



UNIVERSITY OF HAWAII

OFFICE OF CAPITAL IMPROVEMENTS

September 13, 2005

Ms. Genevieve Salmonson, Director
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813


SUBJECT: Finding of No Significant Impact (FONSI) for Kaua'i Community College One-Stop Center - Phase 1 & 2 TMK (4) 3-4-07:03, Lihu'e, Kaua'i, Hawai'i

Dear Ms. Salmonson:

The University of Hawai'i has reviewed the comments received during the 30-day public comment period which began on July 8, 2005. The agency has determined that this project will not have significant environmental effects and has issued a FONSI. Please publish this notice in the next available OEQC Environmental Notice.

We have enclosed a completed OEQC Publication Form and four copies of the final EA. Please call Maynard Young at 956-4071 if you have any questions.

Sincerely,


Jan Yokota
Director

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QUALITY CONTROL

2005-09-23 KA FONSI KAUAI COMMUNITY COLLEGE, ONE STOP
CENTER PHASE I & II.

SEP 23 2005

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Final Environmental Assessment

Kaua'i Community College, University of Hawai'i One-Stop Center - Phase 1 & 2 Lihu'e, Kaua'i, Hawai'i

Prepared by:

AM Partners, Inc.
1100 Alakea Street, Suite 800
Honolulu, Hawai'i 96813

September 2005

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**Kaua`i Community College, One-Stop Center (Phase 1 & 2)
Lihu`e, Kaua`i, Hawai`i**

PROJECT SUMMARY

Project	Kaua`i Community College, One-Stop Center (Phase 1 & 2)
Proposing Agency and Accepting Authority	Kaua`i Community College University of Hawai`i
Agent	AM Partners, Inc. 1100 Alakea Street, Suite 800 Honolulu, Hawai`i 96813 Contact: Jennifer Wakazuru-Kim Phone: (808) 526-2828 ext. 240 Fax: (808) 538-0027
Tax Map Key (existing campus only)	TMK 3-4-07:03
Land Area (existing campus only)	99 acres
Land Area Allocated for Project	Approximately 120,000 square feet
Existing Use	School campus; area for project is vacant land
State Land Use District	Agricultural District (Special Permit granted for campus development by the State Land Use Commission on 4/6/73)
County General Plan	Public Facility
Land Use Designation	Urban Center
County Zoning	R-4/ST-P District (Residential Use District overlaid by a Special Treatment District)
Special Management Area (SMA)	Not within the SMA
FEMA FIRM Zone	Zone X --determined to be outside the 500-year flood plain
Anticipated Determination	Finding of No Significant Impact (FONSI)

Project Description

The applicant, the University of Hawai'i's Kaua'i Community College (KCC), proposes to build a One-Stop Center at its Puhi campus in Lihue, Kaua'i, and will consist of two buildings to be built in two phases. The two-structure facility will provide KCC with a new campus gateway that enhances the identity of the college, improve way-finding for first time visitors within the campus, and implement a number of customer service initiatives that have been discussed at the institution for many years.

The entire Kaua'i Community College property consists of approximately 199 acres of land under the ownership of the State of Hawai'i, University of Hawai'i with Tax Map Key (TMK) 3-4-07:01, 3-4-07:02, 3-4-07:03 and 3-4-07:06. At the present time, all of the existing campus facilities are in TMK 3-4-07:03, including the project site. The Project location is shown below.

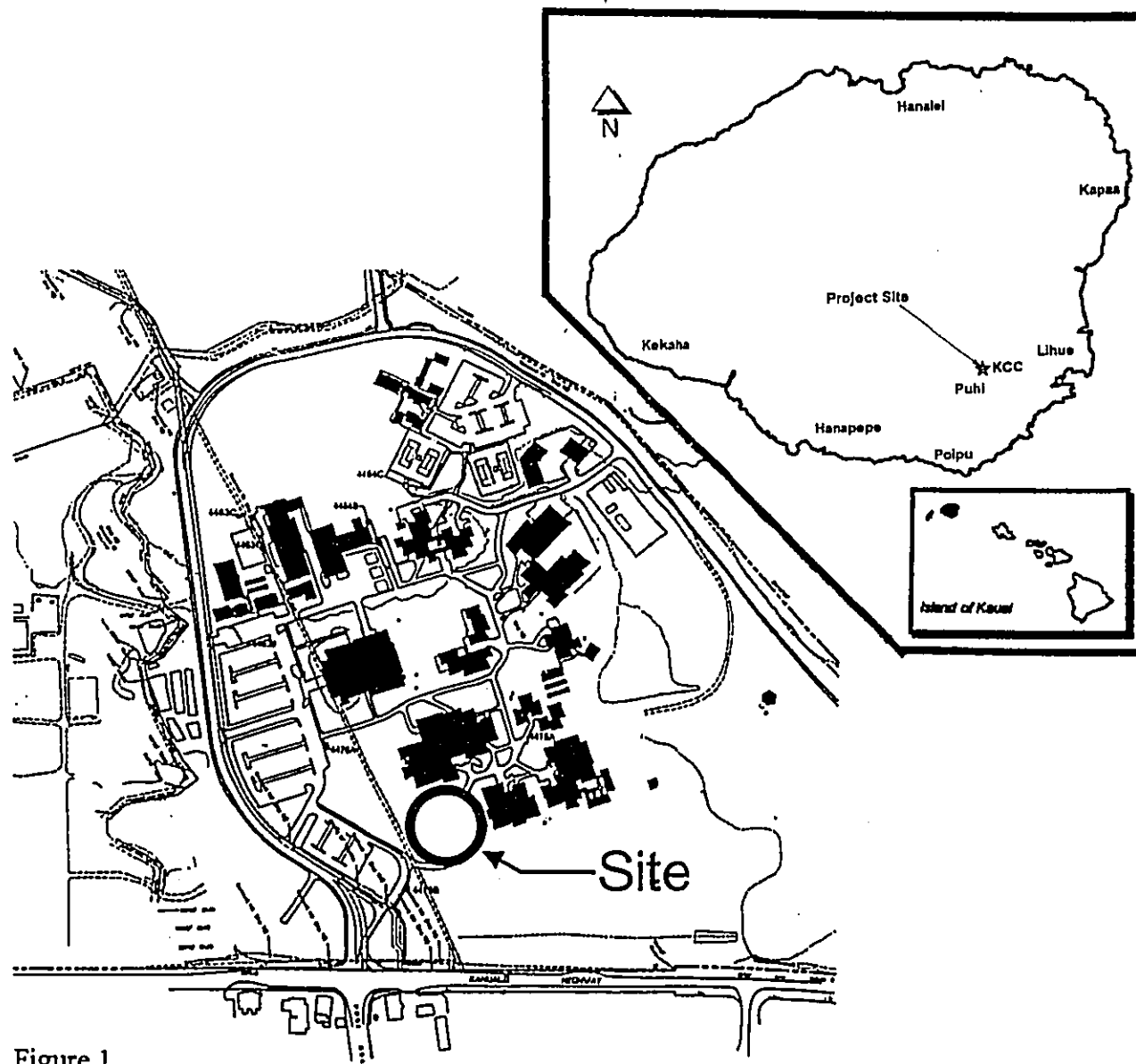


Figure 1
Project Location at the KCC Campus: Island of Kaua'i

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Section 1.0 Introduction

1.1 Purpose and Objectives

The applicant, the University of Hawai'i's Kaua'i Community College, proposes to build a One-Stop Center at its Puhi campus in Lihu'e, Kauai. This Environmental Assessment (EA) is prepared in pursuant to and in accordance with the requirements of Chapter 343 Hawai'i Revised Statutes (HRS), and Chapter 200 of Title 11, Department of Health Administrative Rules. The action that triggers this assessment is the use of State of Hawai'i funds in the planning, design and construction of the structure, and the fact that it will be constructed on State-owned land.

The proposed Kaua'i Community College's (KCC) One-Stop Center (OSC) consists of two buildings to be built in two phases. Phase 1 has a gross area of 33,000 square feet while Phase 2 is 32,500 square feet. The two-structure facility will provide KCC with a new campus gateway that enhances the identity of the college, improves way-finding for first time visitors within the campus, and implements a number of customer service initiatives that have been discussed at the institution for many years. The OSC will consolidate the Student Services, Academic Support and Institutional Support functions, which include a University Center and Bookstore in two contiguous buildings. It will also provide administrative and instructional facilities for the Office of Continuing Education and Training (OCET).

1.2 Project Location

The entire Kaua'i Community College property consists of approximately 199 acres of land under the ownership of the State of Hawai'i, University of Hawai'i with Tax Map Key (TMK) 3-4-07:01, 3-4-07:02, 3-4-07:03 and 3-4-07:06. At the present time, all of the existing campus facilities are in TMK 3-4-07:03, including the project site. The land area allocated for this project is approximately 120,000 square feet and is highly visible from Kaumuali'i Highway and the main vehicular entry to the campus.

As shown in Exhibit 1, the project sites for Phase 1 and Phase 2 are flanked by campus buildings on the north and northeast and by paved parking areas to the south and southwest.

The 199-acre Kaua'i Community College property is bordered by Kaumuali'i Highway on the southeast and the Island School and Gaylord's Restaurant on the north. Lands used for agricultural cultivation to the southwest and west of the property is owned by Grove Farm Co., Inc. and those to the north are owned by Lihu'e Plantation Co., Ltd. Lands makai of the highway are part of the Grove Farm development and include commercial uses, a 3-acre county park, the Klussman Reservoir and some vacant land and residential land uses.

Section 2.0 Project Background

2.1 Kaua'i Community College History

Kaua'i Community College is the only public institution of higher learning in the Island of Kaua'i. It provides community services in addition to its educational mission, and continues to expand its technological resources.

Established in 1965 through the Hawai'i Community Colleges Act of 1964, the college moved to the Puhi campus in 1977 on land donated by Grove Farm in 1972. A Complex Development Report published in 1974 recommended a master plan for a 1,500-student capacity campus. The recommended plan has been largely implemented as a tool for campus development, although a number of facilities in the plan have yet to be constructed.

In 1997, the Hawai'i Legislature appropriated funds to prepare a Long Range Development Plan (LRDP) for the KCC as an update on the original master plan. The LRDP was published in September 1999 and provides guidelines for the development of the campus to accommodate a population of 3,000 full time equivalent (FTE) students. **The LRDP does not have a horizon date when the 3000 FTE is predicted to occur.** Among the list of proposed buildings for KCC described in the LRDP is a two-story institutional support building to be "located at the 'front door' of the campus." (page 48, Section 7.0 Ultimate Site Plan, LRDP). Table 9.1 (page 86, Table 9.1 Priority Listing of Proposed Projects) of the LRDP gives this One-Stop Center the first priority.

2.2 Project Goals

The One-Stop Center will centralize essential functions of the college that are currently housed in a variety of existing buildings throughout the campus. It will also act as the front door of the campus, as well as the "nerve center" and provide a gathering place for college events.

Section 3.0 Design and Construction Activities

3.1 Proposed Design

The major components of the One-Stop Center include the Office of Continuing Education and Training (OCET), the college's Institutional Support, Student Services, and Academic Services. The facility will also house the University Center and the campus bookstore.

3.1.1 Building Organization. The facility will consist of an open-air central lobby flanked by two structures on the north and south ends. (See Exhibits 2 to 9).

The Phase 1 building will be a two-story structure with a two-level central hall. Office-type spaces will surround the central hall on the first and second floor. Clerestory windows that allow natural light to penetrate into the central hall and the building's interior reaches will also be used. Other programmed spaces (commonly referred to as One-Stop Center or OSC) will also be housed in this building.

Phase 2 will house the Office of Continuing Education and Training (OCET) and the shell of a future bookstore. It will be a one-story structure accessible from the central open-air lobby and houses various classrooms and lecture halls as well as a computer lab.

The open-air lobby will serve as the main entrance and will be accessed from a turnaround and drop-off area that will provide a defined vehicular approach to the structure.

3.1.2 Architectural Intent. The facility's exterior architectural theme will be based on Kaua'i's vernacular architectural forms. The LRDP also recommends that the proposed facility provide an architectural style that will complement the existing structures on the campus. Choice of

architectural finishes and features will accommodate Kaua'i's environmental conditions, meet all applicable codes, and enhance security and maintainability.

3.1.3 Sustainability Design. Sustainable design promotes the efficient commitment of limited resources to ensure its availability for future generations, and the intelligent use of these resources to improve the habitability of occupied spaces. The project will commit to sustainable design in various ways, among which include the use of the thermal mass of the exterior walls to enhance passive cooling and daylighting to illuminate interior spaces. Other sustainable design considerations are the use of high efficiency motors; efficient lighting sources and low light levels; as well as increased ventilation rates to improve indoor air quality. The use of low emitting adhesives, sealants, paints, composite wood, and other similar materials will also be restricted.

3.1.4 Use of Native Hawaiian Plants. Kaua'i Community College expressed a strong desire to utilize only Hawaiian plant materials that are endemic, indigenous and or culturally significant to the Hawaiian Community. Accordingly, the plant selection will first be based on native plants found on the island of Kaua'i, and then within the Hawaiian island chain.

3.2 Construction Schedule

Phase 1 is expected to have a construction schedule of 18 months and includes building construction and landscaping/paving work for the outdoor lobby. Construction will begin once all building permit requirements are granted.

Phase 2 has an estimated construction schedule of 20 months, and includes the construction of the re-designed entry loop and drop-off driveway. Construction for Phase 2 will commence once funding is secured.

3.3 Estimated Cost

Construction cost for Phase 1 is estimated at \$8.8 Million while Phase 2 is estimated at \$9.4 Million based on March 25, 2005 costs. The total project cost is anticipated at \$19.2 Million based on 2005 costs, which includes permits, site work and building construction.

Section 4.0 Description of the Affected Environment

4.1 Physical Environment

4.1.1 Climate. Like the rest of Hawai'i, the area's climate has a low day-to-day and month-to-month variability. The average temperature is 73 degrees Fahrenheit. The mean annual precipitation in the Puhi area is 65.8 inches, while the media annual precipitation ranges from 50 to 75 inches, with most of the rainfall occurring in October through May. Wind patterns are northeasterly and range from 10 to 15 miles per hour.

The proposed project will not have a significant effect on the surrounding climate conditions. The project will provide adequate landscaping to assist in the mitigation of any localized increases in temperature due to roadways, parking and related structures.

4.1.2 Topography, Geology, Soils. Elevations on the existing campus (TMK 3-4-07:03) range from 310 feet to 380 feet above mean sea level (msl). The lowest point is near Kaumuali'i Highway and the highest level at its northern, mauka boundary. Topography of the existing campus is relatively flat with slopes ranging from 1.0 percent to 5.0 percent.

The project site has well-drained, medium to fine textured soils called "Lihu'e-Puhi association." Lihu'e soils have a surface layer of dusky red to dark reddish brown, firm silty clay. The substratum is soft, weathered basic igneous rock. Puhi soils have surface layer of brown to very dark brown, friable silty clay loam and silty clay. The substratum is soft, weathered basic igneous rock.

4.1.3 Hydrology. Natural drainage channels are located throughout the entire property. Within the campus area, runoff is being collected by a series of catch basins, intake boxes and grassed swales and ditches. Water flows are then directed to detention basins located along the southeast side of the campus area through a series of underground pipes. The run-off is then piped across Kaumuali'i Highway to a reservoir which feeds Halehaka Stream.

No adverse impacts are expected on surface or ground water. The project is not expected to impact the quality of Halehaka Stream. The project area is located a considerable distance from any large body of water and is not expected to impact on any marine resources.

4.1.4 Vegetation. Vegetation on the campus consists of indigenous and introduced species. The site where the campus is now located was former cane land since the early 1900's until donated by Grove Farm in 1972. Existing vegetation basically followed the Planting List established for the campus in the 1974 Complex Development Report. Plantings consists of groupings of canopy trees which include *kamani*, *kukui*, *wiliwili*, *'ulu*, *Formosa koa*, royal ponciana and African tulip along with ornamental shrubs and hedges.

The landscape design for this project will utilize only Hawaiian plant materials that are endemic, indigenous and or culturally significant. Selection will be based on native species found on Kaua'i and then within the Hawaiian Island chain.

4.1.5 Scenic and Visual Resources. No significant coastal visual resources are in the vicinity. However, views of the Hoary Head Range to the southwest and Kiloana Crater and Mount Wai'ale'ale to the north are visible only from the periphery of the campus due to the relatively flat topography. Both Phase 1 and Phase 2 buildings will not significantly impact the campus' scenic or visual resources.

4.1.6 Historical, Cultural and Archaeological Resources. The survey conducted in September 1973 on the portion of the property where the existing campus is located concluded that no natural, historic or archeological landmarks exist on the site.

An archaeological and cultural impact evaluation for the proposed project is attached in Exhibit 10. This report notes that there will be no adverse impact to historical or cultural resources with the implementation of the project.

Should any unidentified archaeological resources be encountered during construction, all work will cease and the Historic Preservation Office will be contacted for review and approval of mitigation measures.

4.1.7 Noise Quality. Potential noise impacts are expected from construction activities and during the operational phase of the project. Construction impacts will be temporary and localized, and are the normal result of construction related activity. The State Department of Health administers rules and regulation relating to the hours during which construction is permitted and the noise levels permitted.

4.1.8 Air Quality. The major factor affecting long term impact on air quality in the area is vehicular traffic. According to studies prepared for this project it is unlikely that any measurable impacts on air quality will occur. Implementing measures for long term impacts from the proposed project is unnecessary and unwarranted. However, it is expected that construction of the proposed project would produce air pollutants mainly from two sources: exhaust from equipment/machinery including vehicles and fugitive dust emissions due to earth movement. The studies show that the estimated emissions from all pollutants are well below the corresponding significance levels. In any event, the selected Contractor will be required to implement mitigation measures that would minimize degradation to the air quality during the construction phase. Please refer to Exhibit 11, Air Quality Environmental Assessment Final Report dated February 2004 for details.

