. Therefore, LOS “A,” “B,” and “C” are considered acceptable, while “D,” “E,” and “F” are unacceptable.

The year 2000 version of the Highway Capacity Manual (HCM2000) published by the Transportation Research Board presents roadway segment methodology that determines maximum hourly volumes by LOS for various facility types by number of lanes, as presented in Table 2.

Existing Roadway Capacities

Based on the information in Table 2, the maximum acceptable LOS C volumes would generally be 1,000 vehicles per peak hour for Kukuihale Road and 1,860 vehicles per peak hour for Kūhiō Highway. These estimates are generally for urban roadway segments with more “interruptions,” such as signals, on-street parking and other “friction factors” that reduce roadway capacity. Along Kūhiō Highway and Kukuihale Road, where there are few “friction factors” – these LOS C peak hour capacities are therefore conservative.

Table 2 Maximum Hourly Volumes by Level of Service for Roadway Segments

| Facility Type | No. of Lanes | Maximum Hourly Volumes by LOS | | | | |
|--------------------|--------------|-------------------------------|------|------|------|------|
| | | A | B | C | D | E |
| Class I – 50 mph | 1 | | 860 | 930 | 1020 | 1140 |
| | 2 | NA | 1720 | 1860 | 2030 | 2280 |
| | 3 | | 2580 | 2780 | 3050 | 3430 |
| | 4 | | 3450 | 3710 | 4060 | 4570 |
| | | | | | | |
| Class II – 40 mph | 1 | N/A | N/A | 670 | 850 | 890 |
| | 2 | | | 1470 | 1700 | 1780 |
| | 3 | | | 2280 | 2550 | 2670 |
| | 4 | | | 3090 | 3400 | 3560 |
| Class III - 35 mph | 1 | N/A | N/A | 480 | 780 | 850 |
| | 2 | | | 1030 | 1600 | 1690 |
| | 3 | | | 1560 | 2410 | 2540 |
| | 4 | | | 2140 | 3220 | 3390 |
| Class IV – 30 mph | 1 | N/A | N/A | 540 | 780 | 800 |
| | 2 | | | 1200 | 1570 | 1620 |
| | 3 | | | 1900 | 2370 | 2430 |
| | 4 | | | 2610 | 3160 | 3250 |

Source: Highway Capacity Manual, Transportation Research Board, Special Report No. 209, Washington, D.C., 2000.

Existing Conditions

On November 9, 2005, an a.m. peak hour traffic count was taken on Kukuihale Road. Average a.m. peak hour volumes are between 50 and 60 vehicles with daily volumes fluctuating between 500 and 600 vehicles. These traffic levels are well within the acceptable LOS “C” operating conditions for a two-lane rural collector.

The most recent available traffic data obtained from the State Department of Transportation (DOT) include 2003 counts for Kūhiō Highway in the Anahola area (Station No. C-27-B) which indicate that peak hour volumes range around 900-1,100 vehicles, also well within the acceptable LOS “C” operations for a rural highway.

IMPACTS AND MITIGATION

Project-related Trip Generation

Estimates of project trips are typically taken from Trip Generation, 7th Edition (Institute of Transportation Engineers [ITE], 2004). The ITE data for a private grammar school (K-8, ITE code 534) showed an average of 0.90 trips per student during the a.m. peak hour (55 percent entering and 45 percent exiting) and 0.61 trips per student for the p.m. peak hour of the facility (47 percent entering and 53 percent exiting).

The estimated a.m. peak hour trip generation would account for 35 to 40 percent of total daily trips being generated by the proposed project. A school facility tends to attract most of its trips in the a.m. peak hour and in the mid-afternoon, with a different daily trip generation profile from

typical residential or commercial projects. In addition, many students would likely access the proposed project by bike, foot, or carpool, as this facility will serve the local residents within one to three mile radius (accessible distance by bike).

Thus, the proposed Charter School, with a maximum of 60 students, would generate a total of 54 a.m. peak hour trips with 30 entering and 24 exiting the proposed project, and a total of 37 mid-afternoon trips with 17 entering and 20 exiting.

Potential Effects

The proposed charter school project would have short-term temporary impacts on circulation from trucks, heavy equipment, and other vehicles that would use existing roads for access to the project site. However, construction vehicles would only marginally affect overall traffic flow as the construction staging area and parking would be located onsite.

Assuming that all of the operational phase vehicular traffic would have to use Kukuihale Road, the proposed project would increase existing a.m. roadway segment volumes from between 50 and 70 to between 100 and 120 vehicles in the peak hour. As the maximum acceptable hourly volume for Kukuihale Road would generally be 1,000 vehicles per peak hour, roadway segment LOS would remain within the acceptable LOS "C" operating conditions and implementation of the proposed project would have a less than significant impact on roadway segment LOS along Kukuihale Road.

Assuming 70 percent of the proposed project traffic would travel along Kūhiō Highway to access the proposed project, this would lead to 38 new a.m. trips and 26 new mid-afternoon trips on Kūhiō Highway. As maximum hourly acceptable LOS "C" or better volumes along Kūhiō Highway would be 1,860 vehicles per peak hour, and existing peak hour volumes range in the 900 to 1,100 level, the addition of 26 to 38 peak hour trips would have a less than significant impact on roadway LOS along Kūhiō Highway.

The County of Kaua'i Department of Public Works Roads and Highways Division may include requirements for acceleration and deceleration lanes at the school entrance for enhanced safety. The proposed project would comply with these requirements.

The proposed project would result in a less-than-significant parking impact, as parking for all proposed uses would be accommodated onsite according to County requirements.

The relatively low volume of traffic generated by the proposed Charter School would not generate conflicts for pedestrian and bicycle operations in the greater project vicinity.

3.14 LAND USE CONTROLS

State and County policy, and land use and community plans and controls are established to address the long-term physical, social, economic, and environmental needs in Hawai'i. State and County land use controls for the Kanuikapono Charter School are described below.

STATE OF HAWAI‘I, LAND USE COMMISSION – STATE LAND USE DISTRICTS

The HRS Chapter 205 establishes four major land use districts in which all lands in the State are placed. These districts include: urban, rural, agricultural, and conservation. The project site is located within the Urban district. According to State of Hawai‘i Land Use Commission records, the project area was reclassified from Agricultural to Urban District in 1971 (see Appendix A letter dated November 15, 2005). The proposed charter school is a permitted land use in the Urban District.

KAUA‘I COUNTY

The *Kaua‘i 2000 General Plan* is a long range, generalized planning policy document to guide development of Kaua‘i. Specifically, it provides guidance for land use regulations, the location and character of new development and facilities, and planning for County and State facilities and services. The General Plan states the County’s 20-year vision for Kaua‘i and sets policies for achieving that vision. The *Comprehensive Zoning Ordinance for the County of Kaua‘i* (2002) provides regulations and standards for development of land uses and the construction of structures. According to Kaua‘i County Land Use and Planning Department, portions of the project site are located within the Agricultural, Residential, and Open Space Districts. Although DHHL lands are technically exempt from State and County land use zoning designations, the applicant will seek permitting approval from the County of Kaua‘i Planning Department.

As requested by the County of Kaua‘i Planning Department, project design and setbacks would be modeled on requirements for schools from the Land Use Ordinance of Honolulu (Revised Ordinances of Honolulu Chapter 21) since the Kaua‘i Comprehensive Zoning Ordinance (CZO) does not have standards for schools (see Appendix A for letter dated September 13, 2005).

DEPARTMENT OF HAWAIIAN HOMELANDS KAUA‘I ISLAND PLAN

The *Kaua‘i Island Plan* (2004) provides recommendations for the future use of the 20,565 acres on Kaua‘i administered by DHHL, including the Anahola Area. The plan is intended to guide overall land use patterns and development on Kaua‘i for the next 20 years. The Development Plan for the area envisions a contemporary ahupua‘a that provides a mixture of land uses, including cultural, homestead, income-generating, and public services. The project site is designated Residential by this Plan.

This page intentionally
left blank.

4 NECESSARY PERMITS AND APPROVALS

A listing and brief description of the regulatory permits and approvals necessary to implement the proposed Kanuikapono Charter School project (in addition to certification of the EA and issuance of a FONSI) is provided below. State agencies other than DHHL are required to use the DHHL environmental document when considering the environmental effects of the proposed improvement project. Although DHHL lands are technically exempt from State and County land use regulations, the applicant will seek permitting approval from the County of Kaua'i Planning Department.

- Prior to construction activities that disturb one or more acres of total land area, a general National Pollutant Discharge Elimination System (NPDES) permit application shall be required from the State of Hawai'i, Department of Health.
- Grading and Grubbing Permit shall be required from the County of Kaua'i, Department of Public Works.
- Building Permit shall be required from the County of Kaua'i, Department of Public Works.
- Permit to Construct a Wastewater System shall be required from the State of Hawai'i, Department of Health.
- A Road Permit shall be required for all work within the County Road right-of-way from the County of Kaua'i, Department of Public Works.

This page intentionally
left blank.

5 FINDINGS AND DETERMINATION

As set forth in HAR, Title 11, Department of Health, Chapter 200, §11-200-12, in considering the significance of potential environmental effects, an agency must “consider every phase of a proposed action, the expected consequences, both primary and secondary, and the cumulative as well as the short-term and long-term effects of the action.” The proposed action is not expected to have a significant effect on the environment. The recommended preliminary determination for the Kanuikapono Charter Schools is a Finding of No Significant Impact (FONSI). The findings supporting this determination are discussed below.

(1) Involves an irrevocable commitment to loss or destruction of any natural or cultural resource.

The project site has been previously modified by past agricultural activities; no known important natural communities occur within the project area. While there is the potential for discovery of burial sites or other historic or cultural remains during construction, ~~mitigation measures~~ regulatory requirements contained in Chapter 3 would reduce the adverse effects of these potential impacts. No natural or cultural resources were identified at the proposed project site.

(2) Curtails the range of beneficial uses of the environment.

The proposed improvements are not anticipated to curtail the range of beneficial uses at the project site; the project site is currently vacant and was previously used for agricultural purposes. There would be a loss of open space with development of the 3-acre project site. In addition, there would be an increase in developed uses with the proposed paving and additional facilities. However, the project includes landscaping and project design that would blend in with the existing rural-residential community.

(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 project is consistent with the environmental goals, policies, and guidelines established in HRS Chapter 344. The project goal is to create a school facility to house the Kanuikapono Charter School that reflects and fosters a love of nature and Traditional Hawaiian culture. The following guidelines from sections of the State Environmental Policy (HRS Chapter 344) apply to the proposed charter school project:

(5) Economic development.

(A) Encourage industries in Hawaii which would be in harmony with our environment;

(7) Energy.

(A) Encourage the efficient use of energy resources.

(9) Education and culture.

- (A) Foster culture and the arts and promote their linkage to the enhancement of the environment;
- (B) Encourage both formal and informal environmental education to all age groups.

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

The proposed action would have a positive effect on the economic and social welfare of the Anahola community. The proposed charter school project would provide nearby elementary school opportunities for children of families living in the Anahola area.

(5) Substantially affects public health.

Construction activities may temporarily increase fugitive dust and noise levels in the project vicinity. However, these impacts would cease upon completion of construction. No long term negative impact on public health is anticipated with implementation of the proposed action. All buildings and supporting infrastructure would be constructed in accordance with all health, safety, and accessibility regulations.

(6) Involves substantial secondary impacts, such as population changes or effects on public facilities.

The addition of a charter school facility would accommodate an existing community need for local schools. The proposed action is not expected to generate population change on a magnitude that would create secondary demands and impacts on public facilities and services.

(7) Involves a substantial degradation of environmental quality;

There would be no long-term impacts associated with the proposed action. Construction activities may temporarily increase dust, noise, and traffic inconvenience in the project vicinity. However, these impacts would cease upon completion of construction. Mitigation measures included in Chapter 3 would minimize potential construction-related impacts.

(8) Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions.

The proposed action is limited to construction of charter school facilities to accommodate the relocation of an existing charter school. No additional development associated with the proposed school is being considered.

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

The project site is characterized by grass cover and wild cane, evidence of its previous use as agricultural land used to cultivate sugarcane. No important natural communities occur within the project area. There are no known rare, threatened, or endangered species, or evidence of its habitat, in the project area.

(10) Detrimentially affects air or water quality or ambient noise levels.

Construction activities would have a short-term effect on air quality, water quality, and ambient noise levels. Mitigation included in Chapter 3 would minimize these potential impacts. No additional long-term impacts would occur.

(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.

The project site is not considered an environmentally sensitive area. Prior to the initiation of construction, the County would review proposed grading and construction plans for consistency with County requirements and good engineering practice.

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

Implementation of the project would not degrade the existing visual character of the site or surroundings. Proposed improvements would not obstruct views from any recognized view corridor or scenic roadway.

(13) Requires substantial energy consumption.

There would be energy consumption associated with construction of the proposed charter school project. Additionally, energy will be used to operate the buildings (e.g. for indoor lights and electrical appliances) and outdoor lighting. It is anticipated that most buildings would be designed to take advantage of natural ventilation. The amount of energy that would be consumed with project implementation is not considered substantial.