4.1.9 Water Quality and Water Services. Water source for the campus is from a water tank with overflow elevation of 510 feet and a well located to the northwest of the campus. Another water tank with overflow elevation of 393 feet with pump station within the exterior boundary of the campus site serves as an alternate source. The proposed project will connect to the existing water system of the campus that is metered by an existing 3-inch water meter. Fire Protection will be provided with new fire lines and hydrants spaced at 350 feet as required. It is anticipated that the existing water system is adequate since the proposed facility's users are being relocated from existing structures within the campus.

No adverse impacts are anticipated on surface water or ground water since the project does not include injection wells or cesspools. Any runoff or wastewater disposal required for the project will be done in full compliance with County, State and Federal guidelines.

4.1.10 Wastewater. An aerobic sewage treatment plant, constructed when the campus was established is no longer in service. Existing campus sewer system is connected to a treatment plant operated by Grove Farm since April 2001. New sewer laterals from the proposed project will connect to the existing on-site sanitary sewer system.

The applicant will coordinate with appropriate County agencies to obtain review and approval of all plans for the proposed project, including identification and approval of connections to the existing waste water system. No adverse impacts are anticipated to the existing service.

4.1.11 Hazardous Materials/Hazardous Waste. Hazardous materials or hazardous waste is not found within the premises of the site. The current uses of the site preclude its use as storage for hazardous materials and waste.

4.2 Socio-Economic Environment

4.2.1 Population Data. Data from the 2000 U.S. Census indicate that Kauai's population grew by about 15 percent between 1990 and 2000 – from 51,000 to 58,463 persons. The median age for Kaua'i is 38.4 compared to the State's 36.2. No significant change in the population size or median age is expected to occur due to this project.

4.2.2 Surrounding Land Use and Community Character. The entire 199-acre Kaua'i Community College property is bordered by Kaunualii Highway on the southeast and the Island School and Gaylord's Restaurant on the north. Land used for agricultural cultivation surrounds the campus on its southwest, west and north borders. Access to the 10-acre Island School located along the northern central boundary of the property is from the main entry road into the campus. Lands makai of the highway are owned by Grove Farm Development and include commercial uses, a 3-acre County park, the Klussman Reservoir, some vacant land and residential land uses.

4.3 Public Facilities and Services

4.3.1 Schools and Recreational Facilities. The Lihu'e district is served by Wilcox Elementary, Kaunualii Elementary, and Kaua'i High and Intermediate School. The schools in Lihu'e and Kawaihau are expected to have a surplus of classrooms due to enrollment shifts and new school openings. However, on an island wide basis, an increase in enrollment is expected and the State's Department of Education (DOE) plans to increase capacity at other locations.

The State and the County operate parks in Kauai. The State parks are typically larger and are based on natural resources. The County parks serve localized populations. The Lihu'e district consists of 86.8 acres of County-owned parks.

4.3.2 Police and Fire Protection. Police protection is provided by Kaua'i's Police Department with its main headquarters located in Lihu'e, and substations in Kapaa, Hanalei and Waimea. The Kaua'i Fire Department operates seven stations throughout the island. The project will be serviced by the station in Lihu'e.

4.3.3 Medical and Health Facilities. The nearest medical facility to the project site is the Wilcox Memorial Hospital in Lihu'e. The other two hospitals in the island are the Kaua'i Veteran's Memorial Hospital in Waimea and the Samuel Mahelona Memorial Hospital in Kapaa.

4.3.4 Transportation and Accessibility. A single access road runs along the perimeter of the main campus and is accessible from Kaunualii Highway at the southern edge of the main campus. Most of the campus buildings, including the proposed project, are accessible from this perimeter road. Access to the Island School located on the northern end of the campus is also through this road. The campus is served by two main parking lots; a grassy lawn area located west of the main entrance, is used as overflow parking. Two bus stops serve the campus – one near the entrance to the campus and the other alongside the parking lot near the Administration Building and Performing Arts Center. A concrete walkway system provides pedestrian access

between various areas of the campus. New concrete walkways will be provided as part of the project. These 20-foot wide walkway and will also serve as fire lanes and emergency vehicle access. Parking for the project will be provided on areas designated for that purpose as noted in the campus' Long Range Development Plan (LRDP).

A traffic assessment was prepared for the subject project is enclosed in Exhibit 12. According to the report, the project is estimated to have a maximum traffic impact of 85 vehicles per hour in the peak direction during the peak hour. This is less than 100 vehicles per hour that has been suggested as the threshold for conducting a traffic impact or site access study.

4.3.5 Water and Sewer. Water and sewer services are discussed under Section 4.1.9 and 4.1.10 respectively. No adverse impact is expected from the provision of these utilities.

4.3.6 Ground Drainage. The existing grade slopes away from the proposed building site towards an existing detention basin adjacent to Kaumuali'i Highway.

4.3.7 Solid Waste. Solid waste disposal will be provided by a privately owned company.

4.3.8 Electrical, Telephone and Cable Service. The existing primary metered 12.47 KV electric system is provided by Kauai Island Utility Cooperative. The company serves the campus from an overhead line along Kaumuali'i Highway. This service then runs underground to the Electric Switchgear Building that houses the primary meter. Each building or group of buildings, linked to the primary meter via an underground conduit system, has its own pad mounted transformer that converts the 12.47 KV service to an appropriate voltage system. The proposed project will be linked to primary meter in the same way. The secondary voltage to each building will be at 277/480-volt, three phase, four-wire, underground service run.

Telephone service is provided by Hawaiian Telcom (formerly Verizon Hawaii), via lines routed along Kaumuali'i Highway adjacent to the electrical lines. The main communications switchboard for the telephone system is in the Administration/Learning Center but will be relocated to the new facility. Empty conduit provisions will be set up to allow the system vendor(s) to set up the new phone and data systems.

No negative impact is expected from the use of these services.

Section 5.0 Relationship to Federal, State and County Land Use Plans and Policies

5.1 Federal

The Americans with Disabilities Act (ADA) of 1990 provides guidelines for development of accessibility to buildings and facilities by individuals with disabilities. The proposed project will apply these guidelines during the design and construction and operation of the center.

5.2 State of Hawaii

5.2.1 Hawaii State Plan. The Hawaii State Plan (Chapter 226, Hawaii Revised Statutes) provides a guide for the future of Hawaii by setting forth a broad range of goals, objectives, and policies. These serve as guidelines for growth and development of the State of Hawaii. The proposed project is consistent with the Hawaii State Plan.

Section 226-13: Physical Environment – Land, Air and Water Quality. The proposed Kauai Community College One-Stop Center will achieve the objective of planning for the State’s physical environment by pursuing development activities in a manner that is compatible to the surrounding Puhi community and consistent with the Federal, State and County regulations.

5.2.2 State Functional Plans. The Hawaii State Functional Plan (Chapter 226) provides a management program that allows judicious use of the States natural resources to improve current conditions and attend to various societal issues and trends. The proposed project is generally consistent with the State Functional Plans.

5.2.3 State Land Use Law. The State Land Use Commission classified the entire Kaua’i Community College property “Agricultural.” Development of the campus on the existing 99-acre parcel (TMK 3-4-07:03) is permitted through a Special Permit granted by the State Land Use Commission on April 6, 1973. The proposed project is located on this parcel.

Further expansion of the campus on the surrounding tax map parcels (TMK 3-4-07:01,02 and 06) will require either a Special Permit or an amendment to the State Land Use District boundaries from Agricultural to Urban, depending on the type and size of the development.

5.2.4 Coastal Zone Management Act. The proposed center is not located on the coastline or shoreline and does not involve coastal resources. In any event, the facility will be designed in a manner that will not negatively impact the coastline, its resources and the surrounding community.

5.3 County of Kaua’i

The Kaua’i General Plan establishes policy for the long range development, conservation, use and allocation of land, water and other resources in the County of Kauai. The plan is organized according to themes, and the preliminary vision for each of the county’s five districts is discussed under the theme “Enhancing Towns & Communities and Providing for Growth.”

5.3.1 Lihu’e District. The proposed project is within the Lihu’e Planning District, considered the “heart” of Kaua’i. This district serves as the main business, government and transportation of the island. Kaua’i Community College is located in the Puhi area of this district. The Lihu’e Planning District Map designates the KCC campus with an “urban center” designation.

5.3.2 Zoning Designation. The campus was given a R-4/ST-P District (Residential Use District overlaid by a Special Treatment District).

Section 6.0 Alternatives to the Proposed Action

6.1 No Action

This alternative would result in lost opportunity to provide educational resources for Kaua’i.

6.2 Alternative Sites

No alternative sites were considered. The project has been determined to have the top priority in the LRDP

6.3 Alternative Uses

No alternative uses were considered for the site. The area has been designated for the project in KCC's Long Range Development Plan (LRDP).

6.4 Recommended Action

The recommended action is to proceed with the proposed two-phased project on the site.

Section 7.0

Relationship Between Local Short-term Uses and the Maintenance and Enhancement of Long Term Productivity

No short-term exploitation of resources resulting from the proposed project will have long term adverse consequences. Major impacts such as the increased bus and pedestrian traffic to the site will increase noise and emission levels. However, recent studies show that no measurable negative impacts on air quality or noise will occur with the proposed project.

Long-term gains will be the addition of the two structures and accessory landscaping that improves KCC's campus and increases the educational resources for the County of Kaua'i.

Section 8.0

Irreversible/Irretrievable Commitment of Resources by the Proposed Action

Development of the proposed facility will involve the irretrievable loss of certain environmental and fiscal resources. However the costs associated with the use of these resources should be evaluated in light of the long-term benefits to Kaua'i Community College, the County of Kaua'i and the State of Hawai'i.

Section 9.0

Summary of Impacts

9.1 Summary of Impacts

9.1.1 Physical Impacts. No long term negative physical impacts are anticipated with the implementation of the proposed action. Short-term construction related impacts are anticipated but should be adequately mitigated through the use of sound construction practices.

Beneficial impacts include the provision of a modern state-of-the-art campus center that centralizes the essential functions of the KCC that are now dispersed in various locations in the campus. The KCC campus, as well as the entire county of Kaua'i, will also benefit from the functions to be housed in the Center which include a large gathering place, resources for continuing education and a Native Hawaiian Educational Garden.

9.1.2 Impacts on Public Facilities and Services. The proposed structure is not expected to have any negative impact on public facilities and services but will be an addition to the array of public facilities and services now available in the community.

9.1.3 Socio Economic Impacts. No long-term negative impacts are anticipated to the socio-economic environment as a result of the proposed action. A short-term benefit of the project is the creation of employment in the planning, design and construction industries. The long-term benefits are the creation of resources that enhances post secondary and vocational or continuing education.

9.2 Need for an Environmental Impact Statement (EIS)

Because no long-term adverse impacts are anticipated to the proposed project, it is expected that an Environmental Impact Statement is not required.

9.3 Significance

According to the Department of Health Rules (Chapter 11-200-12), an applicant must determine whether an action may have a significant impact on the environment. These would include (1) all phases of the project; (2) its expected primary and secondary consequences; (3) its cumulative impact with other projects; and (4) its short and long-term effects. The Rules establish a Significance Criterion to be used as a basis for identifying whether significant environmental impact will occur. According to the Rules, an action shall be determined to have a significant impact on the environment if it meets any of the following criteria.

1. *Involves an irrevocable commitment to loss or destruction of any natural or cultural resources.* The project will not require the loss or destruction of any natural or cultural resource, but will revive the propagation of native Hawaiian plants that are endemic, indigenous and or culturally significant to the Hawaiian community.
2. *Curtails the range of beneficial uses of the environment.* The project will be built on developed but vacant land. Therefore, it will not negatively impact other beneficial uses.
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 project does not conflict with any long term environmental policies, goals and guidelines.
4. *Substantially affects the economic or social welfare of the community or State.* The project will have a significant positive effect on the economic welfare of the community by serving as the "nerve center" for the county's only community college and as a gathering place.
5. *Substantially affects public health.* The project will not substantially impact public health.
6. *Involves substantially secondary impacts, such as population changes or effects on public facilities.* The project will enhance the identity of the county's only community college.
7. *Involves a substantial degradation of environmental quality.* The project will not substantially degrade the environmental quality of the surrounding area.
8. *Is individually limited but cumulatively has considerable effect on the environment, or involves a commitment for larger actions.* The project is one of many additional structures planned for the Kaua'i Community College campus.

9. *Substantially affect a rare, threatened or endangered species or its habitat.* The project will revive the propagation of native Hawaiian plants that are rare, threatened or endangered.
10. *Detrimentially affects air or water quality or ambient noise levels.* The project will not detrimentally impact air or water quality. Mitigation measures will be enforced to reduce negative impacts due to construction.
11. *Affects or is likely to suffer damage by being located in an environmentally sensitive area such as flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, freshwater or coastal waters.* The project will not be developed in an environmentally sensitive area.
12. *Substantially affects vistas and view planes identified in County or State plans or studies.* The project will not impact any scenic or view planes.
13. *Requires substantial energy consumption.* The project will not require substantial energy consumption to complete. The facility will comply with design energy budgets specified in the Hawaii Energy Code.
14. *Adheres to the concepts of environmental justice.* The project will not displace any racial groups or populations.

Section 10.0 Necessary Permits and Approvals

10.1 Federal

A Federal permit will be required in response to Section 401(a)(1) of the Federal Water Pollution Act commonly known as the Clean Water Act. A National Pollution Elimination Discharge System (NPEDS) permit is required for construction work on sites more than an acre and is administered through the State's Department of Health (DOH).

10.2 State of Hawai'i

The State requires the preparation of an Environmental Assessment. If the state provisions are addressed, the applicant can determine that an Environmental Impact Statement (EIS) will not be required, and can then issue a FONSI (Finding of No Significant Impact) for this project.

10.3 Kaua'i County

Prior to obtaining the building permit, it will be necessary to secure all applicable reviews and approval from regulating agencies of Kaua'i County.

Section 11.0 References

AM Partners, Inc. **BASIS OF DESIGN REPORT, KAUA'I COMMUNITY COLLEGE ONE-STOP CENTER** (Draft Report). March 2004.

County of Kaua'i Planning Department. **KAUA'I GENERAL PLAN**. November 2000.

Hawai'i Department of Business, Economic Development & Tourism. **THE STATE OF HAWAII DATA BOOK 2000**. Honolulu, 2001

Juvik, Sonia P. and James O., eds. **ATLAS OF HAWAII**. 3d ed. Honolulu: University of Hawaii Press, 1998

United States Department of Agriculture Soil Conservation Service in cooperation with The University of Hawaii Agricultural Experiment Station. **ISLANDS OF KAUA'I, OAHU, MAUI, MOLOKAI, AND LANA'I, STATE OF HAWAII**. August 1972

University of Hawaii, State of Hawaii. **KAUA'I COMMUNITY COLLEGE: LONG RANGE DEVELOPMENT PLAN**. September 1999

Section 12.0

Preparation of the Draft Environmental Assessment: Pre-Consultation Responses

Letters requesting pre-consultation comments on the proposed project were sent to government agencies and the private sector. This list is provided in Appendix A. The agencies listed below provided written comments. These comments and response letters have been reproduced and included in Appendix A.

Federal Agencies

U.S. Department of the Army, Engineer District Regulatory Branch (3/15/05)

State of Hawai'i Agencies

Hawai'i Department of Accounting & General Services (3/7/05)

Hawai'i Department of Business Economic Development & Tourism, Strategic Industries Division (3/9/05)

Hawai'i Department of Education (3/8/05)

Hawai'i Department of Health, Environmental Planning Office (7/1/04)

Hawai'i Department of Land & Natural Resources, Historic Preservation Division (3/8/05)

Hawai'i Department of Transportation (3/11/05)

Hawai'i Office of Hawaiian Affairs (3/22/05)

County of Kaua'i

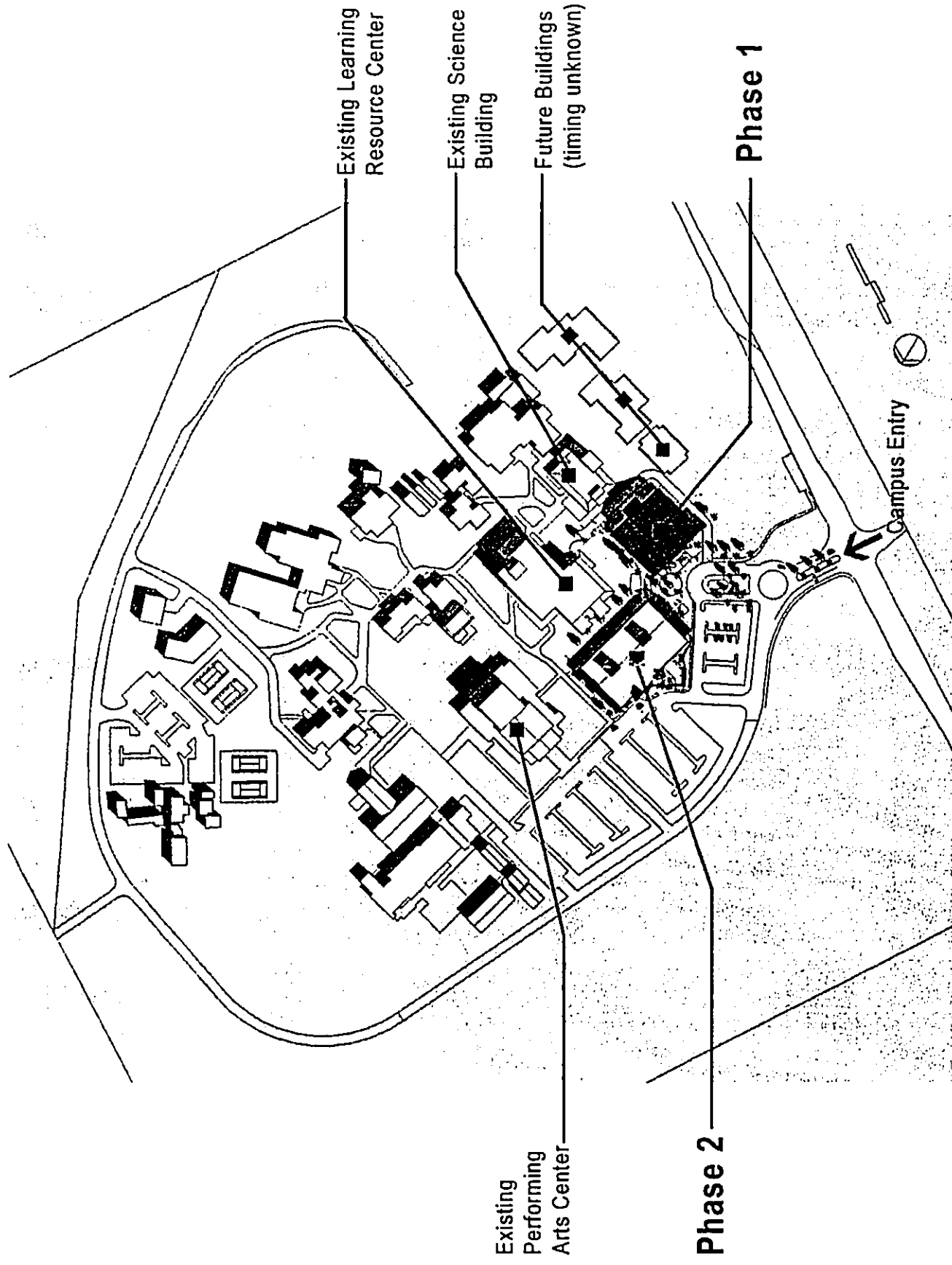
County of Kaua'i, Fire Department (3/7/05)

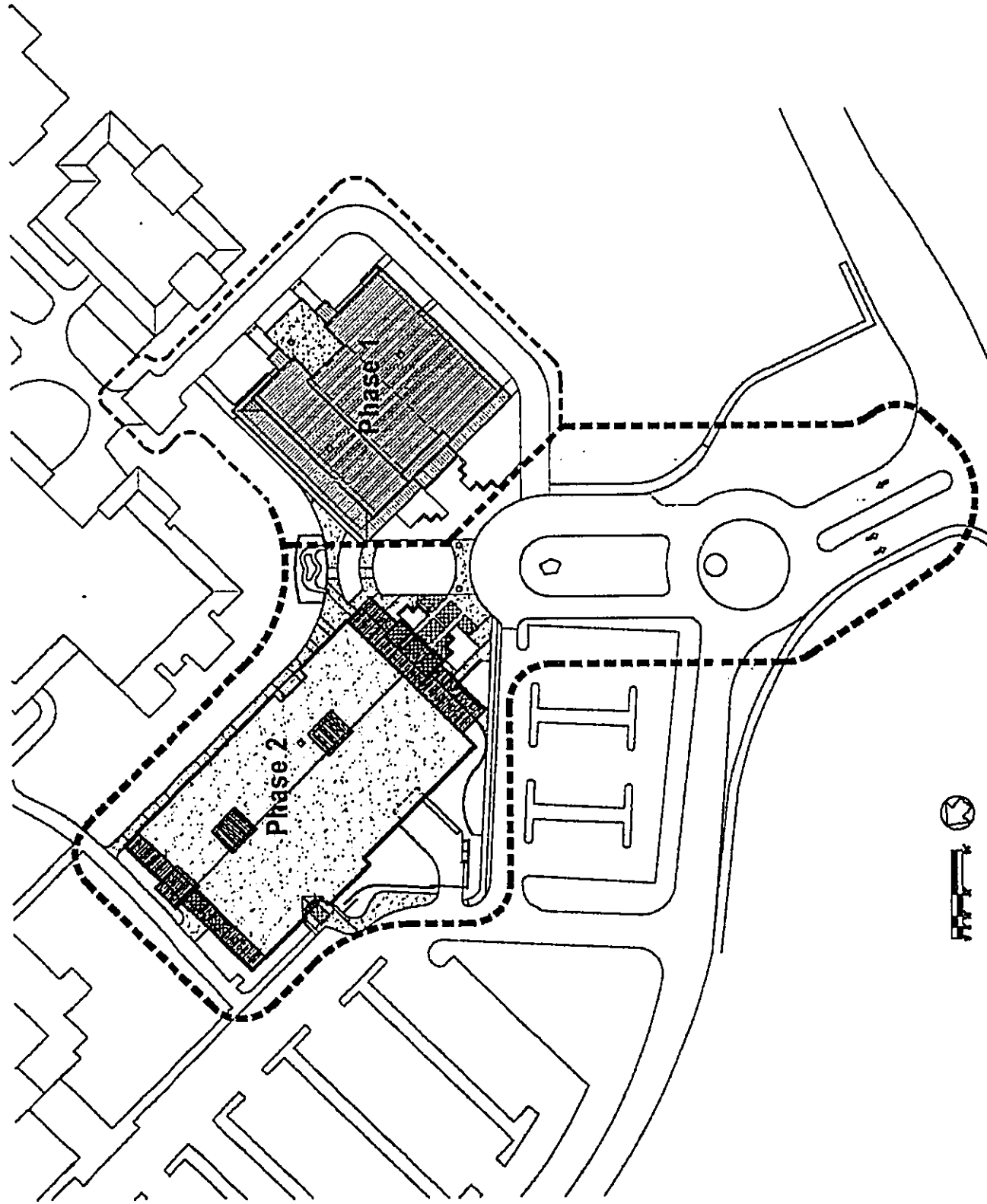
The Office of Environmental Quality Control (OEQC) was the only agency that offered comments to the DEA within the 30-day comment period. A copy of the letter, as well as the response, is attached in Appendix A. Changes to the DEA triggered by the agency comments are noted on pages 2 and 5 of the FEA and are in bold letters.

List of Exhibits
(Exhibits 1 to 9)

Final Environmental Assessment

Kaua'i Community College, University of Hawai'i
One Stop Center - Phase 1 & 2
Lihu'e, Kaua'i, Hawai'i

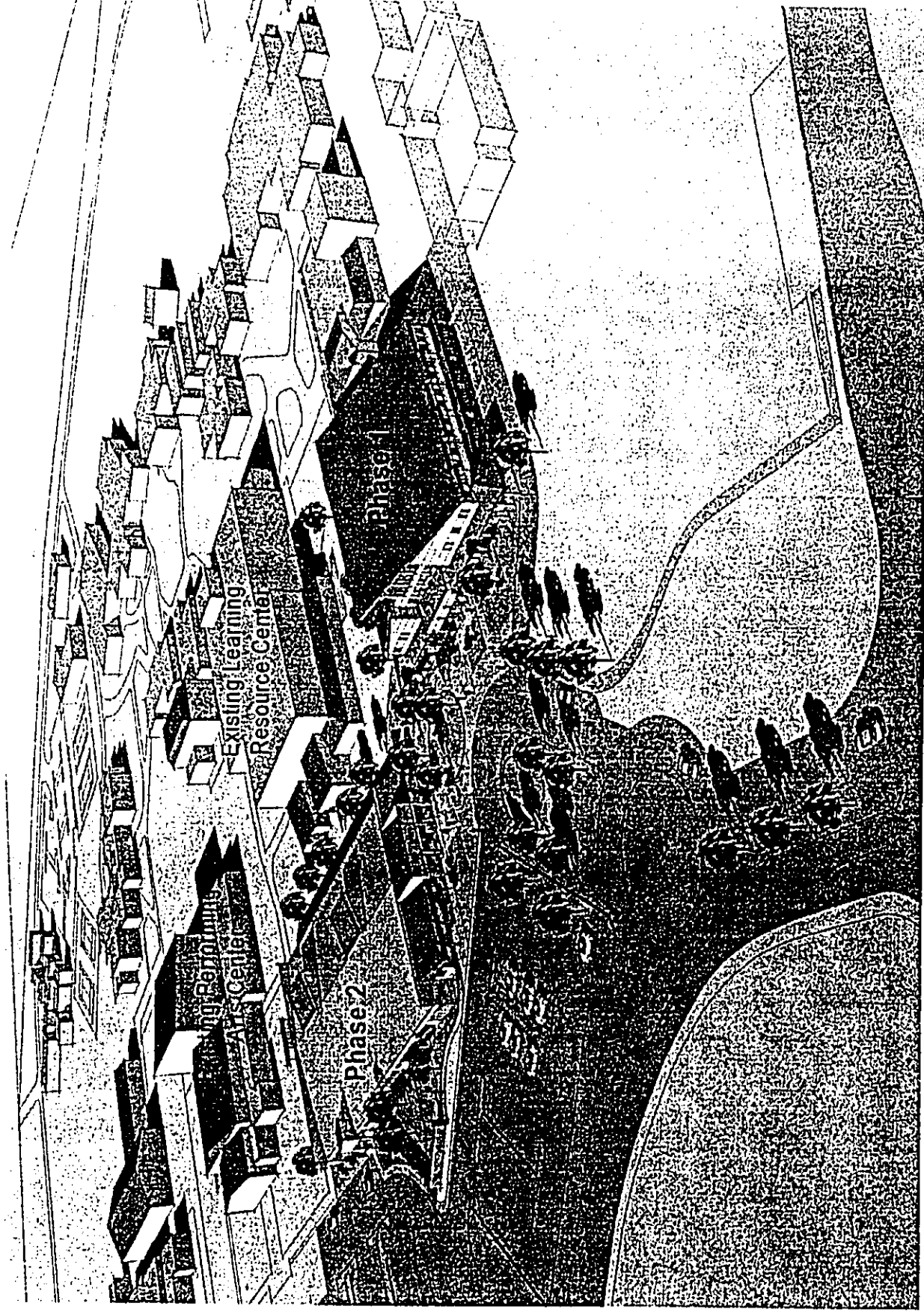




PHASE 1 AND 2 SITE PLAN
EXHIBIT 2



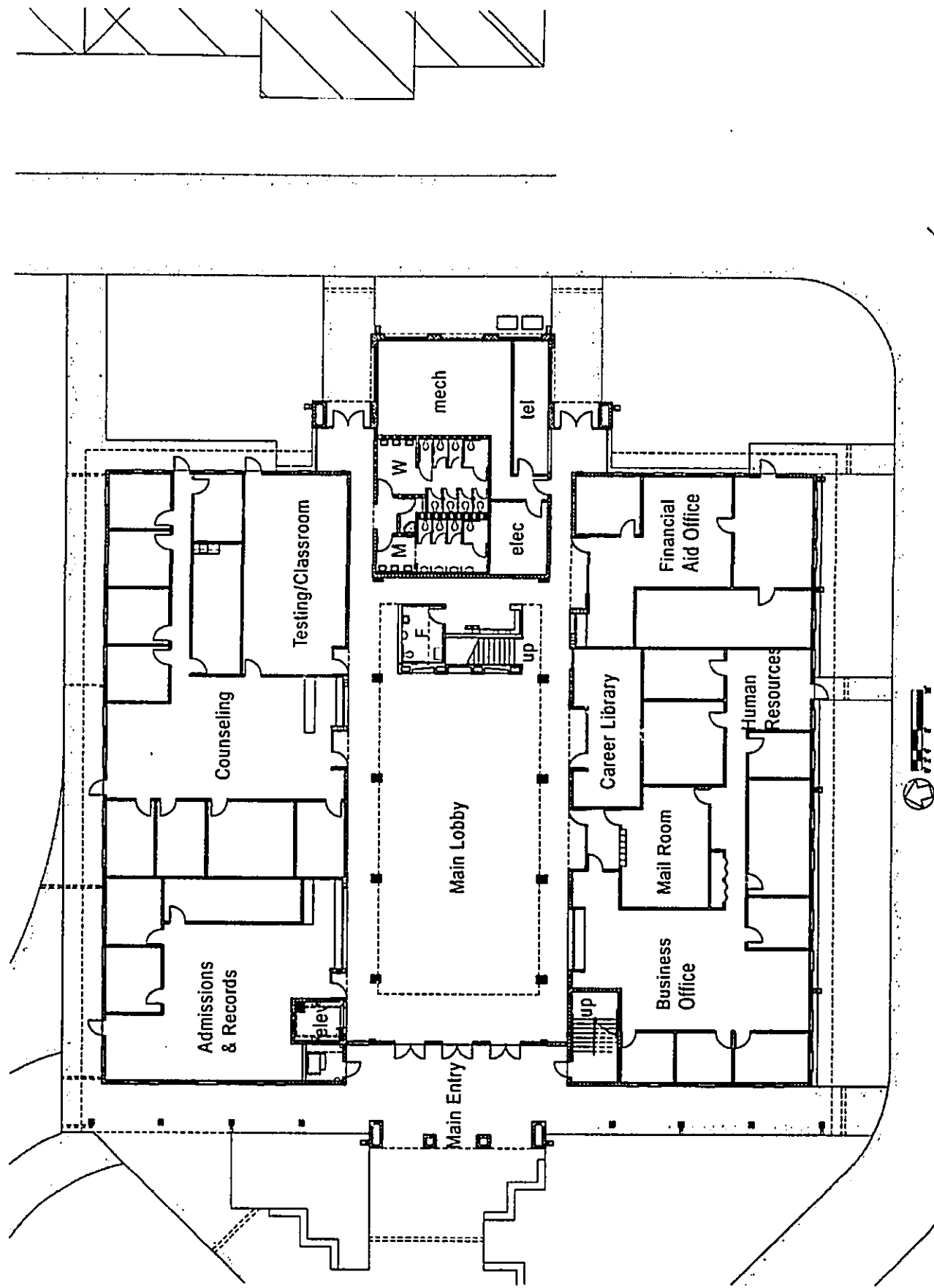
KAUAI COMMUNITY COLLEGE ONE-STOP CENTER
APRIL 2005



KAUAI COMMUNITY COLLEGE ONE-STOP CENTER
APRIL 2005



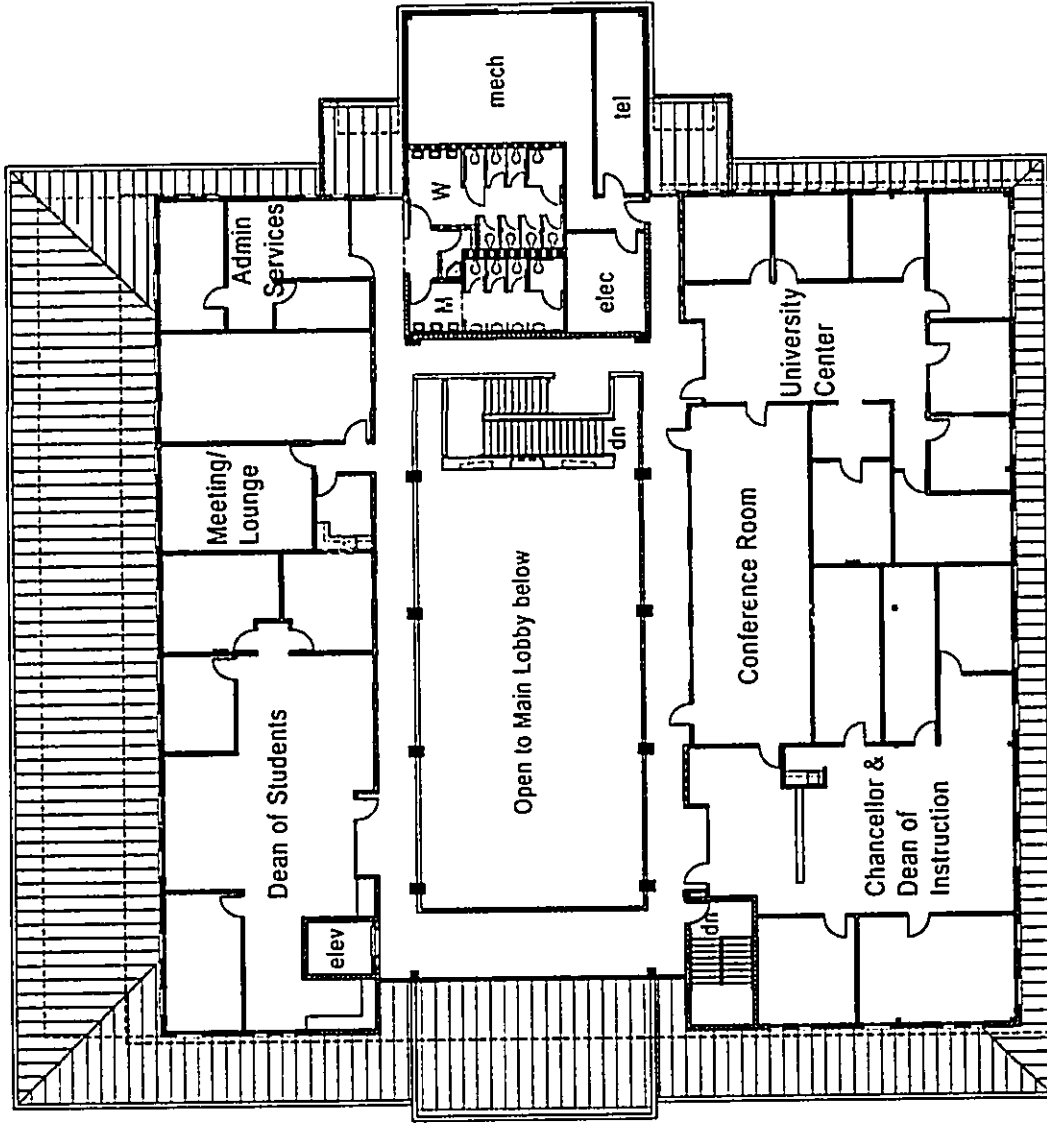
AERIAL PERSPECTIVE SHOWING PROPOSED
STRUCTURES IN RELATION TO EXISTING BUILDINGS
EXHIBIT 3