6 INDIVIDUALS, COMMUNITY GROUPS, AND AGENCIES CONSULTED

6.1 CONSULTATION

Preliminary consultation with agencies, organizations, and individuals were conducted during preparation of the Draft EA. Agencies, organizations, and individuals followed by an asterisk (*) provided written comments, as included in Appendix A.

STATE AGENCIES

State of Hawai'i, Department of Hawaiian Home Lands
State of Hawai'i, Department of Health, Environmental Planning Office
State of Hawai'i, Department of Health, Kaua'i District Health Office
State of Hawai'i, Department of Land and Natural Resources, Office of Conservation and Coastal Lands*
State of Hawai'i, Department of Land and Natural Resources, Land Division
State of Hawai'i, Department of Transportation
State of Hawai'i, Land Use Commission*
State of Hawai'i, State Historic Preservation Division*
Office of Hawaiian Affairs*

COUNTY AGENCIES

County of Kaua'i, Department of Water*
County of Kaua'i, Department of Public Works, Building Division
County of Kaua'i, Department of Public Works, Engineering Division
County of Kaua'i, Fire Department*
County of Kaua'i, Planning Department*

6.2 ENVIRONMENTAL ASSESSMENT PREPARATION

This Draft Environmental Assessment (EA) was prepared for Kanuikapono, Inc. by RMBJ Consulting. The following consultants were involved in the preparation of this document:

| | |
|-------------------------|------------------------------------|
| Raadha M. B. Jacobstein | Project Manager, RMBJ Consulting |
| Valerie Rosenkrantz | Traffic Screening, RMBJ Consulting |
| Robert D. Klousner | Technical Editor, RMBJ Consulting |

REFERENCES

- AMEC Earth and Environmental, 2003. *Anahola Project Faith Brownfields Site Characterization Study*, prepared for the State of Hawaii Department of Health, Hazard Evaluation and Emergency Response Office, December 2003. On file at the SHPD library.
- Archaeological Consultants of the Pacific, Inc., 2003. *An Archaeological Monitoring Report for the Proposed Kuhio Highway Drainage Improvements Project at Kapa'a and Anahola*. Prepared by Michelle Elmore, B.A. and Joseph Kennedy, M.A., February 2003. On file at the SHPD library.
- BEI Environmental Services, 2004. *Phase I Environmental Site Assessment, Aina Hoopulapula, Kukuihale Road, TMK: (04)04-08-03, Parcel 19 (portion)*. BEI Environmental Services, October 11, 2004.
- Bennett, Wendell Clark. *Archaeology of Kauai*. Bernice P. Bishop Museum, Bulletin 80. 1931. On file at the SHPD library.
- Calisay, Melody. State of Hawai'i, Department of Health, Environmental Health Specialist. Personal Communications with Raadha M. B. Jacobstein regarding levels of metals concentrations in soil samples at the project site via telephone conversations conducted from September 8 through September 16, 2005.
- Hawai'i, State of. Department of Health, Title 11, Department of Health Administrative Rules, Chapter 54. Water Quality Standards. August 2004.
- Hawai'i, State of. Department of Health, Title 11, Department of Health Administrative Rules, Chapter 200. Environmental Impact Statement Rules. August 1996.
- Hawai'i, State of. Department of Health, Title 11, Department of Health Administrative Rules, Chapter 46. Community Noise Control. September 1996.
- Hawai'i, State of. Department of Health, Clean Air Branch. 2003 Annual Summary Hawaii Air Quality Data.
- Hawai'i, State of. Department of Health. Environmental Planning Office. Final 2004 List of Impaired Waters In Hawaii. Prepared Under Clean Water Act §303(d). June 16, 2004.
- Hawai'i, State of. Department of Health. Water Quality Standards Map of the Islands of Kauai and Niihau. October, 1987.
<http://www.hawaii.gov/health/environmental/water/cleanwater/wqsmaps/index.html>
- Hirata, Ernest K. and Associates. *Soils Investigation, Anahola Community Center, Project Faith, Anahola, Kauai, Hawaii TMK 4-7-04*. January 28, 2003.
- Kehua, Kehaulani. Personal communications with Raadha M. B. Jacobstein on November 16, 2005 regarding cultural practices and history in the project area.

Kukuchi, William, 1979 and 1983. Site surveys on file at the SHPD library.

Scientific Consultant Services, Inc., 1999. *An Archaeological Inventory Survey of Anahola Beach Park (TMK 4-8-14:16)*. Prepared by Leann McGerty, B.A., and Robert L. Spear, Ph.D., March 1999. On file at the SHPD library.

SSDAN, 2000. Social Science Data Analysis Network. *CensusScope: Your Portal to Census 2000 Data*. <http://www.censusscope.org/>

Rechtman Consulting, 2001. *Archaeological Inventory Survey of Approximately 38 acres, Department of Hawaiian Homelands (TMK: 4-4-8-03:05, por. 16)*. Prepared by Robert B. Rechtman, Ph.D. and Dennis S. Dougherty, B.A., April 2001.

U.S. Department of Agriculture, Natural Resources Conservation Service (formerly Soil Conservation Service, Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii. August 1972.

This page intentionally
left blank.



APPENDIX A

CORRESPONDENCE



APPENDIX A

The following correspondences include responses to preconsultation requests from the following agencies. The content of this consultation has been incorporated into the analysis contained in this Draft EA. Where a follow-up response was required to clarify project details, the response letter is included.

State Agencies

| | |
|--|--------------------|
| DLNR, Historic Preservation Division | August 17, 2005 |
| State of Hawai'i, Office of Hawaiian Affairs (OHA) | September 15, 2005 |
| *RMBJ Consulting response to OHA | December 15, 2005 |
| State of Hawai'i, DLNR, Office of Conservation and Coastal Lands | October 5, 2005 |
| State of Hawai'i, Land Use Commission | November 15, 2005 |

County

| | |
|--|--------------------|
| County of Kaua'i, Planning Department | September 13, 2005 |
| County of Kaua'i, Fire Department | September 22, 2005 |
| County of Kaua'i, Department of Water | October 27, 2005 |
| *RMBJ Consulting response to County of Kaua'i, Department of Water | February 2, 2006 |

LINDA LINGLE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

HAWAII HISTORIC PRESERVATION
DIVISION REVIEW

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA
DEPUTY DIRECTOR - LAND

DEAN HAKANO
ACTING DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCES MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAIKOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

Log #: 2005.1513
Doc #: 0508NM21

Applicant/Agency: Raadha M.B. Jacobstein,
FOR: Kanuikapono Charter School

Fax: 808- 236-0663

Address: RMBJ Consulting
46-304 Nahewai St.
Kane'ohe, HI 96744

SUBJECT: **Chapter 6E-42 Historic Preservation Review – Proposed Kanikapono Charter School Project with Anahola Homestead Community**

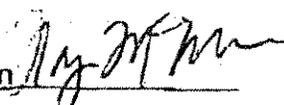
Ahupua`a: Anahola
District, Island: Kawaihau, Kauai
TMK: (4) 4-8-03: 19

1. We believe there are no historic properties present, because:

- a) intensive cultivation has altered the land
- b) residential development/urbanization has altered the land
- c) previous grubbing/grading has altered the land
- d) an acceptable archaeological assessment or inventory survey found no historic properties
- e) other:

2. This project has already gone through the historic preservation review process, and mitigation has been completed ____.