KAUAI COMMUNITY COLLEGE ONE-STOP CENTER
 APRIL 2005

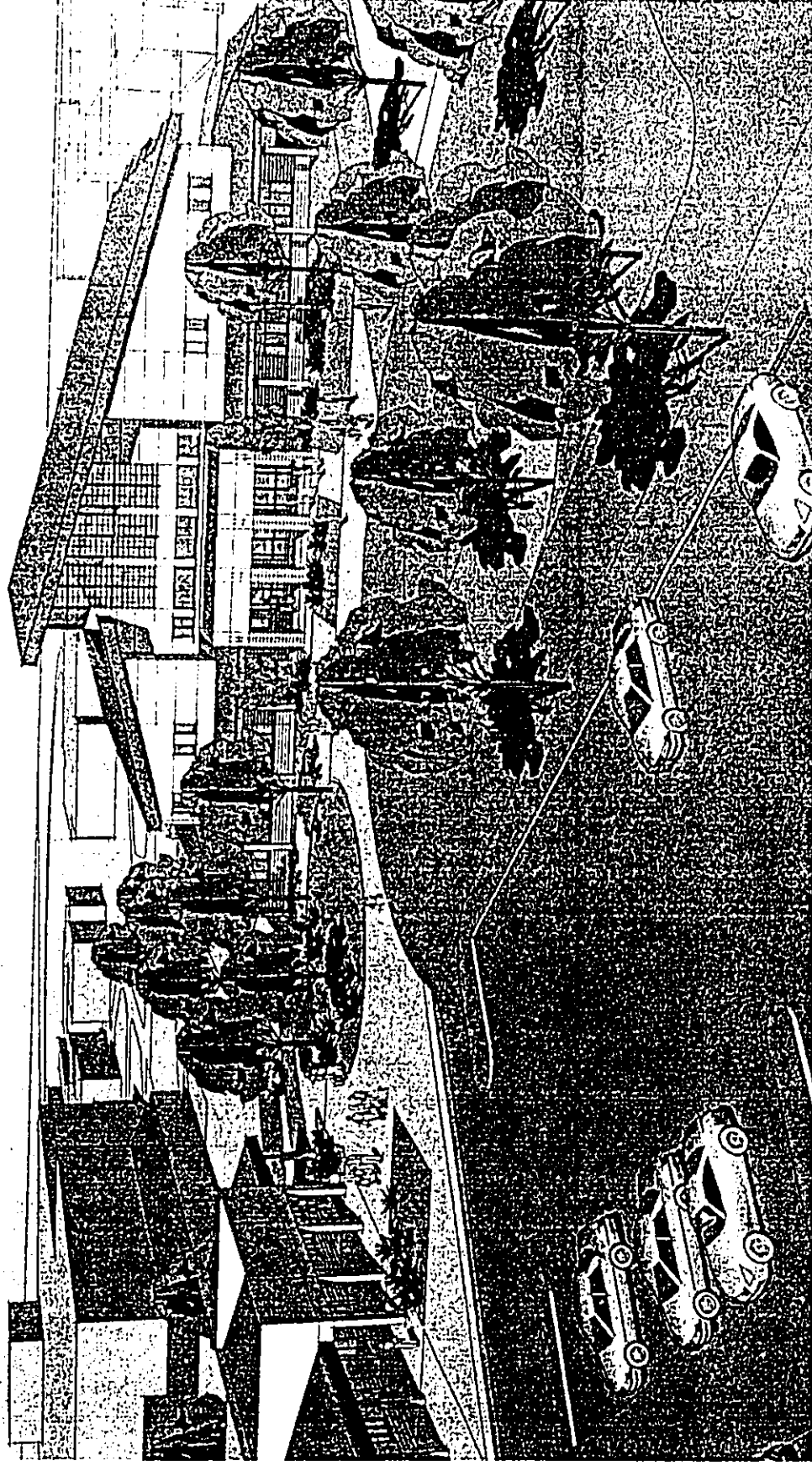


PHASE 1 FIRST FLOOR PLAN
 EXHIBIT 4



KAUAI COMMUNITY COLLEGE ONE-STOP CENTER
 APRIL 2005

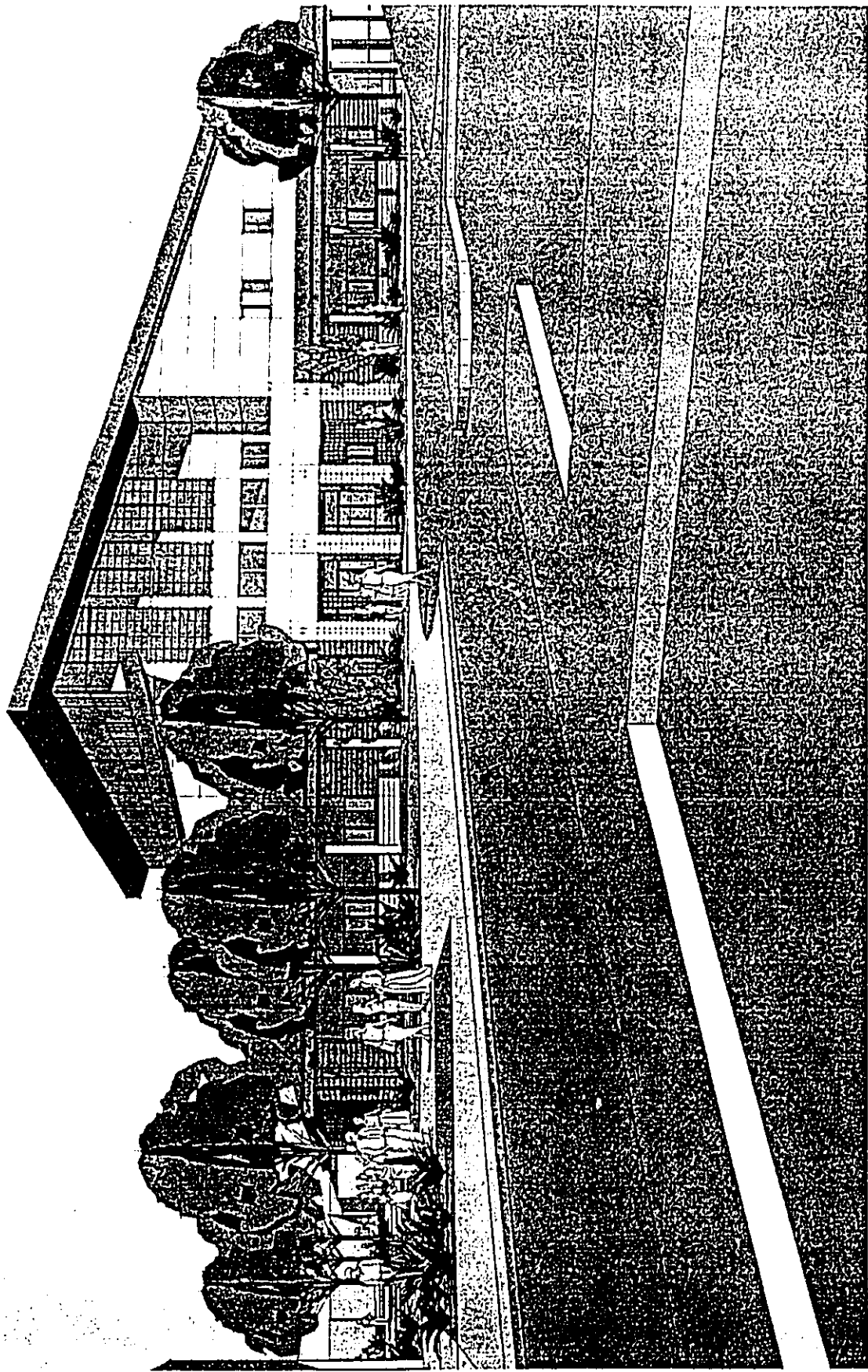
PHASE 1 SECOND FLOOR PLAN
 EXHIBIT 5



AERIAL PERSPECTIVE OF PHASE 1
BUILDING AND MAIN ENTRY DRIVE
EXHIBIT 6



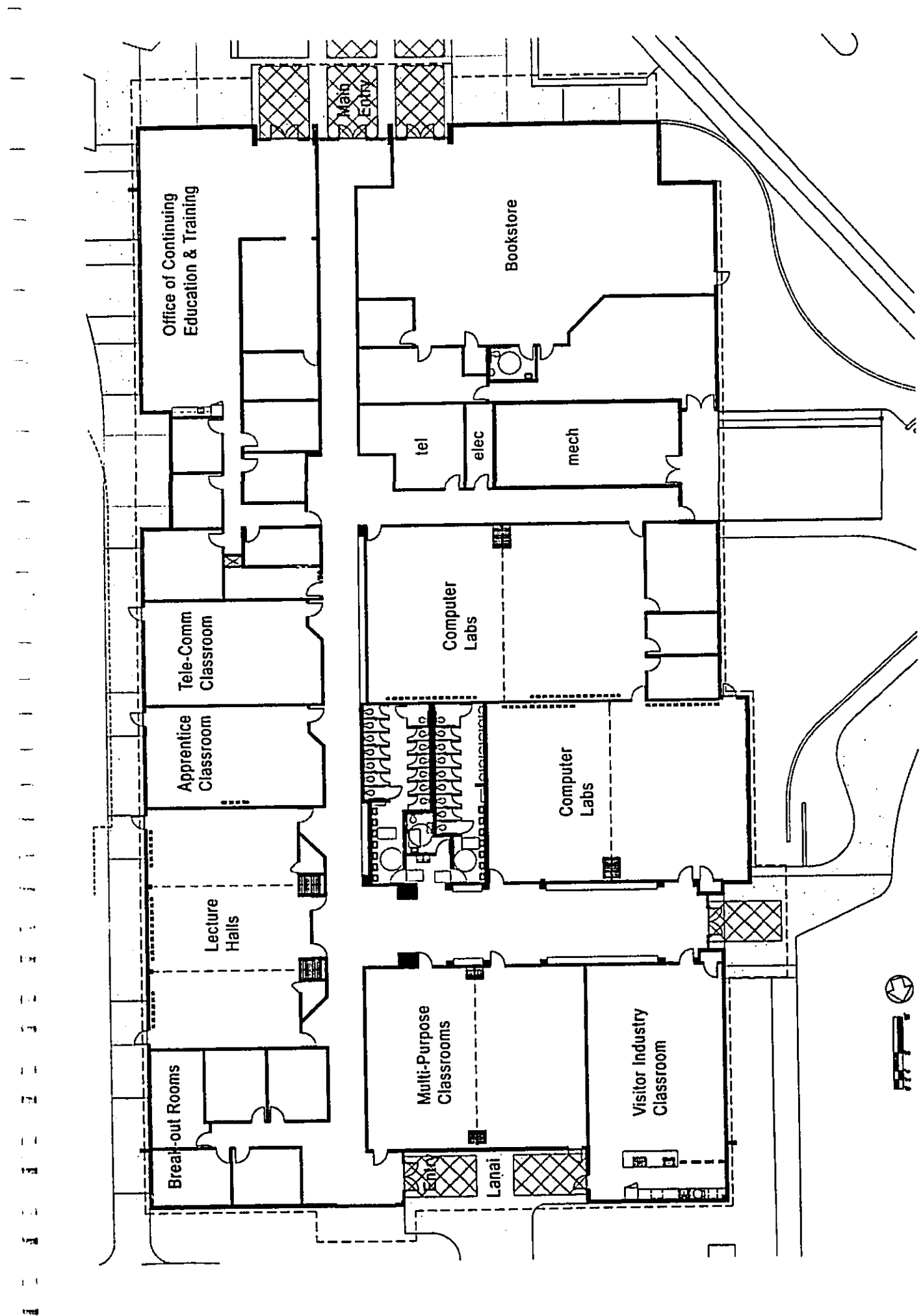
KAUAI COMMUNITY COLLEGE ONE-STOP CENTER
APRIL 2005



KAUAI COMMUNITY COLLEGE ONE-STOP CENTER
APRIL 2005



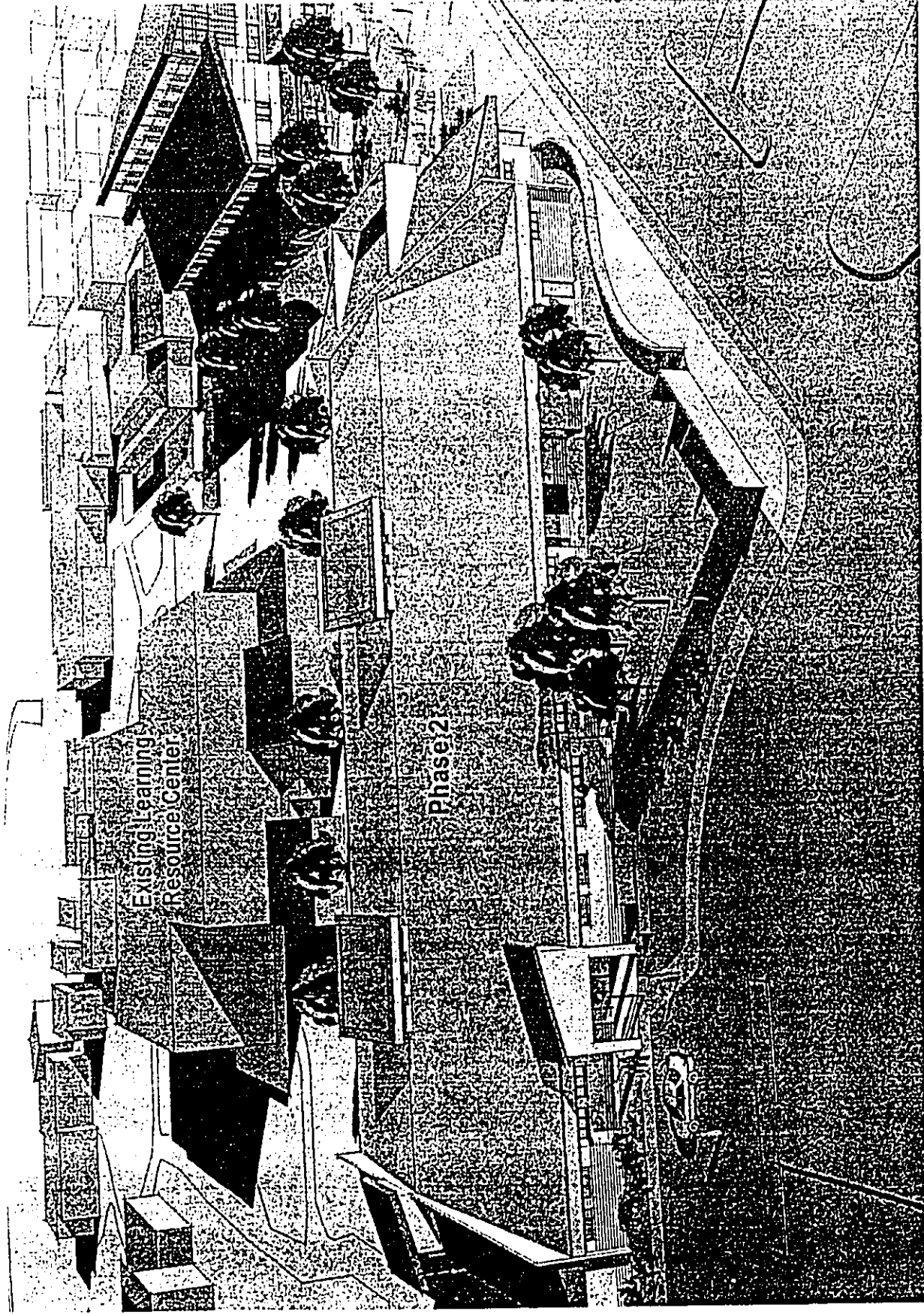
PERSPECTIVE VIEW OF
PROPOSED PHASE 1 BUILDING
EXHIBIT 7



PHASE 2 FIRST FLOOR PLAN
EXHIBIT 8



KAUAI COMMUNITY COLLEGE ONE-STOP CENTER
APRIL 2005



AERIAL PERSPECTIVE VIEW OF
PROPOSED PHASE 2 BUILDING
EXHIBIT 9



KAUAI COMMUNITY COLLEGE ONE-STOP CENTER
APRIL 2005

Exhibit 10
Archaeological and Cultural Impact Evaluation Study

Final Environmental Assessment

**Kaua'i Community College, University of Hawai'i
One Stop Center - Phase 1 & 2
Lihu'e, Kaua'i, Hawai'i**

**ARCHAEOLOGICAL AND CULTURAL IMPACT EVALUATION STUDY
IN SUPPORT OF DEVELOPMENT OF THE
"ONE-STOP CENTER,
KAUA'I COMMUNITY COLLEGE" PROJECT**

By

Hallett H. Hammatt, Ph.D.
and
David W. Shideler, M.A.

for

Design Lab

By

Cultural Surveys Hawai'i, Inc.

February 2004

Introduction

Cultural Surveys Hawai'i, Inc. was contracted by DesignLab to evaluate archaeological and cultural impacts of the development of a "One-Stop Center" on the Puhi campus of Kaua'i Community College. The proposed project involves construction of a two-story structure of approximately 35-40,000 net square feet (about 55-60,000 gross square feet) housing a variety of functions including offices of continuing education and training, academic support, student services, counselling, institutional support, a University Center, and a bookstore. The general location is at the southwest (Kaumuali'i Highway) side of the Kaua'i Community College between existing buildings and parking as shown in Figure 1. The project is to serve as the "front-door" to the campus. The precise extent of the project limits have not as yet been determined but assuming a footprint of approximately 30,000 square feet and applying UH's general project site allowance of 4 x footprint results in an estimated project site area of approximately 120,000 square feet.

Previous Archaeological Study

Stephen Palama carried out an archaeological reconnaissance of approximately 57-acres of the Kaua'i Community College campus back in 1973. While he did note certain features in the general vicinity including *lo'i*, *'auwai*, a Japanese cemetery, remains of an old plantation camp, and an old military complex none of these appear to have been near the present area of concern. He concluded (1973:2) that no further investigation was warranted. Cultural Surveys conducted an Archaeological Assessment of the Ka'umuali'i Highway corridor passing the Kaua'i Community College campus back in 1998 but had no concerns in this area. This study notes the absence of any *kuleana* Land Commission Awards near the present project area. We are not aware of any reported sites or finds in the area.

Prior Land Use

We understand that the vast majority, if not all of the present Kaua'i Community College campus was under sugar cane cultivation by Grove Farm Co., Inc. (The Lihue Plantation Co. Ltd. for many decades until c. 1970. The aerial photograph in the Foote et al. 1972 USDA soil survey study (Figure 2) shows the extent of the sugar cane in 1965.

Results of Field Inspection

Mr. William Folk of Cultural Surveys Hawai'i conducted a brief field inspection of the vicinity of the proposed project in December 2003. The immediate area of impact was observed to be a graded, established lawn (Figures 3-6). No indicators of any archaeological concern were observed.

Evaluation of Cultural Impact Issues

Possible cultural impact issues considered included gathering of natural resources, hunting, trails, *wahi pana* or "storied places", sacred places, archaeological sites and burial issues. Given that the project area was under sugar cane cultivation for many decades and that the project area was observed to be a graded, established lawn it was concluded that there were unlikely to be any cultural impact issues associated with the "one-stop" project.

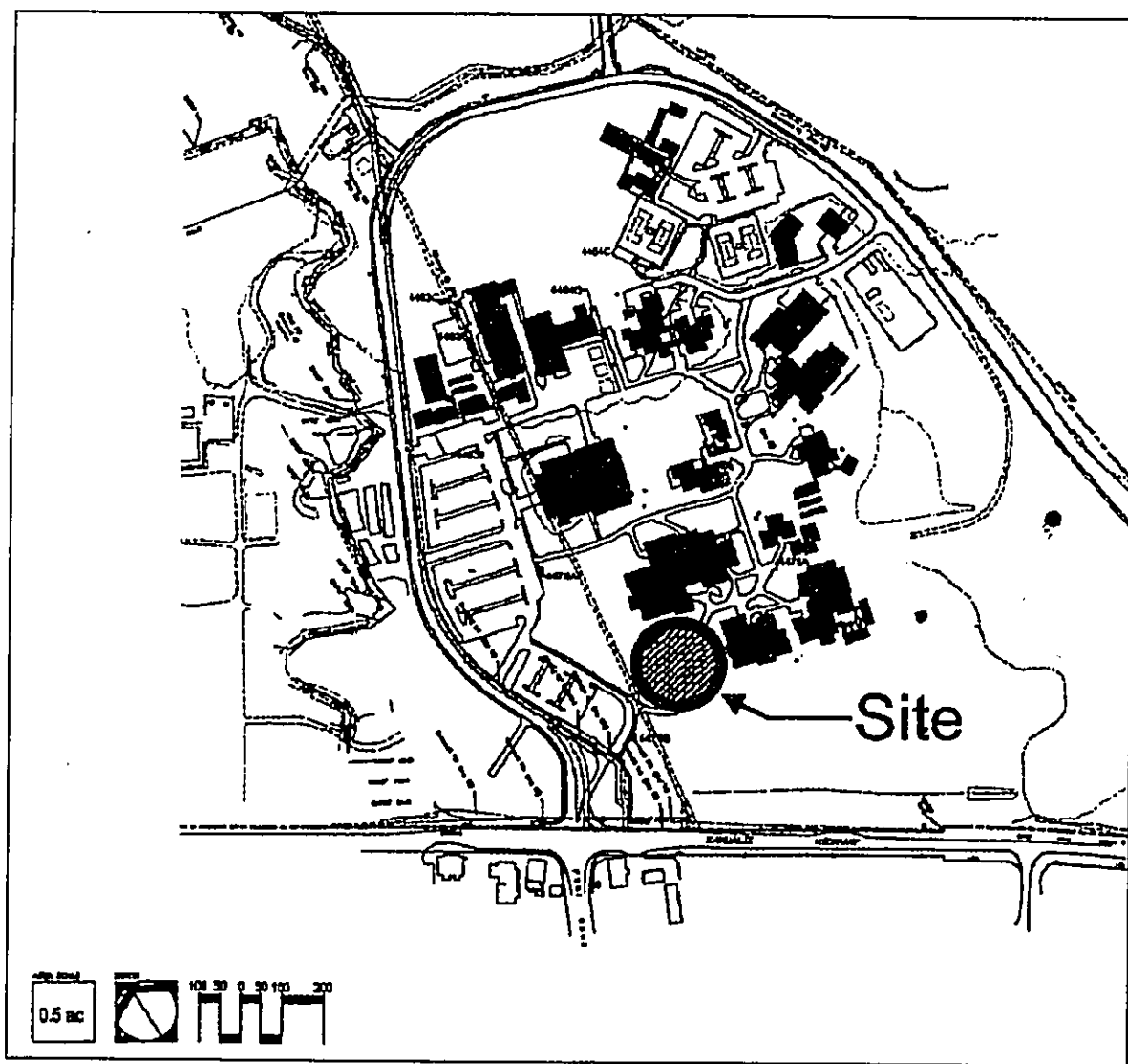


Figure 1 Location of Project Area in Southwest Portion of Kaua'i Community College Campus, Puhi, Kaua'i

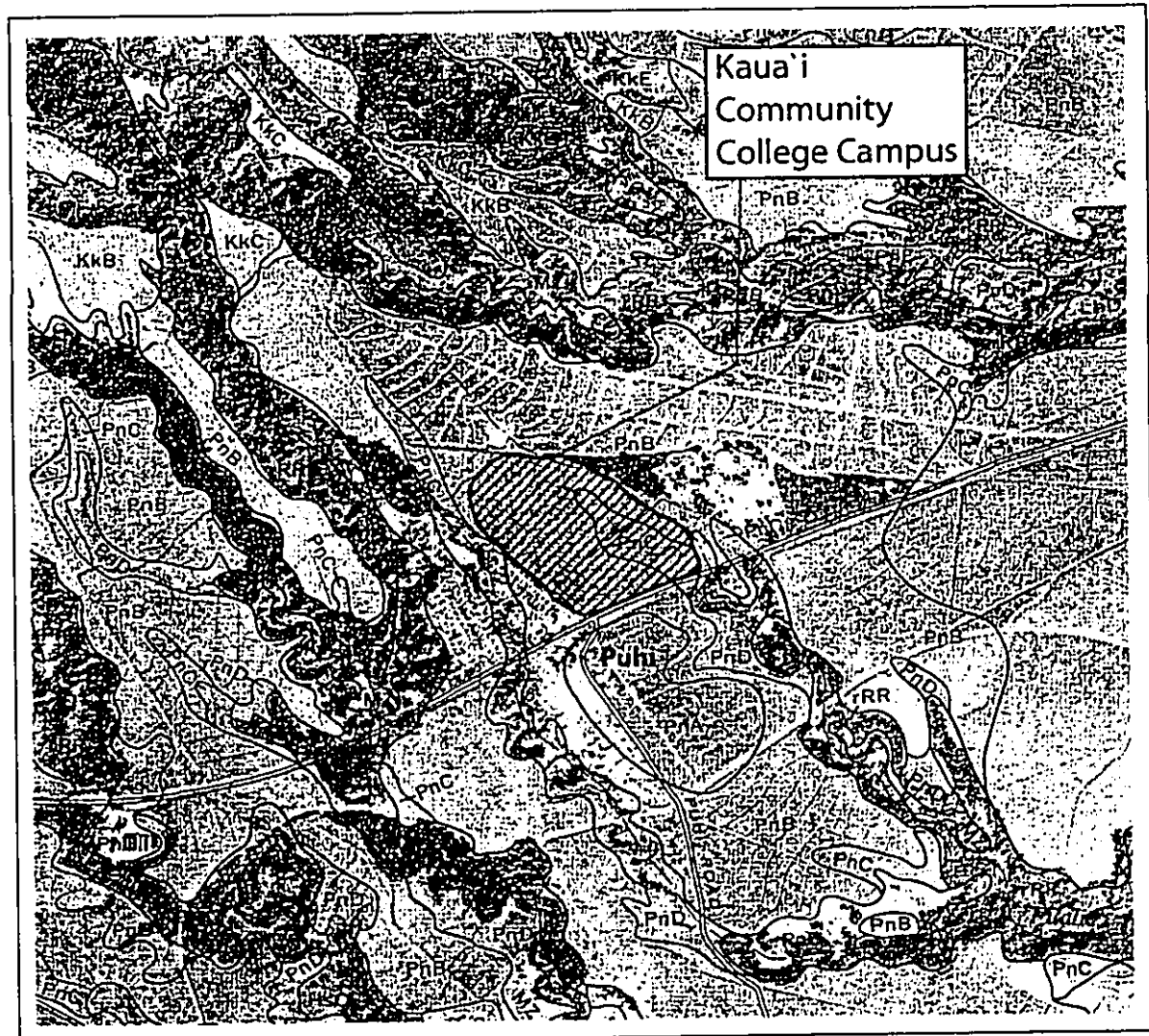


Figure 2 Aerial Photo Showing the Vicinity of the Kaua'i Community College Campus Under Sugar Cane Cultivation in 1965 (from Foote et al.)



Figure 3 General View of Project Area at Kaua'i Community College from Kaunualii Highway; View to North



Figure 4 General View of Project Area at Kaua'i Community College; View to West

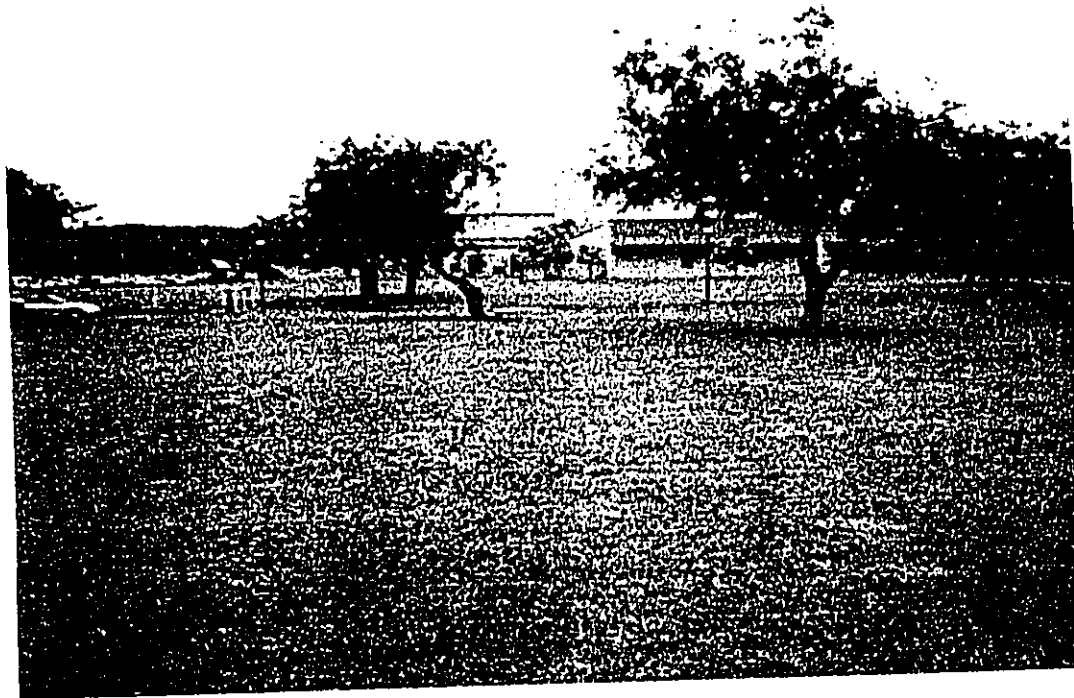


Figure 5 Close-up View of Project Area; View to North

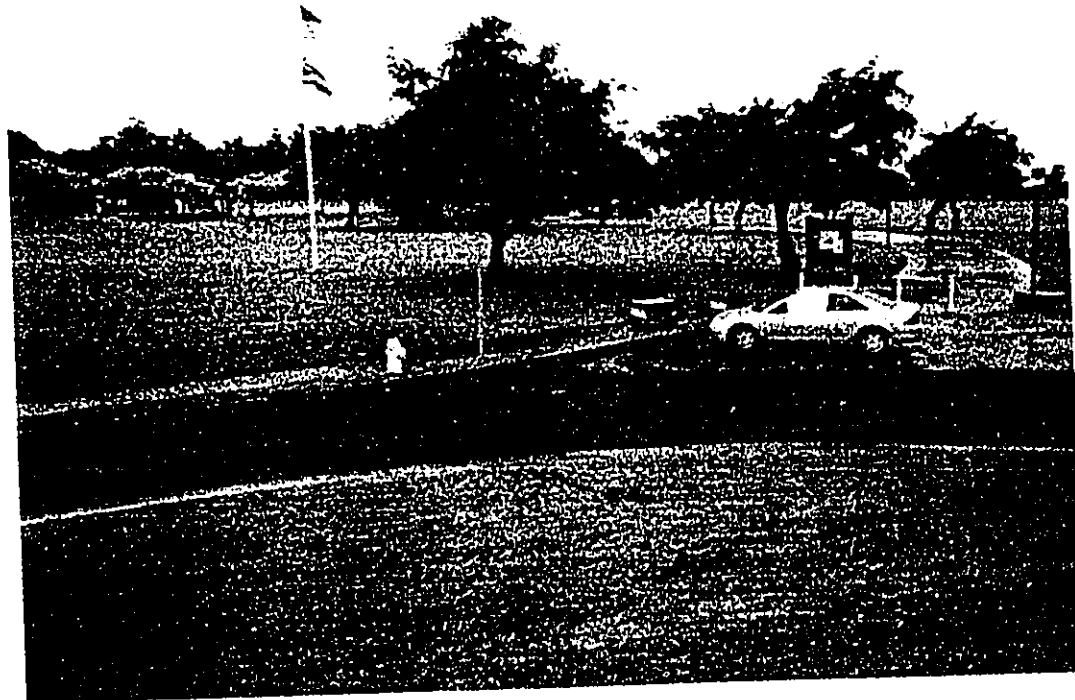


Figure 6 Close-up View of Project Area; View to Southeast

Results of State Historic Preservation Division Review

A summary of prior land use, archaeological studies in the vicinity, and field observations was sent to Ms. Nancy McMahon, Kaua'i Island archaeologist with the State Historic Preservation Division with a request for determination. The State Historic Preservation Division concluded "No further archaeological work is needed for the project." (Figure 7)

History of Consultation Regarding Cultural Impacts of the Project

Given the nature of former and present land use a modest program of consultation seemed appropriate and sufficient to make a "good faith" effort to consider possible cultural impacts. A summary of the proposed project and our findings was mailed to Dr. Pu'a Aiu of the Office of Hawaiian Affairs and to Mr. Dennis Chun of the Hawaiian Studies program of Kaua'i Community College on December 23, 2003. Follow-up telephone consultation was held with Mr. Chun of February 19, 2004 and with Dr. Aiu on February 24, 2004. A brief telephone conversation on the subject was also held with Ms. LaFrance Kapaka-Arboleda of the Kaua'i Office of Hawaiian Affairs and the Kaua'i/Ni'ihau Islands Burial Council on February 20, 2004. None of these parties expressed any concerns for adverse impacts to cultural practices by the proposed project as described.

Conclusion

Based on the research and consultations documented in this brief study we conclude that there is very little likelihood of any adverse impacts to archaeological, historical or cultural resources or cultural practices and furthermore that no further archaeological or cultural impact work is warranted.

Works Cited

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1972 *Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai and Lanai, State of Hawaii*, U.S. Dept. of Agriculture, U.S. Government Printing Office, Washington, D.C.
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1998 *Archaeological Assessment of an Approximately 11.5 Kilometer-long Portion of the Ka'umuali'i Highway Corridor Through Nāwiliwili, Ha'ikū, and Kōloa Ahupua'a, Island of Kaua'i* Cultural Surveys Hawai'i, Kailua, Hawai'i
- Palama, Stephen L.
1973 *The Archaeological Reconnaissance of a Portion of the New Kaua'i Community College at Puhi, Haiku Ahupua'a, Puna, Island of Kaua'i* Project 14-16 Archaeological Research Center Hawaii, Lāwa'i Hawaii.

LINDA LINGLE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING, ROOM 555
601 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707

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

DAN DAVIDSON
DEPUTY DIRECTOR - LAND

ERNEST Y.W. LAU
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCE ENFORCEMENT
ENGINEERING

FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

January 13, 2004

Mr. David Shideler
Cultural Surveys Hawaii
733 N. Kalaeo Avenue
Kailua, Hawaii 96734

LOG NO: 2004.0039
DOC NO: 0401NM05

Dear Mr. Shideler:

SUBJECT: Chapter 6E-8 Historic Preservation Review – Request for Determination of the Need for Archaeological Study in Support of Development of the "One-Stop Center Kauai Community College" Project, (Shideler, CSH, 2003)
[State/University of Hawai'i]
TMK: 3-4-5: 9
Puhii, Lihue, Kauai

Thank you for submitting the above letter report. We received the request for determination and the attached letter report on December 26, 2003, and provide the following comments (Shideler, 2003. *Request for Determination of the Need for Archaeological Study in Support of Development of the "One-Stop Center Kauai Community College" Project* (TMK: 3-4-5: 9) CSH ms.)

Based on your research and the brief field inspection, no historic sites were found nor are any likely to be present, given the extent of past land alterations and development. No further archaeological work is needed for this project.

We would only ask that a copy of the letter report be provided to our O'ahu office. If you have any questions, please call Nancy McMahon (808) 742-7033.