Thus, we believe that "no historic properties will be affected" by this undertaking

Staff: Nancy McMahon  Date: 8/17/05

Title: Archaeologist for Kauai



STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAII 96813

HRD05/1990

September 15, 2005

Raadha M.B. Jacobstein
RMBJ Consulting
46-304 Nahewai St,
Kāne'ohe, HI 96744

RE: Proposed Kanuikapono Charter School Project Within the Anahola Homestead Community, Kaua'i, Hawai'i, TMK (4) 04-8-03: 19.

Dear Ms. Jacobstein,

The Office of Hawaiian Affairs (OHA) is in receipt of your August 8, 2005 request for comment on the above listed proposed project, TMK (4) 04-8-03: 19. OHA offers the following comments:

OHA is pleased to hear about plans to build a new home for the Kanuikapono Charter School. We have a few recommendations concerning environmental and cultural matters.

An Archaeological Monitoring Plan should be drafted in support of the proposed project. This document will, in part, analyze the need for "on-site" or "on-call" monitoring, as appropriate. ~~OHA reminds the consultant that human burials and Native Hawaiian cultural properties have been encountered in areas that have been previously graded for agricultural use.~~

OHA also recommends that if any landscaping or re-vegetation is planned as part of this project, native flora will be incorporated into that plan. The area surrounding the proposed Kanuikapono Charter School is seemingly vegetated with exotic flora. The reintroduction of native plants and trees would be a step towards promoting a native landscape. It would also create an environment that is more beneficial to native animals, namely avian species.

OHA further requests your assurances that if the project goes forward, should iwi or Native Hawaiian cultural or traditional deposits be found during ground disturbance, work will cease, and the appropriate agencies will be contacted pursuant to applicable law.

Thank you for the opportunity to comment. If you have further questions or concerns, please contact Jesse Yorck at (808) 594-0239 or jessey@oha.org.

'O wau iho nō,



Clyde W. Nāmu'o
Administrator

CC: La France Kapaka-Arboleda
OHA Community Affairs Coordinator (Kaua'i)
3-3100 Kuhio Hwy., Suite C4
Lihue, HI 96766-1153

RMBJ CONSULTING

Environmental Planning Services
46-304 Nahewai St.
Kāneʻohe, HI 96744

(808)236-0663
Fax (808)236-0663
rbrayce@earthlink.net

December 15, 2005

Clyde W. Nāmuʻo
Attn: Jesse Yorek
Office of Hawaiian Affairs
711 Kapiʻolani Blvd., Ste. 500
Honolulu, HI 96813

Subject: **Proposed Kanuikapono Charter School project within the Anahola Homestead community on Kauaʻi**

Thank you for your review and comment on the proposed Kanuikapono Charter School project located within the Anahola Homestead community on Kauaʻi (3-acre portion of a 121-acre parcel Tax Map Key (04)04-8-03:19). As stated in your September 15, 2005 letter, OHA recommends that an Archaeological Monitoring Plan be prepared for the proposed project. Since receipt of the September 15 OHA letter, we have initiated telephone consultation with Jesse Yorek of OHA to clarify the intent of the comment, in addition to consultation with La France Kapaka-Arboleda, OHA Community Affairs Coordinator for Kauaʻi, Nancy McMahon, State Historic Preservation Division (SHPD) Archaeologist for Kauaʻi, and Kehaulani Kekua, cultural practitioner in the project area. La France Kapaka-Arboleda identified sensitive cultural resources in the surrounding project area that may contain burial sites, but noted that they are somewhat distant from the project site and would not likely be affected by project implementation. Nancy McMahon also confirmed potential burial grounds in sandy soils in the project vicinity, but because the project site consists of silty clay soils and intensive agricultural cultivation has altered the land, it was determined to be unlikely that historic resources would be affected with implementation of the proposed project.

After careful consideration of OHA's recommendation, it has been determined that an Archaeological Monitoring Plan will not be prepared for the charter school project at this time. However, because there is the potential for discovery of unknown cultural resources, the following mitigation measures will be included in the Draft Environmental Assessment.

- Should any archaeological, cultural, historical resources, artifacts or other features, or human remains be discovered during the course of construction of the proposed project, work shall be suspended and the SHPD (Kauaʻi and Oʻahu offices) shall be notified.
- In the event of discovery of burial remains, prepare and implement a Burial Treatment Plan to be developed in consultation with SHPD, Kauaʻi/Niʻihau Island Burial Council, and interested Hawaiian organizations, including lineal and/or cultural descendants.

RMBJ CONSULTING

Page 2 of 2
December 15, 2005

Additional comments raised in the September 15, 2005 OHA letter includes a recommendation to use landscaping that incorporates native flora. One of the goals of the Kanuikapono Learning Center is to create a school facility to house the Kanuikapono Charter School that reflects and fosters a love of nature and Traditional Hawaiian culture. This would include incorporation of native plantings on the project site.

Thank you for your assistance on this project. Please do not hesitate to contact me if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Raadha M. B. Jacobstein', with a large, sweeping flourish extending to the right.

Raadha M. B. Jacobstein

CC: La France Kapaka-Arboleda, OHA Community Affairs Coordinator (Kaua'i)

LINDA LINGLE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
OFFICE OF CONSERVATION AND COASTAL LANDS

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

PETER L. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA
DEPUTY DIRECTOR - LAND

DEAN NAKANO
ACTING DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENFORCEMENT
FORESTRY AND WILDLIFE -
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

REF:OCCL:CP

Correspondence: KA-06-72

Raadha M.B. Jacobstein
RMBJ Consulting
Environmental Planning Services
46-304 Nahewai St.
Kaneohe, Hawaii 96816

OCT - 5 2005

Dear Mr. Jacobstein,

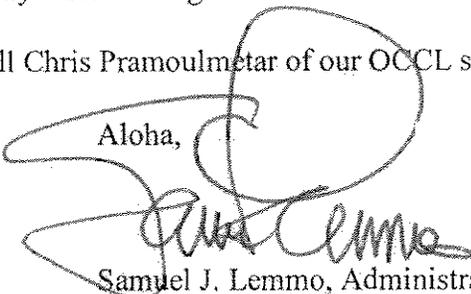
Subject: Proposed kanuikapono Charter School Project on Parcel TMK: (4) 4-8-003:019

The Department of Land and Natural Resources (DLNR) Office of Conservation and Coastal Lands (OCCL) is in receipt of your letter dated September 26, 2005 and diagrams describing the location of your project.

According to the information you have provided, your project site does not appear to be located within the conservation district or within 50 feet of conservation district, and therefore is not subject to Hawaii Administrative Rules (HAR) 13-5. Of course, you may want to contact the Kauai County Planning Department for any applicable county rules and regulations.

Should you have further questions, please call Chris Pramoulmetar of our OCCL staff at 587-0048.

Aloha,


Samuel J. Lemmo, Administrator
Office of Conservation and Coastal Lands



STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
LAND USE COMMISSION

P.O. Box 2359
Honolulu, Hawaii 96804-2359
Telephone: 808-587-3822
Fax: 808-587-3827

November 15, 2005

Mr. Raadha M. B. Jacobstein
RMBJ Consulting
46-304 Nahewai Street
Kaneohe, Hawaii 96744

Dear Mr. Jacobstein:

Subject: BOUNDARY INTERPRETATION No. 05-26
Tax Map Key: 4-8-03: 19 (Lot 19-A)
Anahola, Kauai, Hawaii

This is in response to your letter dated September 26, 2005, requesting a boundary interpretation for Lot 19-A located within the subject parcel.

Based on review of the Commission's records and official maps currently on file at our office, we have determined that a portion of Lot 19-A, as represented on the Project Site map (Figure 2), is approximately located within the State Land Use Urban District. This area is subject to State Land Use Commission docket no. A71-289/Land Use Commission, County of Kauai, and was reclassified from Agricultural to Urban District dated August 7, 1971.

A copy of the above map is enclosed for your reference. Should you require clarification or further assistance, please feel free to call Fred Talon or Bert Saruwatari of my staff at 587-3822.

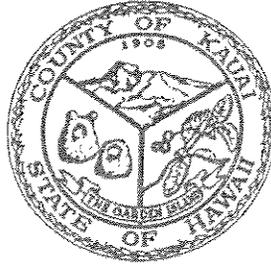
Sincerely,


ANTHONY J. H. CHING
Executive Officer

Enclosure

- c: Ian Costa, Planning Director, County of Kauai, Planning Department (w/enclosure)
Domie Bucasas, Supervisor, Real Property Assessment Division, County of Kauai,
Finance Department (w/enclosure)
Harry Beatty, GIS Coordinator, County of Kauai (w/enclosure)
Micah Kane, Director, Department of Hawaiian Home Lands (w/enclosure)

BRYAN J. BAPTISTE
MAYOR



IAN K. COSTA
DIRECTOR OF PLANNING

GARY K. HEU
ADMINISTRATIVE ASSISTANT

MYLES S. HIRONAKA
DEPUTY DIRECTOR OF PLANNING

COUNTY OF KAUA'I
PLANNING DEPARTMENT
4444 RICE STREET
KAPULE BUILDING, SUITE A473
LIHU'E, KAUA'I, HAWAII 96766-1326

TELEPHONE: (808) 241-6677 FAX: (808) 241-6699

September 13, 2005

Raadha M.B. Jacobstein
Environmental Planning Services
46-304 Nahewai Street
Kaneohe, HI 96744

SUBJECT: Proposed Kanuikapono Charter School at Anahola, Kauai

Thank you for providing us the opportunity to comment on your project.

The entire project site is situated on Department of Hawaiian Homelands (DHHL) property and therefore is not subject to County zoning code requirements. However, we feel that it would be prudent to consider complying with zoning code requirements for schools. Because our Comprehensive Zoning Ordinance (CZO) does not have standards for schools, we recommend checking with the other Counties on their zoning requirements for schools.

We also recommend that comments be solicited from the State Department of Health and the County's Building Division to ensure that health and safety codes are complied with.

Please feel free to contact Keith Nitta of my staff at 241-6677 if you have any questions.


IAN K. COSTA
Planning Director



COUNTY OF KAUI
Fire Department
Mo'ikeha Building
4444 Rice Street, Suite 295
Lihu'e, Kaua'i, Hawaii 96766

September 22, 2005

RMBJ Consulting
Environmental Planning Services
46-304 Nahewai Street
Kaneohe, Hi 96744

Subject: **Proposed Kanuikapono Charter School Project within the
Anahola Homestead community on Kaua'i**

To Whom It May Concern:

The Kauai Fire Department has no objections to this project, provided it conforms to all other departmental standards. The Department of Water standards for a hydrant system for Fire Protection and plans of all structures for review are requested in a timely manner.

Life and fire safety are always of the utmost concern for the Fire Department. Once the new projects begin, issues may occur in the building phase which will need to be addressed.

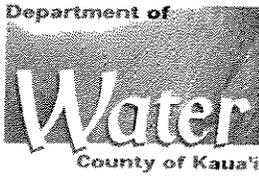
Should you have additional questions, please direct your inquiries to the Fire Prevention Bureau at 241-6511.

Sincerely,

David Bukoski
Fire Inspector II

Approved:

Robert F. Westerman
Fire Chief



October 27, 2005

UID #1387

Raadha Jacobstein
RMBJ Consulting
46-304 Nahewai Street
Kaneohe, HI 96744

Dear Raadhā Jacobstein:

Subject: Water Service Inquiry: Proposed Kanuikapono Charter School, TMK: 4-8-03:019,
Anahola, Kaua'i, Hawai'i

This letter is in response to your September 19, 2005 water service inquiry letter.

Any actual subdivision or development of this area will be dependent on the adequacy of the source, storage, and transmission facilities existing at that time.

At the present time, the source facilities are at capacity and the transmission facilities are not adequate for the proposed use.

Prior to building permit or water meter approval, the applicant shall:

1. Submit a formal request for water service to the Department of Water (DOW) for review and approval. The applicant shall submit detailed water demand calculations, along with the proposed water meter size, to the DOW for review and approval. DOW conditions are subject to change based on the proposed use and approved water demand calculations.
2. Prepare and receive DOW approval of construction drawings of the necessary water system facilities and construct said facilities. These facilities shall include but not be limited to:
 - a) An extension of a main 12-inch in diameter. The main shall begin at the existing 12-inch waterline along Kukuihale Road and run north-east along Kukuihale Road to the access point to the proposed school.
 - b) The domestic service connection.
 - c) The fire service connection.
 - d) The interior plumbing plans with the appropriate backflow prevention assembly.
 - e) Additional source facilities.