Aloha,

P. Holly McEldowney

P. Holly McEldowney, Administrator
State Historic Preservation Division

c. Iun Costa, Planning Department
Chair, Kaua'i Historic Preservation Review Commission

NM:ak

Figure 7. State Historic Preservation Division Review Letter for the Project

Exhibit 11
Air Quality Impact Assessment

Final Environmental Assessment

**Kaua'i Community College, University of Hawai'i
One-Stop Center - Phase 1 & 2
Lihu'e, Kaua'i, Hawai'i**

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Appendix A Traffic Assessment – Kauai Community College One-Stop Center

Air Quality Impact Assessment

One-Stop Center
Kauai Community College
3-1901 Kaunualii Highway, Lihue, Hawaii

February 2004

Prepared for:

Design Lab
47-233 Kamehameha Highway
Kaneohe, HI 96744

Prepared by:

The Environmental Company, Inc.
1001 Bishop St., Pauahi Tower, Suite 1240
Honolulu, HI 96813

Air Quality Impact Assessment – One-Stop Center

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EXECUTIVE SUMMARY

The University of Hawaii System (UHS) is proposing to construct a One-Stop Center (OSC) at the Puhii Campus of the Kauai Community College (KCC) on the island of Kauai, Hawaii. The proposed OSC will house a University Center, a bookstore, classroom and office space for student services, counseling, academic support and the office of Continuing Education and Training. The OSC will be a two-story structure with approximately 60,000 square feet of floor area and is intended to serve as the "front door" to the campus. Construction of this facility was cited as the highest priority in the "Long Range Development Plan" prepared for KCC. This air quality assessment will be part of the environmental assessment (EA) for the proposed development. To ascertain the potential air quality impact of the project, peak construction activities and peak vehicular traffic in the area during the OSC operation were predicted and used as a worst-case scenario.

The major potential short-term air quality impact of the project will occur from the emission of fugitive dust during construction. Adequate fugitive dust control can usually be accomplished by the establishment of a frequent watering program to keep bare-dirt surfaces in construction areas from becoming significant sources of dust. Other control measures such as limiting the area that can be disturbed at any given time, applying chemical soil stabilizers, mulching and/or using wind screens may be necessary. Open-bodied trucks should be covered at all times when in motion if they are transporting materials that could be blown away. Road cleaning or tire washing should be done on a regular basis as vehicles tracking dirt onto paved streets from unpaved areas are often a significant source of dust in construction areas. Paving of parking areas and/or establishment of landscaping as early in the construction schedule as possible can also lower the potential for fugitive dust emissions. Monitoring dust at the project boundary during the period of construction could be considered as a means to evaluate the effectiveness of the project's dust control program and to adjust the program if necessary.

During construction phases, emissions from engine exhausts (primarily consisting of carbon monoxide and nitrogen oxides) will also occur from on-site construction equipment, from vehicles used by construction workers, and from trucks traveling to and from the project. Increased vehicular emissions due to disruption of traffic by construction equipment, roadway lane closures and/or commuting construction workers can be alleviated by moving equipment and personnel to the site during off-peak traffic hours and by trying to avoid roadway lane closures during peak traffic periods. Much of the CO and VOC emissions are vehicular in origin, and would be exhausted over 20 miles of roadways. This would constitute a regional rather than a site-specific impact.

During operation, any long-term impacts on air quality near the One-Stop Center due to emissions from project related vehicular traffic will be negligible. The estimated emissions for all pollutants, including localized fugitive dust emissions, are well below the corresponding State-defined significance levels for a stationary source. Strictly speaking, the significant emission rates are intended to be applied to stationary point sources and not mobile sources such as vehicular traffic. Emissions from mobile sources are exempt or not regulated by the State. Nevertheless, it is believed that this

ACRONYMS

AAQS	Ambient Air Quality Standards
CFR	Code of Federal Regulations
CAB	Clean Air Branch (Hawaii DOH)
CO	Carbon Monoxide
EA	Environmental Assessment
EIS	Environmental Impact Statement
HAR	Hawaii Administrative Rules
HC	Hydrocarbons
HDDV	Heavy-duty Diesel Vehicle
HDOH	Hawaii Dept. of Health
H ₂ S	Hydrogen Sulfide
KCC	Kauai Community College
LDGV	Light-duty Gasoline Vehicle
mph	miles per hour
NOAA	National Oceanic and Atmospheric Administration
NO _x	Nitrogen Oxides
O ₃	Ozone
OSC	One-Stop Center
Pb	Lead
PM ₁₀	Particulate Matter ≤ 10 microns
PM _{2.5}	Particulate Matter ≤ 2.5 microns
PSD	Prevention of Significant Deterioration
SLAMS	State and Local Air Monitoring Stations
SO _x	Sulfur Oxides
TEC	The Environmental Company, Inc.
TSP	Total Suspended Particles
UHS	University of Hawaii System
USEPA	U.S. Environmental Protection Agency
VOCs	Volatile Organic Compounds

1.0 PROJECT OVERVIEW

1.1 INTRODUCTION

The University of Hawaii System (UHS) is proposing to construct a One-Stop Center (OSC) at the Puhi Campus of the Kauai Community College (KCC) on the island of Kauai, Hawaii (Figure 1.1). The proposed OSC will house a University Center, a bookstore, classroom and office space for student services, counseling, academic support and the office of Continuing Education and Training. The OSC will be a two-story structure with approximately 60,000 square feet of floor area and is intended to serve as the "front door" to the campus. Construction of this facility was cited as the highest priority in the "Long Range Development Plan" prepared for KCC. This air quality assessment will be part of the environmental assessment (EA) for the proposed development. To ascertain the potential air quality impact of the project, peak construction activities and peak vehicular traffic in the area during the OSC operation were predicted and used as a worst-case scenario.

The purpose of this study is to describe existing air quality in the project area and to assess the potential short and long-term direct and indirect air quality impacts that could result during the construction and operation of the proposed center. Measures to mitigate these impacts are suggested where possible and appropriate.

1.2 SITE DESCRIPTION

The proposed OSC will be located on the south end of the Kauai Community College campus and will be highly visible from the main entrance to the campus and from Kaunuaui Highway (Figure 1.2). The project area is estimated to be approximately 120,000 square feet in size fronting the Learning Resource Center and the Administrative Services buildings (Figure 1.3). The site has flat-to-gently-sloping terrain with very little vegetation (Figure 1.4).

The KCC campus sits on agricultural land and is surrounded by a residential area to the south-east (Figure 1.5), an industrial area to the southwest (Figure 1.6) and a diversified farm to the east (Figure 1.7). An elementary school (Figure 1.8) is located to the northeast of the campus and utilizes the main campus road as their access road. To the north of KCC lies Kiohaha Restaurant and Museum. The nearest shopping center (Kukui Grove Center) is located approximately one mile to the east of the campus.

A Hawaii Department of Transportation meteorological station is located at the Lihue Airport, approximately three miles to the east of the project site. A Hawaii Department of Health State and Local Monitoring Station (SLAMS) that monitors particulate matter less than 10 microns in diameter (PM₁₀) is located in the downtown area of Lihue at the District Health Office (Figure 1.9).

will provide a reasonable approach to ascertaining the significance of the project-related emissions of CO, VOC, and NO_x.

The estimated low level of air pollutant emissions at the project site would not cause significant impacts to the identified human receptors or the environment. It is conceivable, however, that indirect impacts on air quality could occur if the normal flow of ambient traffic on adjacent roadways is disrupted causing excess emissions at the site. Thus, the proposed facilities should be designed so as to minimize the disruption of traffic on adjacent roadways. Implementing other measures to mitigate long-term impacts is probably unnecessary and unwarranted.

2.0 AIR QUALITY IMPACT ASSESSMENT

2.1 AMBIENT AIR QUALITY STANDARDS

Ambient concentrations of air pollutants are regulated by both National and State ambient air quality standards (AAQS). National AAQS are specified in Section 40, Part 50 of the Code of Federal Regulations (CFR), while the State of Hawaii AAQS are defined in Chapter 11-59 of the Hawaii Administrative Rules (HAR). Table 1 summarizes both the National and the State AAQS. National and State AAQS have been established for particulate matter (PM₁₀), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), carbon monoxide (CO), ozone (O₃) and lead (Pb). There is also a National AAQS for PM_{2.5}, while the State AAQS include hydrogen sulfide. National AAQS are stated in terms of both primary and secondary standards for most of the regulated air pollutants. National primary standards are designed to protect the public health with an "adequate margin of safety." National secondary standards, on the other hand, define levels of air quality necessary to protect the public welfare from "any known or anticipated adverse effects of a pollutant." Secondary public welfare impacts may include such effects as decreased visibility, diminished comfort levels, or other potential injury to the natural or man-made environment, e.g., soiling of materials, damage to vegetation or other economic damage. In contrast to the National AAQS, Hawaii State AAQS are given in terms of a single standard that is designed "to protect public health and welfare and to prevent the significant deterioration of air quality."

Each of the regulated air pollutants has the potential to create or exacerbate some form of adverse health effect or to produce environmental degradation when present in sufficiently high concentrations for prolonged periods of time. The AAQS specify a maximum allowable concentration for a given air pollutant for one or more averaging times to prevent harmful effects. Averaging times vary from one hour to one year depending on the pollutant and type of exposure necessary to cause adverse effects. In the case of the short-term (i.e., 1- to 24-hour) AAQS, both National and State standards allow a specified number of exceedances each year.

The Hawaii AAQS are in some cases considerably more stringent than the comparable National AAQS. In particular, the Hawaii 1-hour AAQS for carbon monoxide is four times more stringent than the comparable national limit, and the State 1-hour limit for ozone is more than two times as stringent as the National 1-hour standard. The National 1-hour ozone standard is being phased out in favor of the new (and more stringent) 8-hour standard. The Hawaii AAQS for sulfur dioxide were relaxed in 1986 to make the State standards essentially the same as the National standards. In 1993, the State also revised its airborne particulate standards to follow those set by the Federal government. During 1997, the Federal government again revised its standards for particulate matter, but the new standards have been challenged in Federal court. To date, the Hawaii Department of Health (HDOH) has not made any revision to the State particulate matter standards.

2.2 REGIONAL AND LOCAL CLIMATOLOGY

Regional and local climatology significantly affect the air quality of a given location. Wind, temperature, atmospheric turbulence, mixing height and rainfall all influence air quality. Hawaii lies well within the belt of northeasterly trade winds generated by the semi-permanent Pacific high-pressure cell to the north and east. Although the climate of Hawaii is relatively moderate throughout most of the state and most of the year, significant differences in these parameters may occur from one location to another. Most differences in regional and local climates within the state are caused by the mountainous topography (NOAA, 2000).

The island of Kauai is about 33 miles long and 25 miles wide and has an area of 555 square miles. The eastern one third of the island consists of broadly eroded valley lands while the western two thirds are mostly mountainous. The outstanding features of the climate are the equable temperatures from day-to-day and season-to-season, the persistent northeasterly trade winds and the marked variation in rainfall from the wet to dry season and place-to-place. Although climatic conditions vary somewhat between the sites, long-term weather data available from the Lihue Airport, located approximately three miles to the east of the project site, is at least semi-representative.

The trade winds blow across the island during most of each year and the dominance of these winds has a marked influence on the climate of the area. Completely cloudless skies are quite rare. On the average, six tenths to seven tenths of the sky is covered by clouds during the daylight hours.

Trade-wind showers are relatively common. Although heavy at times, most of the showers are light and of short duration. The frequency and intensity of the showers increase toward the mountains to the west. Mt. Waialeale receives 486 inches of rain annually and has recorded an annual rainfall over 620 inches. Normal annual rainfall at the airport is over 40 inches. Three-fourths of this total falls during the seven-month wet season which extends from October through April. Widespread rainstorms, which account for much of the precipitation, occur most frequently during this period. The dry season includes the months of May through September with June, the driest month, receiving only 1.69 inches of rain on the average (Table 2).

Hurricanes and other severe windstorms are quite rare. Strong winds do occur at times in connection with storm systems moving through the area, but seldom cause extensive damage. Relative humidity is moderate to high; however, even during periods when the temperature and humidity are both high, the weather is seldom oppressive. This is due to the trade winds which provide a system of natural ventilation during most of the year.

2.3 PRIMARY AIR POLLUTANTS OF CONCERN

The primary air pollutants that pose a major concern to human health and the environment include the following:

O₃ - Ozone is formed in the atmosphere by chemical reaction of nitrogen oxide (NO_x) and volatile organic compounds (VOCs) in the presence of sunlight. In the upper atmosphere, ozone shields the earth from harmful ultraviolet radiation; however at ground level it can cause harmful effects in humans and plants.

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PM₁₀ and PM_{2.5}. The maximum air pollutant concentrations recorded in downtown Honolulu are well below the corresponding National and State AAQS.

The SO₂ in downtown Honolulu for the years 2000 to 2002 was consistently low compared to both the National and State AAQS. Annual average SO₂ concentrations range from 1 - 3 µg/m³. There were no recorded exceedances of the State or National AAQS for the 3-hour (1,300 µg/m³) or the 24-hour (365 µg/m³) standards during the three-year period.

Particulate matter (PM₁₀) concentrations at the Honolulu downtown monitoring station for the years 2000 to 2002 show annual average concentrations ranging from 14 to 16 µg/m³, while PM_{2.5} concentration range from 4 - 14 µg/m³. All values reported were within the State and National AAQS (50 µg/m³ and 150 µg/m³ for the average annual and annual values, respectively). PM₁₀ and PM_{2.5} data during New Years Eve are considered outliers or extreme values and were not included in the annual and 24-hour average values.

Carbon monoxide measurements show the highest 1-hour concentrations ranging from 3.9 to 5.2 mg/m³. The annual second-highest 8-hour concentrations ranged from 1.5 to 2.2 mg/m³. No exceedances of the State 1-hour (10 mg/m³) or 8-hour (5 mg/m³) AAQS were reported.

Nitrogen dioxide concentration is also monitored by HDOH at the Kapolei monitoring station on the island of Oahu. The average monthly concentrations of this pollutant ranged from 6 to 12 µg/m³ in 2001 and 7 to 11 µg/m³ for the year 2002. These were safely inside the State and National AAQS at 70 µg/m³ and 100 µg/m³, respectively.

The only available ozone measurements in the State of Hawaii were obtained at the Sand Island monitoring station also on the island of Oahu. The highest 1-hour concentrations for each year from 2000 to 2003 ranged from 98 to 106 µg/m³. There were no exceedances of the State AAQS (100 µg/m³ per year) recorded during the monitoring period.

Based on the data and discussion presented above, it appears likely that the State and National AAQS for SO₂, NO₂, and PM₁₀ are currently being met at the project site. Due to the abundance of ozone in the State of Hawaii, it is likely that the State AAQS for ozone may be exceeded on occasion based on the Sand Island measurements for this parameter. The abundance of ozone is greatly influenced by the amount of sunshine in the state. While carbon monoxide measurements at the Kapolei monitoring station suggest that concentrations are within the State and National standards, local "hot spots" may exist near traffic-congested intersections.

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NO₂ - Nitrogen Dioxide is a brownish, highly corrosive gas with a pungent odor. It is formed in the atmosphere from emissions of nitrogen oxides (NO_x). Sources of nitrogen oxides include electric utilities, industrial boilers, motor vehicle exhaust, and combustion of fossil fuels.

PM₁₀ and PM_{2.5} - Particulate matter less than 10 microns and 2.5 microns in aerodynamic diameter, respectively. The USEPA revised the National AAQS for particulate matter in 1987 to cover only PM₁₀, because these particles have the greatest potential for respiratory health impacts.

CO - Carbon Monoxide is a colorless, odorless, tasteless gas under atmospheric conditions. It is produced by the incomplete combustion of carbon fuels, with the majority of emissions in urban areas coming from transportation sources.

SO₂ - Sulfur Oxides are colorless gases that include SO₂. Emissions of SO₂ are largely from sources that burn fossil fuels such as coal and oil. On the island of Hawaii, a significant source of SO₂ emissions is from the on-going eruption of Kilauea Volcano.

Pb - Lead is a naturally occurring substance found in the environment that has been used as an ingredient in paint and gasoline. Particulates of Pb and its compounds are released to the air mainly from vehicle exhaust. Lead can be inhaled or ingested and can accumulate in the blood, bone, and soft tissue. The elimination of Pb in gasoline sold in the United States has greatly reduced the amount of Pb in the ambient air.

2.4 PRESENT AIR QUALITY

The OSC site is close to an industrial area which could be a potential source of air pollution. In addition, air pollution from agricultural activities in the area may have a significant impact on the air quality at the project site. Agriculture-related emissions in the Puhi area may include occasional dust and smoke impacts from nearby, large-scale sugarcane cultivation and harvesting operations. Natural sources of air pollutant emissions that also could affect the project area but cannot be quantified very accurately include the ocean (sea spray), plants (aero-allergens), wind-blown dust, and perhaps distant volcanoes on the island of Hawaii.

The HDOH has been monitoring ambient air quality in the State of Hawaii since 1957. Before 1971, there was only one air-monitoring site located on the island of Oahu. Today, the air-monitoring network has expanded to include fifteen national and local stations on the islands of Oahu, Kauai, Maui and the Big Island of Hawaii. The network of air quality monitoring stations, however, does not monitor the full complement of air quality parameters. The monitoring station on Kauai, for example, is limited to monitoring ambient particulate matter (PM₁₀). The present PM₁₀ data near the project area (Table 3) shows the maximum 24-hour PM₁₀ concentration and the annual average recorded to be four times less than the National and State AAQS and shows a declining trend from 2000 to 2002.

As a worse case example of ambient air quality in the State of Hawaii, we can examine the data from the Honolulu monitoring station located at 1250 Punchbowl Street in downtown Honolulu (Figure 1.10). An air pollutant emission summary for downtown Honolulu for the years 2000 - 2002 is shown in Table 4. The station monitors CO, SO₂,

3.0 PROJECT IMPACTS AND MITIGATION MEASURES

3.1 CONSTRUCTION IMPACTS

To determine the significance of emissions during construction of the OSC, the estimated annual emission levels can be compared to the significant emission rates as defined in the Hawaii Administrative Rules (HAR), Title 11, Chapter 60.1. The significant emission rate for NO_x, VOCs, and SO₂ is 40 tons per year while the State-defined emission rates for CO and PM₁₀ are 100 and 15 tons per year, respectively.