Raadha Jacobstein

Subject: Water Service Inquiry: Proposed Kanuikapono Charter School, TMK: 4-8-03:019,
Anahola, Kaua'i, Hawai'i

October 27, 2005

Page 2

3. Pay the applicable charges in effect at the time of payment to the DOW. At the present time, these charges will be determined by the approved water meter size and construction drawings.
4. Receive a "Certification of Completion" for the completion of the necessary water system facilities from the DOW.

If you have any questions, please contact Mr. Keith Aoki at (808) 245-5418.

Sincerely,



Gregg Fujikawa
Chief of Water Resources and Planning

KA:all
W4-8-03-019 jacobstein 25-411

RMBJ CONSULTING

Environmental Planning Services
46-304 Nahewai St.
Kāne'ohe, HI 96744

(808)236-0663
Fax (808)236-0663
rbrayce@earthlink.net

February 2, 2006

Gregg Fujikawa, Chief of Water Resources and Planning
Attn: Keith Aoki
Department of Water, County of Kaua'i
P.O. Box 1706
Lihue, HI 96766

**Subject: Proposed Kanuikapono Charter School project within the Anahola
Homestead community on Kaua'i**

Thank you for your review and comment on the proposed Kanuikapono Charter School project located within the Anahola Homestead community on Kaua'i (3-acre portion of a 121-acre parcel Tax Map Key (04)04-8-03:19). As stated in your October 27, 2005 letter, the County water source facilities are at capacity and the transmission facilities are not adequate for the proposed use. However, the proposed charter school project has obtained from the Department of Hawaiian Home Lands (DHHL) approval to use a portion of DHHL's water allocation from the County's system, equivalent to the consumption permitted by a 5/8 inch water meter. These water credits have already been apportioned to DHHL and would not affect County water resources. Further, the project applicant has initiated coordination with the Department of Water regarding the extension of infrastructure and required water facilities as stated in your letter.

Thank you for your assistance on this project. Please do not hesitate to contact me if you have any questions.

Sincerely,



Raadha M. B. Jacobstein

APPENDIX B

DRAFT ENVIRONMENTAL ASSESSMENT
COMMENT LETTERS

APPENDIX B

The following correspondence includes comments on the Draft EA from the following agencies:

State Agencies

| | |
|--|-----------------------|
| <u>State of Hawai'i, Department of Transportation</u> | <u>March 14, 2006</u> |
| <u>State of Hawai'i, Office of Hawaiian Affairs (OHA)</u> | <u>March 23, 2006</u> |
| <u>State of Hawai'i, Office of Environmental Quality Control</u> | <u>March 23, 2006</u> |

County

| | |
|--|-----------------------|
| <u>County of Kaua'i, Department of Water</u> | <u>March 22, 2006</u> |
|--|-----------------------|

LINDA LINGLE
GOVERNOR



RODNEY K. HARAGA
DIRECTOR

Deputy Directors
BARRY FUKUNAGA
BRENNON T. MORIOKA
BRIAN H. SEKIGUCHI

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

IN REPLY REFER TO:

STP 8.2077

March 14, 2006

RMBJ Consulting
Environmental Planning Service
46-304 Nahewai Street
Kaneohe, Hawaii 96744

Dear Sirs:

Subject: Kanuikapono Charter School Project
Draft Environmental Assessment (DEA)
TMK: 4-8-3: Por 19

Thank you for your transmittal requesting our comments on the subject project.

The proposed Kanuikapono Charter School will not have a significant impact to our State transportation facilities in the area.

The developer of the Anahola Residential Lots Unit 6 project (that encompasses the subject school project) prepared a Traffic Impact Analysis Report (TIAR) that included the subject school in its analysis. Our Highways Division has been working together with the developer of the Anahola Residential Lots Unit 6 in developing plans to improve the intersection of Kukuiahale Road and Kuhio Highway.

We appreciate the opportunity to provide comments.

Very truly yours,

A handwritten signature in cursive script that reads "Rodney K. Haraga".

RODNEY K. HARAGA
Director of Transportation

RMBJ CONSULTING
Environmental Planning Services
46-304 Nahewai St.
Kāne'ohe, HI 96744

(808)236-0663
Fax (808)236-0663
rbrayce@earthlink.net

March 29, 2006

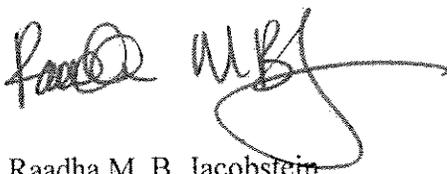
Rodney K. Haraga, Director of Transportation
State of Hawai'i
Department of Transportation
869 Punchbowl Street
Honolulu, HI 96813-5097

Subject: **Proposed Kanuikapono Charter School project within the Anahola
Homestead community on Kaua'i**

Thank you for your review and comment on the Draft EA for the proposed Kanuikapono Charter School project located within the Anahola Homestead community on Kaua'i (3-acre portion of a 121-acre parcel Tax Map Key (04)04-8-03:19). As stated in your March 14, 2006 letter, the proposed project would not have a significant impact to the State transportation facilities in the area.

Thank you for your assistance and participation in the environmental review process. We will provide you with a copy of the Final EA. Please do not hesitate to contact me if you have any questions.

Sincerely,



Raadha M. B. Jacobstein



STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAII 96813

HRD05/1990B

March 23, 2005

Raadha M.B. Jacobstein
RMBJ Consulting
46-304 Nahewai St.
Kāne'ohe, HI 96744

RE: Draft Environmental Assessment for the Proposed Kanuikapono Charter School Project Within the Anahola Homestead Community, Kaua'i, Hawai'i, TMK (4) 04-8-03: 19.

Dear Ms. Jacobstein,

The Office of Hawaiian Affairs (OHA) is in receipt of your February 5, 2005 request for comment on the above listed proposed project, TMK (4) 04-8-03: 19. OHA offers the following comments:

While OHA is in full support of the proposed Kanuikapono Charter School, we do have a few concerns regarding the proposed mitigation for potential adverse impacts to subsurface cultural deposits and iwi. The document proposes that 'mitigation measures contained in Chapter 3 would reduce adverse effects' to burial sites and cultural remains. Upon reviewing Chapter 3 (3.7) it appears as though the only protection afforded to potential iwi and historic sites is that work will cease upon encountering such sites and that a burial treatment plan would be drafted upon encountering iwi. Our staff reminds the applicant that these measures are not mitigation measures, but rather legal obligations pursuant, in part, to Section 6E-46.6, Hawaii Revised Statutes and Chapter 13-300, Hawaii Administrative Rules.

Our staff would also like to remind the applicant that archaeological monitoring, particularly 'spot-checking' and 'on-call' monitoring, as was proposed by OHA, are the most minimal form of mitigation. It is with this in mind that OHA again asks the applicant to draft an Archaeological Monitoring Plan with a scope and methodology that is appropriate for the level of proposed grading and earth altering activities planned for the development.