The construction of the proposed project would produce air pollutants mainly from two different types of sources: exhaust from construction equipment/machinery including vehicles, and fugitive dust emissions due to earth movement. These emissions are short-term in duration and would cease upon completion of the project. Air emissions could affect human receptors and some ecological receptors present at the project site. Potential human receptors that would be affected by project construction activities include construction workers, students and employees of the Kaula Community College, as well as the public accessing the various nearby facilities and occasional visitors to the project site.

Table 5 shows a hypothetical schedule for the construction of the OSC. The schedule would involve mobilization and site preparation such as setting up a mobile office and setting up the dust screen along the perimeter of the project site. This will be followed by site clearing and although the area is relatively flat, a small amount of cut and fill will be done to level the site. Soil stabilization and treatment including erosion controls will be done when needed. Mobilization, site cleaning, grading and all other earthwork is expected to last for six months and would require at least 20 to a maximum of 30 workers. The total area affected by site preparation will be approximately 120,000 sq. ft. Structural excavation, however, will be limited to 40,000 sq. ft. where the actual building will be erected.

The next phase of the construction schedule is the project build-out which includes excavation for anchors, foundation, and other load-bearing elements as well as erecting the structural framework of the building. This phase is expected to be the peak construction activity and will mobilize approximately 50 construction workers. The project build-out would also include carpentry work, electrical wiring, cable installation, plumbing and other utility services, as well as drainage and containment work and is expected to last for 10 months. The last two months of the project will be devoted to site cleaning, demobilization and inspection to ensure that all work done meets the specifications required by the owner.

3.1.1 Heavy Equipment and Vehicle Emissions During Construction

On-site mobile and stationary construction equipment will emit air pollutants from engine exhausts. This equipment is usually powered by diesel engines. Nitrogen oxides emissions from diesel engines can be relatively high compared to gasoline-powered equipment, but the standard for nitrogen dioxide is set on an annual basis and is not likely to be violated by short-term construction equipment emissions. Carbon monoxide emissions from diesel engines, on the other hand, are low and should be relatively insignificant compared to vehicular emissions on nearby roadways.

The appropriate equipment exhaust emission factors and their estimated hours of utilization for each phase of the construction are listed in Table 6a together with their corresponding USEPA Non-road emission factors obtained from the USEPA document "Non-road Engine and Vehicle Emissions Study" (USEPA, 1991).

Table 6b summarizes the estimated maximum construction air pollutant emissions. Some very conservative assumptions were used in this analysis as actual construction equipment to be employed is not known with certainty since a contractor has not been selected. Representative equipment was selected and usage was estimated. The usage estimates are likely significantly over-estimated.

A standard 40-hour, five-day work-week was assumed, with 10 holidays per year, giving 250 work-days per year. The maximum construction crew size was assumed to be 50 workers during the peak construction activities for at least 12 months. This scenario would generate maximum air quality impacts and was therefore used to calculate worst-case emissions. Each worker was assumed to drive a private, light-duty, gasoline-fueled vehicle to the site. This is a very conservative assumption, as workers would undoubtedly car-pool to some extent. Workers were further assumed to be coming from places as far as Kekaha, about 20 miles from the project site. The average commute of a worker is estimated at 24 miles per day. It is also assumed that at the peak of construction activities, four heavy-duty diesel trucks (water truck, cement truck, flatbed truck, etc.) will be used at the construction site and will travel approximately 40 miles per day. Other equipment is expected to remain on-site for the duration of the project.

Vehicular emissions data and emission factors for passenger truck and construction vehicles are shown in Table 7a. The emission factors were calculated using the USEPA Mobile Source Emission Factor Model (USEPA, 2002). Estimated maximum emissions (Table 7b) were calculated based on the total number of trips per year and the average distance per trip.

3.1.2 Fugitive Dust Emissions During Construction

Short-term direct and indirect impacts on air quality could occur during project construction. For a project of this nature, there are two potential types of air pollution emissions that could directly result in short-term air quality impacts during project construction: (1) fugitive dust; and (2) exhaust emissions from on-site construction equipment. Indirectly, there also could be short-term impacts from slow-moving construction equipment traveling to and from the project site, from a temporary increase in local traffic caused by commuting construction workers, and from the disruption of normal traffic flow caused by lane closures on adjacent roadways.

Project construction is expected to last for 18 months with six months allotted to mobilization, site preparation, and earthwork. Site mobilization is expected to last for a month involving 30 workers equipped with water trucks, flat bed trucks, dump trucks and a forklift. Site preparation is estimated to last two months and will include installing a turf-fence or wind-barrier on the perimeter of the project site for dust mitigation. Site clearing and dewatering will also be done when needed on the 120,000 sq. ft. project area. Once the site is cleared and fully enclosed with a turf-fence, grading, excavation, dredging, embankment soil stabilization or treatment including erosion control will be done on the 40,000 sq. ft. section of the project site where the OSC will be erected.

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Earthwork will involve 50 full-time workers and additional equipment to include a bulldozer, a pay loader, a scraper, a compactor, an excavator and a truck-mounted auger. Storm drains and pipe culverts will also be excavated at this time. All earthwork activities are scheduled to finish within four months after site clearing. Installation of the foundations and other load-bearing elements and anchors is expected to take approximately five months. No tunneling or boring is required during construction.

Once the building foundation and foundation walls have been erected, much of the heavy-duty equipment will be removed from the site except for the forklift, crane and the water truck. Air compressor and diesel-electric generators will be brought in for welding and carpentry work.

Fugitive dust emissions may arise from the grading and dirt-moving activities associated with site clearing and preparation work. The emission rate for fugitive dust from construction activities is difficult to estimate accurately. This is because of the variety of causes and because the potential for its generation varies greatly depending upon the type of soil at the construction site, the amount and type of dirt-disturbing activity taking place, the moisture content of exposed soil in work areas, and the wind speed. The USEPA (1995) has provided a rough estimate for uncontrolled fugitive dust emissions from construction activity of 1.2 tons per acre per month total suspended particulate matter (TSP) under conditions of "medium" activity, moderate soil silt content (30%), and precipitation / evaporation (P/E) index of 50. The corresponding emission rate for PM_{10} was estimated to be 36% of the TSP emissions (AP-42, Table 13.2.2-1) (USEPA, 1995). Using these assumptions on the 2.75 acre construction area for the OSC and the estimated four months of earth work, the calculated PM_{10} emissions due to earth movement would be about 4.75 tons per year for the OSC. Uncontrolled fugitive dust emissions at the project site would likely be somewhere near that level, depending on the amount of rainfall that occurs. In any case, State of Hawaii Air Pollution Control Regulations (HAR 60.1) prohibit visible emissions of fugitive dust from construction activities at the property line. Thus, an effective dust control plan for the project construction phase is essential.

3.1.3 Mitigation Measures

The major potential short-term air quality impact of the project will occur from the emission of fugitive dust during construction. Adequate fugitive dust control can usually be accomplished by the establishment of a frequent watering program to keep bare-dirt surfaces in construction areas from becoming significant sources of dust. In dust-prone or dust-sensitive areas, other control measures such as limiting the area that can be disturbed at any given time, applying chemical soil stabilizers, mulching and/or using wind screens may be necessary. Control regulations further stipulate that open-bodied trucks be covered at all times when in motion if they are transporting materials that could be blown away. Haul trucks tracking dirt onto paved streets from unpaved areas is often a significant source of dust in construction areas. Some means to alleviate this problem, such as road cleaning or tire washing, may be appropriate. Paving of parking areas and/or establishment of landscaping as early in the construction schedule as possible can also lower the potential for fugitive dust emissions. Monitoring dust at the project boundary during the period of construction could be considered as a means to evaluate the effectiveness of the project dust control program and to adjust the program if necessary.

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During construction phases, emissions from engine exhausts (primarily consisting of carbon monoxide and nitrogen oxides) will also occur from on-site construction equipment, from vehicles used by construction workers, and from trucks traveling to and from the project site. Increased vehicular emissions due to disruption of traffic by construction equipment, roadway lane closures and/or commuting construction workers can be alleviated by moving equipment and personnel to the site during off-peak traffic hours and by trying to avoid roadway lane closures during peak traffic periods.

The estimated emissions for all pollutants as summarized in Table 8, including localized fugitive dust emissions, are well below the corresponding significance levels. The low level of air pollutant emissions would not cause significant impacts to the identified human receptors or the environment. Much of the CO and VOC emissions is vehicular in origin, and would be exhausted over 20 miles or more of roadways. This would constitute a regional impact rather than a site-specific impact.

Project construction activities will also likely obstruct the normal flow of traffic at times to such an extent that overall vehicular emissions in the project area will temporarily increase. This only means to alleviate this problem will be to attempt to keep roadways open during peak traffic hours and to move heavy construction equipment and workers to and from construction areas during periods of low traffic volume. Thus, most potential short-term air quality impacts from project construction can be mitigated.

3.2 OPERATION IMPACTS

The KCC OSC is expected to operate 8 hours daily from Monday to Friday for 250 days a year and will be closed on weekends, as well as during state and federal holidays. To determine the air quality impact of OSC operations, potential emissions were based on a draft Traffic Assessment for the KCC OSC (Appendix A). The average weekday traffic in the area was estimated at 1,100 vehicles per day (550 entering and 550 exiting the area), with a morning peak hour of 85 vehicles entering the project site with the assumption that traffic generated in the area is all new (added). Vehicle approach and departure speed is assumed at 25 mph and the dwell or idling time is set at 3 minutes to allow cars to load and unload passengers. The approach and departure distance was set at 1-mile from the OSC with the assumption that any emissions more than one mile away from the OSC will not significantly affect the air quality in the vicinity of the One-Stop Center.

3.2.1 Vehicle Emissions

The proposed OSC will result in increased vehicular traffic on nearby roadways, potentially causing long-term impacts on ambient air quality in the vicinity of the KCC. Motor vehicles with gasoline-powered engines are significant sources of carbon monoxide, and they also emit nitrogen oxides and other pollutants. In urban and suburban areas, carbon monoxide emissions near congested roadway intersections are the usual issue. Diesel-powered buses and trucks, which are the primary source of nitrogen oxides and particulate matter, will not be common at the site and therefore are not expected to make a significant contribution to the air quality deterioration.

The USEPA Mobile Source Emission Factor Model (MOBILE6.2) was used to assess the impact of carbon monoxide emissions from vehicular traffic at the project site and compare to the "significant" emission rates as defined in the Hawaii Administrative

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Rules. Strictly speaking, the significant emission rates are intended to be applied to stationary point sources and not mobile sources such as vehicular traffic. Nevertheless, it is believed that this will provide a reasonable approach to ascertaining the significance of the project-related emissions of CO, VOC, and NO. If the project emissions are shown to be below the significant emission rates, this is usually taken to indicate that a more detailed assessment of the emissions is not warranted.

To evaluate the potential long-term impacts on air quality related to the operation of the OSC, the annual vehicular volume to the site was estimated at 137,500. Vehicles coming to and leaving the OSC will emit air pollution on approach, during idling and as they depart the area. Idling time is assumed to last for three minutes while cars load and unload passengers. To estimate the vehicular emissions during these modes of operation, the USEPA MOBILE6.2 was used in combination with the expected annual traffic volume. Emission factors for CO, VOC, and NO_x were calculated for the year 2006, the expected year of project completion. An average annual temperature of 84°F was assumed, and it was further assumed that the average approach and departure speed would be 25 mph.

Table 9 shows the resulting estimated composite and idle emission factors for LDGV including the resulting total annual approach and depart miles and the total annual idling times for the OSC. Carbon monoxide emissions are the most appreciable followed by VOCs, and NO_x. It is worth noting that CO emissions from LDGV are about five times higher per vehicle mile of travel than those for HDDV. The total vehicle miles and the annual idling time associated with the OSC operation were determined by assuming that vehicular emissions beyond 1-mile of the OSC will not significantly impact the air quality in the vicinity of the OSC. Therefore, the relevant approach and depart vehicle miles at the OSC were estimated based on the annual traffic volume and the assumption that each vehicle would idle for an average of 3 minutes at the loading and unloading area of the OSC.

The resulting estimated annual emissions for the OSC for the year 2006 are shown in Table 10 along with the significant thresholds for nitrogen oxides, PM₁₀, VOC, carbon monoxide and sulfur dioxide for the State of Hawaii. Carbon Monoxide emissions at the OSC were estimated at 45.34 tons per year, while VOC and NO_x emissions would amount to 11.02 and 2.3 tons per year, respectively. Emission rates during idling are the major contributing factor to the total emission as indicated in Table 10. This is a worst-case scenario as not all vehicles coming to the project site will stop to load and unload passengers and therefore the actual emission rate is expected to be much lower. In addition, emissions of CO and VOC can be expected to decrease with time as newer vehicles are phased in that must meet more stringent emission standards.

To ascertain the significance of the One-Stop Center emissions, the estimated annual emissions can be compared to the HAR significant emission rates. A comparison of the estimated annual emission rate at the OSC and the significant threshold level for the State of Hawaii shows that the OSC emissions will be substantially less than the defined significant emission rates.

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3.2.2 Mitigation Measures

Any long-term impacts on air quality near the One-Stop Center due to emission from project related vehicular traffic will be negligible. Annual emissions from vehicular traffic at the OSC will amount to a fraction of the State-defined significant emission rates, and thus it can be anticipated that any direct impacts on air quality from vehicular emissions will be minimal. It is conceivable, however, that indirect impacts on air quality could occur if the normal flow of ambient traffic on adjacent roadways is disrupted causing excess emissions at the site. Thus, the proposed facilities should be designed so as to minimize the disruption of traffic on adjacent roadways. Implementing other measures to mitigate long-term impacts is probably unnecessary and unwarranted.

4.0 REFERENCES

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Table 1. Summary of State of Hawaii and National Ambient Air Quality Standards

Pollutant	Units	Averaging Time	Maximum Allowable Concentration	
			National Primary	State Secondary of Hawaii
Particulate Matter (≤10 microns)	µg/m ³	Annual	50	50
		24 Hours	150	150
Particulate Matter (≤2.5 microns)	µg/m ³	Annual	15	15
		24 Hours	65	65
Sulfur Dioxide	µg/m ³	Annual	80	-
		24 Hours	365	-
		3 Hours	-	1300
Nitrogen Dioxide	µg/m ³	Annual	100	100
Carbon Monoxide	mg/m ³	8 Hours	10	-
		1 Hour	40	-
Ozone	µg/m ³	8 Hours	157	157
		1 Hour	235	235
Lead	µg/m ³	Calendar Quarter	1.5	1.5
		1 Hour	-	-
Hydrogen Sulfide	µg/m ³	1 Hour	-	35

^a Designated to prevent adverse effects on public health. Source: 40CFR Part 50.
^b Designated to prevent adverse effects on public welfare, including effects on comfort, visibility, vegetation, animals, aesthetic values, and soiling and deterioration of materials. Source: 40CFR Part 50.
^c Designated to protect public health and welfare and to prevent significant deterioration of air quality. Source: HAR 11-59-1.

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Table 2. Monthly Climate Summary for Selected Hawaii Cities, 1961-90.

Normal 1961-90	YRS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
Normal Monthly Maximum Temperature, Deg F														
Hilo, HI	30	79.8	79.8	79.5	79.8	81.2	82.7	83.0	83.6	83.8	83.2	81.4	80.0	81.5
Honolulu, HI	30	80.1	80.5	81.6	82.8	84.7	86.5	87.5	88.7	88.5	86.9	84.1	81.2	84.4
Kahului, HI	30	79.9	80.1	81.2	82.2	84.2	85.9	86.8	87.6	87.7	86.4	83.7	81.1	83.9
Lihue, HI	30	77.9	78.1	78.5	79.5	81.2	83.2	84.1	84.8	84.8	83.2	80.7	78.8	81.2
Normal Monthly Minimum Temperature, Deg F														
Hilo, HI	30	63.6	63.8	64.4	65.5	68.5	67.8	68.6	68.9	68.6	68.1	66.8	64.8	66.4
Honolulu, HI	30	65.6	65.4	67.2	68.7	70.3	72.2	73.5	74.2	73.5	72.3	70.3	67.0	70.0
Kahului, HI	30	63.3	63.4	64.6	66.1	67.0	69.0	70.5	70.8	69.8	69.2	67.6	65.1	67.2
Lihue, HI	30	65.3	65.1	66.9	68.5	70.3	72.5	73.7	74.2	73.5	72.0	70.3	67.1	70.0
Normal Monthly Precipitation (Inches)														
Hilo, HI	30	9.88	10.29	13.92	15.26	9.91	6.20	9.71	9.34	8.53	9.60	14.51	12.04	129.19
Honolulu, HI	30	3.55	2.21	2.20	1.54	1.13	0.50	0.59	0.44	0.78	2.28	3.00	3.80	22.02
Kahului, HI	30	4.14	2.87	2.72	1.84	0.77	0.27	0.38	0.49	0.35	1.23	2.59	3.27	20.92
Lihue, HI	30	5.89	3.33	4.17	3.50	3.15	1.69	2.13	1.78	2.37	4.41	5.45	5.15	43.00
Sunshine - Average Percent (%) Possible - Data through 1995														
Hilo, HI	45	47	48	42	35	36	43	41	41	43	38	33	37	40
Honolulu, HI	43	65	67	71	70	71	73	76	77	77	70	83	82	70
Kahului, HI	33	64	65	64	63	68	72	70	71	73	67	63	63	67
Lihue, HI	45	54	56	54	53	59	62	62	64	66	58	49	48	57
Wind - Average Wind Speed (mph)														
Hilo, HI	46	7.4	7.7	7.7	7.5	7.4	7.1	6.9	6.8	6.8	6.7	6.8	7.2	7.2
Honolulu, HI	46	9.5	10.1	11.3	11.8	11.8	12.8	13.1	12.9	11.2	10.5	10.7	10.4	11.3
Kahului, HI	23	10.8	11.1	12.3	13.3	13.2	14.7	15.6	14.8	12.9	12.0	11.8	11.3	12.8
Lihue, HI	45	11.0	11.5	12.7	13.3	12.7	13.1	13.7	13.1	11.7	11.5	12.3	11.8	12.4

Source: National Oceanic and Atmospheric Administration (NOAA), 2000, National Climatic Center, Asheville, NC.