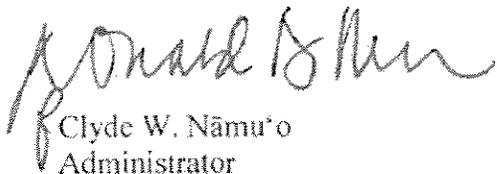
OHA also asks that, in accordance with Section 6E-46.6, Hawaii Revised Statutes and Chapter 13-300, Hawaii Administrative Rules, if any significant cultural deposits or human skeletal remains are

Raadha M.B. Jacobstein
March 23, 2005
Page 2

encountered, work shall stop in the immediate vicinity and the State Historic Preservation Division (SHPD/DLNR) shall be contacted.

Thank you for the opportunity to comment. If you have further questions or concerns, please contact Jesse Yorck at (808) 594-0239 or jessey@oha.org.

‘O wau iho nō,



Clyde W. Nāmu‘o
Administrator

CC: La France Kapaka-Arboleda
OHA Community Affairs Coordinator (Kaua‘i)
3-3100 Kuhio Hwy., Suite C4
Lihue, HI 96766-1153

RMBJ CONSULTING

Environmental Planning Services
46-304 Nahewai St.
Kāne'ohe, HI 96744

(808)236-0663
Fax (808)236-0663
rbrayce@earthlink.net

March 29, 2006

Clyde W. Nāmu'o
Attn: Jesse Yorck
Office of Hawaiian Affairs
711 Kapi'olani Blvd., Ste. 500
Honolulu, HI 96813

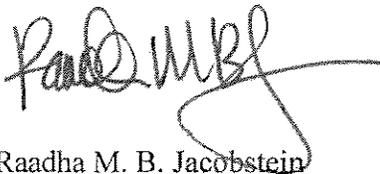
**Subject: Proposed Kanuikapono Charter School project within the Anahola
Homestead community on Kaua'i**

Thank you for your review and comment on the proposed Kanuikapono Charter School project located within the Anahola Homestead community on Kaua'i (3-acre portion of a 121-acre parcel Tax Map Key (04)04-8-03:19). As stated in your September 15, 2005 letter and reiterated in your March 23, 2006 letter, OHA recommends that an Archaeological Monitoring Plan be prepared for the proposed project. In our response dated December 15, 2005, it was determined to be unlikely that historic resources would be affected with implementation of the proposed project (see Appendix A of the EA for a copy of this letter). After careful consideration of OHA's recommendation, it was determined that an Archaeological Monitoring Plan would not be prepared for the charter school project at this time (see Appendix A for letter detailing consultations leading to this determination).

We acknowledge that the measures included in Section 3.7 of the Draft EA are regulatory requirements for the protection of undiscovered historic and cultural resources.

Once again, thank you for your assistance and participation in the environmental review process. We will provide you with a copy of the Final EA. Please do not hesitate to contact me if you have any questions.

Sincerely,



Raadha M. B. Jacobstein

LINDA LINGLE
GOVERNOR OF HAWAII



GENEVIEVE SALMONSON
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

235 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4185
FACSIMILE (808) 586-4186
E-mail: oeqc@health.state.hi.us

March 23, 2006

Kamahalo Ka'uhane
Kanuikapono Learning Center
P.O. Box 12
Anahola, Hawai'i 96703

Mr. Micah Kane, Director
Mr. Noel Akamu
Department of Hawaiian Home Lands, State of Hawaii
1099 Alakea Street, Suite 2000
Honolulu, Hawai'i 96813

Ms. Raadha M. B. Jacobstein
RMBJ Consulting
46-304 Nahewai Street
Kāne'ohe, Hawai'i 96744

Dear Messrs. Ka'uhane, Kane, Akamu, and Ms. Jacobstein:

The Office of Environmental Quality Control has reviewed the draft environmental assessment for the Kanuikapono Charter School, Tax Map Key (4th) 4-8-003, parcel 19, situated in the judicial district of Kawaihau. We offer the following comments for your consideration and response.

Sustainable Building: Please elaborate further on Figure 4, Building Sections, especially with respect to solar power. Page 3 notes that the classrooms would accommodate 18 to 30 students. Please discuss the expected distribution of students at various the grade levels from K-12. With your projected estimate of faculty and staff for the school, please estimate the daily wastewater generation and discuss its direct, indirect and cumulative impacts on page 14.

Landscaping with Xerophagic Native and Indigenous Plants: Please consider landscaping with native and indigineous xerophagic (drought-tolerant) plants. Please refer to our Internet website at <http://www.state.hi.us/health/oeqc/index.html> for more information.

Thank you for the opportunity to comment. If there are any questions, or if you would like to discuss this matter further, please call Mr. Leslie Segundo, Environmental Health Specialist, at (808) 586-4185.

Sincerely,

A handwritten signature in cursive script, appearing to read "Genevieve Salmonson".

GENEVIEVE SALMONSON
Director

RMBJ CONSULTING
Environmental Planning Services
46-304 Nahewai St.
Kāneʻohe, HI 96744

(808)236-0663
Fax (808)236-0663
rbrayce@earthlink.net

April 4, 2006

Genevieve Salmonson, Director
State of Hawai'i
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, HI 96813

**Subject: Proposed Kanuikapono Charter School project within the Anahola
Homestead community on Kaua'i**

Thank you for your review and comment on the Draft EA for the proposed Kanuikapono Charter School project located within the Anahola Homestead community on Kaua'i (3-acre portion of a 121-acre parcel Tax Map Key (04)04-8-03:19). The following are responses to your comments.

Sustainable Building: The building sections shown in Figure 4 are conceptual designs that have not been finalized. These design concepts incorporate the sustainable building goals and strategies identified by students and teachers at Kanuikapono with the assistance of Ferraro Choi and Associates. Solar power is identified as the preferred energy source by Kanuikapono Charter School (see revised text on page 5 of the Final EA).

The distribution of students would be from K through 5th grade levels, with approximately 10-12 students in each grade level. Each class would consist of mixed-grade levels to be taught either in the classrooms or in outdoor lab spaces (see revised text on page 6 of the Final EA).

Wastewater generation estimates are provided in Section 3.4, *Surface Water and Groundwater Hydrology* and Appendix C of the Final EA. The wastewater system design and measures included in the Final EA would result in minimal impacts to groundwater (see revised text on pages 14-15 of the Final EA).

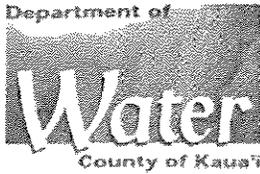
Landscaping: Included in the proposed action is landscaping with primarily native plants.

Thank you for your assistance and participation in the environmental review process. We will provide you with a copy of the Final EA. Please do not hesitate to contact me if you have any questions.

Sincerely,



Raadha M. B. Jacobstein



Water has no substitute.....Conserve it

March 22, 2006

Raadha Jacobstein
RMBJ Consulting
Environmental Planning Services
46-304 Nahewai Street
Kaneohe, HI 96744

Dear Raadha Jacobstein:

Subject: Proposed Kanuikapono Charter School Project, TMK: 4-8-03:por.19, Kukuihale Road, Anahola, Kauai

This is in regard to your letter dated February 2, 2006. We acknowledge that this project will use a portion of DHHL's water allocation from the County's system. As indicated in your letter the school's water demand will not exceed the permitted water use for a 5/8-inch water meter.

Be made aware that prior to water meter size approval the applicant will be required to submit detailed water demand that must include (both domestic and irrigation demand) calculations along with the proposed water meter size. Water demand calculations submitted by your engineer or architect should also include fixture count and water meter sizing worksheets. The Department's comments may change depending on the approved water demand calculations.

If you have any questions, please contact Mr. Edward Doi at (808) 245-5417.

Sincerely,

A handwritten signature in black ink, appearing to read "Gregg Fujikawa".

Gregg Fujikawa
Chief of Water Resources and Planning

WTR-002
26-0000 Aquatics, Inc. 03/06/06

RMBJ CONSULTING

Environmental Planning Services
46-304 Nahewai St.
Kāne'ohe, HI 96744

(808)236-0663
Fax (808)236-0663
rbrayce@earthlink.net

March 29, 2006

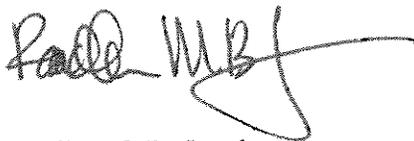
Gregg Fujikawa, Chief of Water Resources and Planning
Attn: Edward Doi
Department of Water, County of Kaua'i
P.O. Box 1706
Lihue, HI 96766

Subject: **Proposed Kanuikapono Charter School project within the Anahola
Homestead community on Kaua'i**

Thank you for your review and comment on the proposed Kanuikapono Charter School project located within the Anahola Homestead community on Kaua'i (3-acre portion of a 121-acre parcel Tax Map Key (04)04-8-03:19). As stated in your March 22, 2006 letter, the project applicant would be required to submit water demand calculations to the Department of Water for approval.

Thank you for your assistance and participation in the environmental review process. We will provide you with a copy of the Final EA. Please do not hesitate to contact me if you have any questions.

Sincerely,



Raadha M. B. Jacobstein

APPENDIX C

WASTEWATER SYSTEM



AQUA ENGINEERS

3560 Koloa Road
Kalaheo, Hawaii 96741

Tel (808) 332-7381
Fax (808) 332-7596

Neighbor Islands call
1 (800) 430-7381

April 3, 2006

Raadha M.B. Jacobstein
RMBJ Consulting
46-304 Nahewai Street
Kane'ohe, HI 96744

Subject: Individual Wastewater Systems for
Kanuikapono Learning Center & Charter School
TMK:(4) 4-8-03:19

As you requested, this letter summarizes the proposed individual wastewater systems (IWS) for the subject project. Attached are the design calculations and preliminary plot plan for the two proposed classrooms prepared in accordance with the State of Hawaii, Department of Health (DOH) HAR, Chapter 11-62.

We are proposing to use a 1500 gallon Orenco fiberglass septic tank combined with an 18 feet by 50 feet absorption bed as the effluent disposal component for each classroom.

The sewer line from the building connects to the septic tank which provides preliminary treatment. In the tank, heavy solids are allowed to settle forming a sludge layer, and grease and light solids float to form a scum layer. The sludge and scum remain in the tank where naturally occurring bacteria work to break them down. The bacteria cannot completely break down all of the sludge and scum, however, and this is why septic tanks need to be pumped periodically. Wastewater leaves the septic tank, flows to an absorption field and down through the soil. The soil acts as a natural filter and contains organisms that help treat the waste. DOH requires a 3 feet setback between the bottom of the absorption field to groundwater elevation. The proposed absorption field is designed to be 3 feet below grade. Groundwater elevation is greater than 40 feet in this area, which will allow greater filtering and minimal impact to groundwater.

If you have any questions or need more information, please call Brad Suizu at 332-7381.

Sincerely,

Julie A. Simonton, P.E.

cc: File

DESIGN REQUIREMENTS:

Area Classification: Critical Wastewater Disposal Area
TMK: (4) 4-8-03: 19
Lot size: 3 Acres
IWS Permitted: 1 / 10,000 s. f.

FLOW

20 Students @ 15 gpd = 300 gpd
2 – Teachers @ 20 gpd = 40 gpd
40 – Visitors @ 5 gpd = 200 gpd
for a total of 540 gpd.

Using 800 gpd for design purposes for each classroom
And future additions

TANK CAPACITY

Use 1500 gallon Orenco fiberglass septic tank for each system

PERCOLATION TEST INFORMATION:

Date of test: June 1, 2002
Tested by: Brad Suizu
Percolation Rate: 20 mpi.
Soil Description: 0-30" reddish brown silty clay, hard, fine,
slightly sticky and slightly plastic.
Depth to water: >40' (based on cesspool records in the area)

ABSORPTION FIELD REQUIREMENTS:

Absorption area = 210 s.f. per bedroom (Table 1, USPHS Pub. 526)
Area required for 4 bedroom-equivalent = 4 x 210 = 840 s.f. (min.)

Use absorption bed with High-Capacity rated leaching chambers

Construct 18 ft. x 50 ft. absorption bed for each system
Total Absorption area provided = 18 ft. x 50 ft. = 900 sq. ft.

HAWAIIAN HOMES COMMISSION
FINDING OF NO SIGNIFICANT IMPACT
for the
KANUIKAPONO CHARTER SCHOOL PROJECT
In the Community of Anahola, County of Kaua'i

At its monthly meeting held on Tuesday, April 25, 2006, in Anahola, Kauai, the Hawaiian Homes Commission has determined that the proposed Kanuikapono Charter School project in the community of Anahola will have no significant environmental effects. This Finding of No Significant Impacts (FONSI) is based on the attached Final Environmental Assessment (FEA), which have been independently reviewed by the State of Hawai'i, Department of Hawaiian Home Lands (DHHL), and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project and appropriate mitigation measures. These documents provide sufficient evidence and analysis for determining that an Environmental Impact Statement (EIS) is not required.

Aloha and mahalo,

5/8/06
Date

Micah A. Kane
Micah A. Kane, Chairman
Hawaiian Homes Commission