Air Quality Impact Assessment – One-Stop Center

Table 3. PM₁₀ Data for the Island of Kauai, Years 2000 – 2002.

Pollutant	Average Time	SAAQS (µg/m ³)	NAAQS (µg/m ³)	Maximum Concentration (µg/m ³)			Number of Exceedances SAAQS			Number of Exceedances NAAQS		
				2000	2001	2002	2000	2001	2002	2000	2001	2002
PM ₁₀	24 hrs	150	150	39	31	27	0	0	0	0	0	0
	Annual	50	50	18	17	14	0	0	0	0	0	0

Source: Annual Summary: Hawaii Air Quality Data CY 2000, 2001, and 2002. HDOH, Clean Air Branch, Honolulu, Hawaii.

Table 4. Annual Summaries of Ambient Air Quality Measurements in Downtown Honolulu.

Pollutant	Average Time	SAAQS (µg/m ³)	NAAQS (µg/m ³)	Maximum Concentration (µg/m ³)			Number of Exceedances SAAQS			Number of Exceedances NAAQS		
				2000	2001	2002	2000	2001	2002	2000	2001	2002
CO	1 hr	10,000	40,000	3,990	5,244	3,990	0	0	0	0	0	0
	8 hrs	5,000	10,000	1,753	2,209	1,582	0	0	0	0	0	0
PM ₁₀	24 hrs	150	150	83	83	90	0	0	0	0	0	0
	Annual	50	50	14	16	15	0	0	0	0	0	0
PM _{2.5}	24 hrs	—	65	52	56	53	—	—	—	—	—	0
	Annual	—	15	14	14	4	—	—	—	—	—	0
SO ₂	3 hrs	1,300	1,300	65	45	30	0	0	0	0	0	0
	24 hrs	365	365	9	25	9	0	0	0	0	0	0
	Annual	80	80	1	2	3	0	0	0	0	0	0

Source: Annual Summary: Hawaii Air Quality Data CY 2000, 2001, and 2002. HDOH, Clean Air Branch, Honolulu, Hawaii.

Table 5. Hypothetical Schedule of Construction Activities for the One-Stop Center.

Construction Activities and Estimated Duration	Construction Months																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Mobilization	█																	
Site Preparation	█	█	█															
Earthwork			█	█	█	█	█											
Foundation and Load Bearing Elements					█	█	█	█	█	█								
Drainage and Containment										█	█	█	█					
Utility Services										█	█	█	█	█	█	█	█	
Clean Out / Demobilization																		█

Air Quality Impact Assessment – One-Stop Center

Table 6a. USEPA Non-road Emission Factors Source Data for Construction Equipment.

Equipment Type (a)	No. of Units	Rated HP (b)	Load Factor (c)	Hours per Day (d)	Days per Week (d)	Total Weeks (d)	USEPA Non-road Emission Factors (g/hp-hr) (e)					Source Category
							CO	VOC	NO _x	SO _x	PM ₁₀	
Air Compressor	1	200	0.480	8	5	68	5.00	1.20	8.00	0.93	1.00	Air Compressor
Excavator	2	58	0.570	8	5	32	5.20	0.70	10.75	0.93	1.44	Excavator
Crane	1	194	0.430	8	5	68	4.20	1.28	10.30	0.87	1.44	Crane
Forklift	2	215	0.300	8	5	78	8.08	1.57	14.00	0.93	1.60	Forklift
Grader	1	125	0.610	8	5	32	3.80	1.50	9.60	0.87	1.00	Grader
Compactor	1	5	0.430	8	5	32	3.10	0.80	9.30	0.93	0.90	Plate Compactor

- (a) Source of Data: Hypothetical. All equipment is diesel-fueled, unless otherwise indicated.
- (b) Source of Data: SCAQMD 1993.
- (c) Source of Data: USEPA 1997.
- (d) Source of Data: Hypothetical.
- (e) Source of Data: USEPA 1991.

Table 6b. Estimated Maximum Emissions for Construction Equipment (a).

Equipment Type	Emissions (tons/year)				
	CO	VOC	NO _x	SO _x	PM ₁₀
Air Compressor	1.101	0.264	1.781	0.205	0.220
Excavator	0.488	0.063	0.968	0.084	0.130
Crane	0.803	0.241	1.970	0.168	0.275
Forklift	1.792	0.464	4.141	0.275	0.473
Grader	0.409	0.161	1.033	0.094	0.108
Compactor	0.009	0.002	0.028	0.003	0.003
Total Emissions	4.583	1.196	9.901	0.828	1.209

- (a) Calculated based on one year construction period.

Air Quality Impact Assessment – One-Stop Center

Table 7a. Emission Source Data for Construction Vehicles.

Equipment Type	Total Trips per Year (a)	Round Trip Distance (miles) (b)	Mobile6.2 Emission Factors (g/mile) (c)					Source Category
			CO	VOC	NO _x	SO _x	PM ₁₀	
Employee Vehicles	12,500	24	12.91	0.81	0.78	neg.	neg.	LDGV
Trucks	1,250	40	3.15	0.67	7.04	neg.	neg.	HDDV

(a) Conservative estimate.

(b) The round trip distance was assumed to be 24 miles per day for passenger vehicles and 40 miles per day for construction trucks.

(c) Source of Data: The Mobile 6.2 model output.

Table 7b. Estimated Maximum Emissions for Construction Vehicles (a)

Equipment Type	Emissions (tons/year)				
	CO	VOC	NO _x	SO _x	PM ₁₀
Employee Vehicles	4.270	0.268	0.259	neg.	neg.
Trucks	0.174	0.037	0.388	neg.	neg.

(a) Calculated for one year of construction.

Air Quality Impact Assessment – One-Stop Center

Table 8. Summary of the Estimated Maximum Construction Air Pollutant Emissions

Equipment Type	Estimated Emissions (tons/year)				
	CO	VOC	NO _x	SO _x	PM ₁₀
Fugitive Dust Emissions					4.75
Equipment Emissions	4.58	1.20	9.90	0.83	1.21
Vehicular Emissions	4.44	0.30	0.65	0.00	0.00
Total	9.02	1.50	10.55	0.83	5.61
HAR Significance Emission Rate (a)	100	40	40	40	15

(a) As defined in Hawaii Administrative Rules, Title 11, Chapter 80.1.

Table 9. Estimated Annual Vehicular Volume at the OSC and the Emission Factors for Composite and Idling Operation (a).

Emissions Category	Annual Volume of Vehicles	Approach / Depart Distance (Miles)	Annual Idle Time (Minutes)	CO	VOC	NO _x	SO _x	PM ₁₀	Unit
Composite (b)	275,000	2		10.12	1.11	0.80	neg.	neg.	grams/ml
Idling (c)	137,500		412,500	88.225	22.755	4.080	neg.	neg.	grams/min

(a) PM₁₀ emission factors pertain to exhaust emissions only

(b) Composite emission factors pertain to an average vehicle speed of 25 mph.

(c) Idle emission factors base on 2.5 mph speed.

Table 10. Estimated Annual Air Pollutant Emissions from OSC Operation (a).

Emission Category	Estimated Emissions (tons/year)				
	CO	VOC	NO _x	SO _x	PM ₁₀
Composite Emissions (b)	6.135	0.673	0.485	Neg.	Neg.
Idling Emissions (c)	39.207	10.347	1.846	Neg.	Neg.
Total	45.343	11.020	1.846	Neg.	Neg.
Significance Threshold (d)	100	40	40	40	15

- (a) PM₁₀ emission factors pertain to exhaust emissions only
- (b) Composite emission factors pertain to an average vehicle speed of 25 mph.
- (c) As defined in Hawaii Administrative Rules, Title 11, Chapter 60.1.
- (d) Idle emission factors base on 2.5 mph speed.

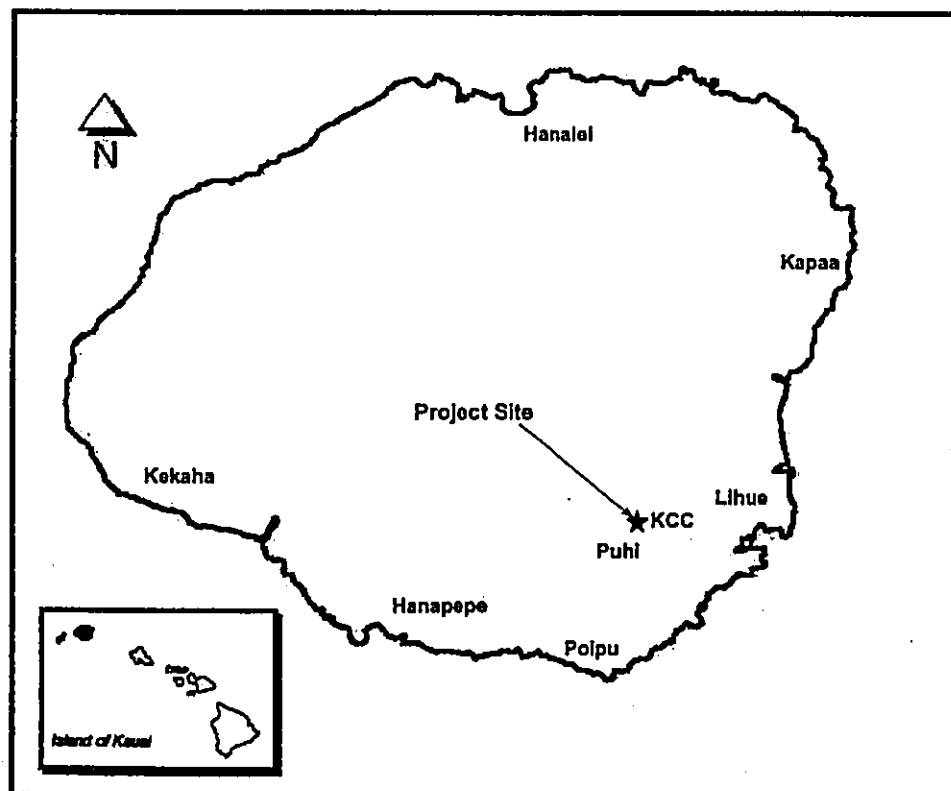


Figure 1.1 Location Map, One-Stop Center, Kauai Community College, Kauai.

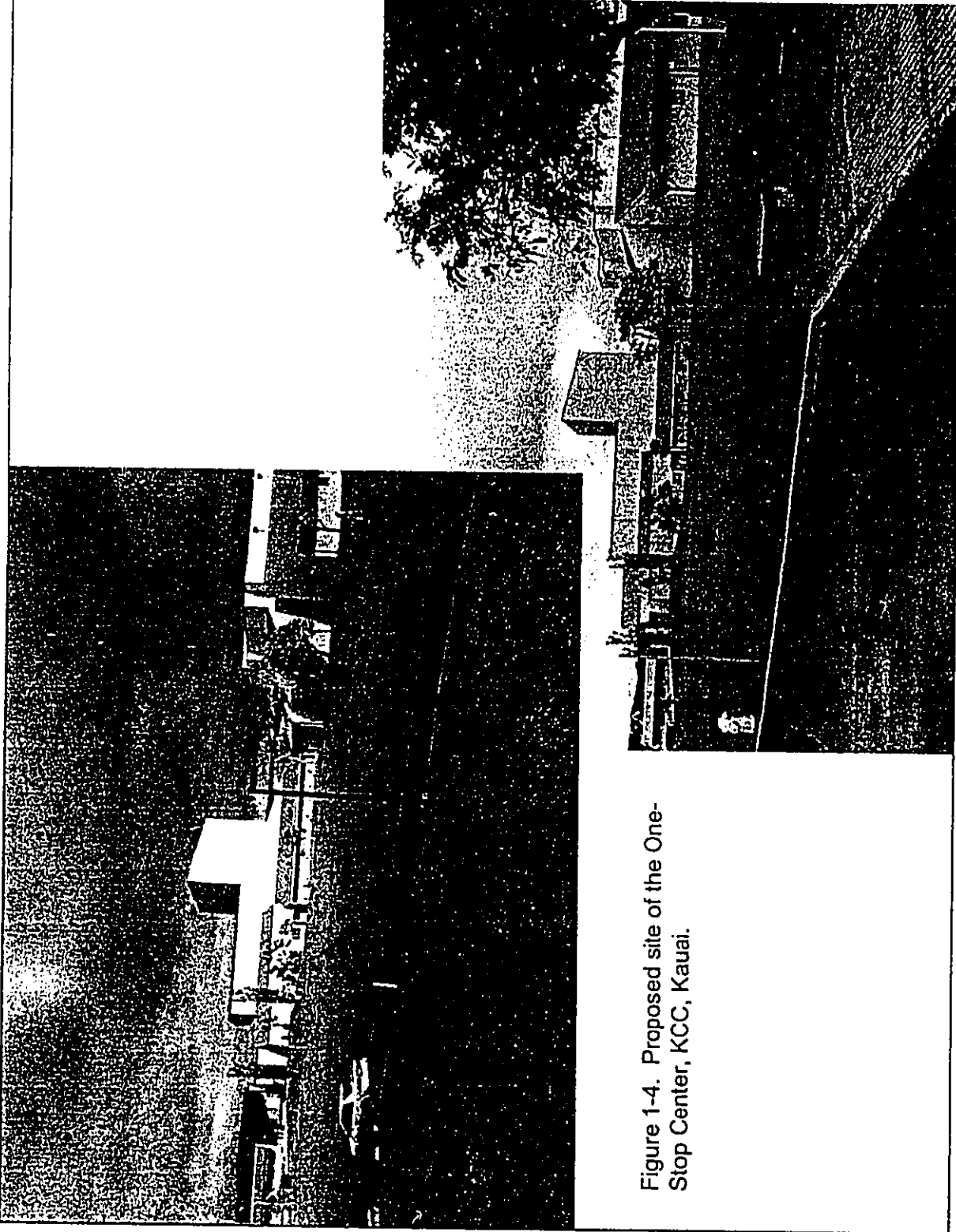


Figure 1-4. Proposed site of the One-Stop Center, KCC, Kauai.

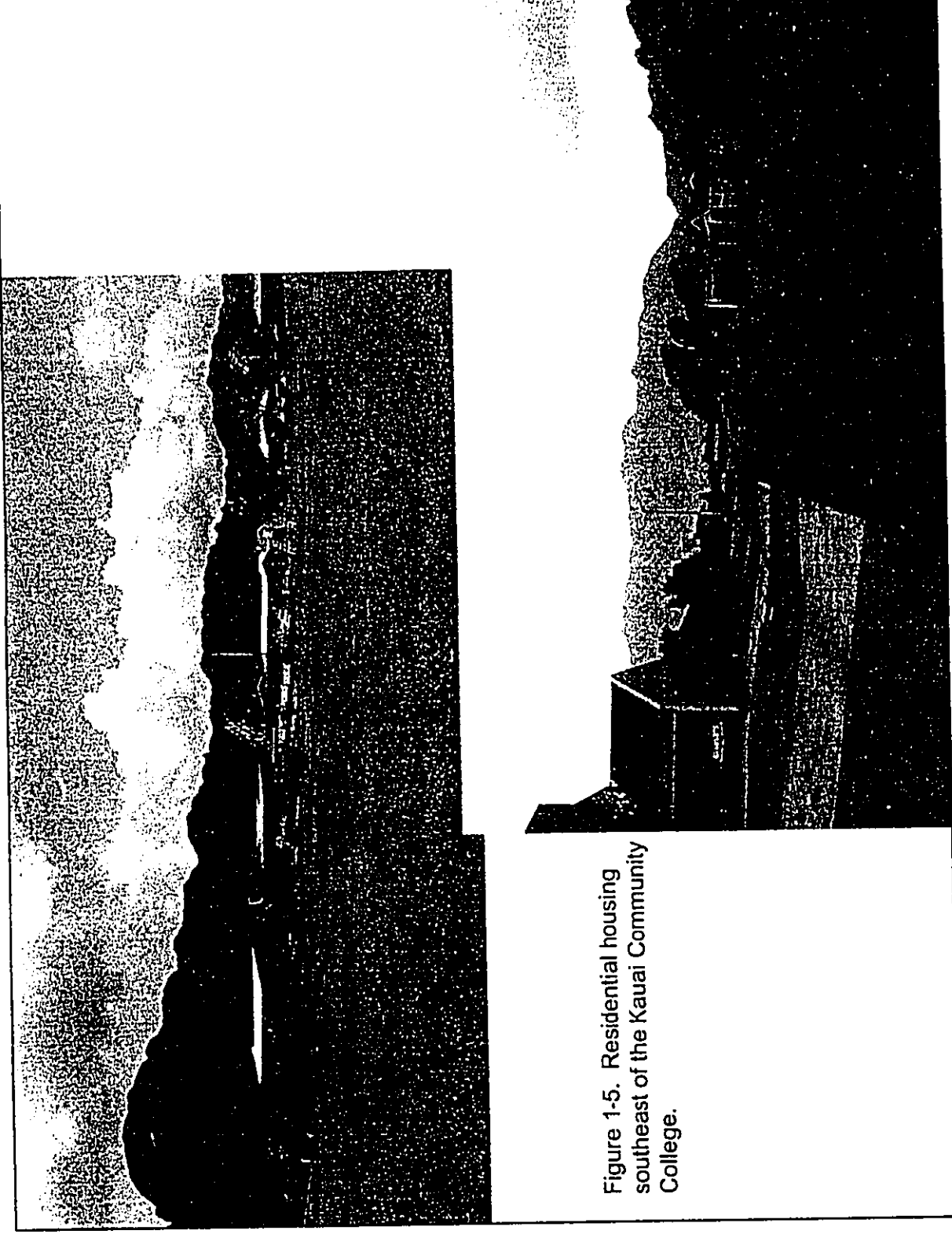


Figure 1-5. Residential housing southeast of the Kauai Community College.

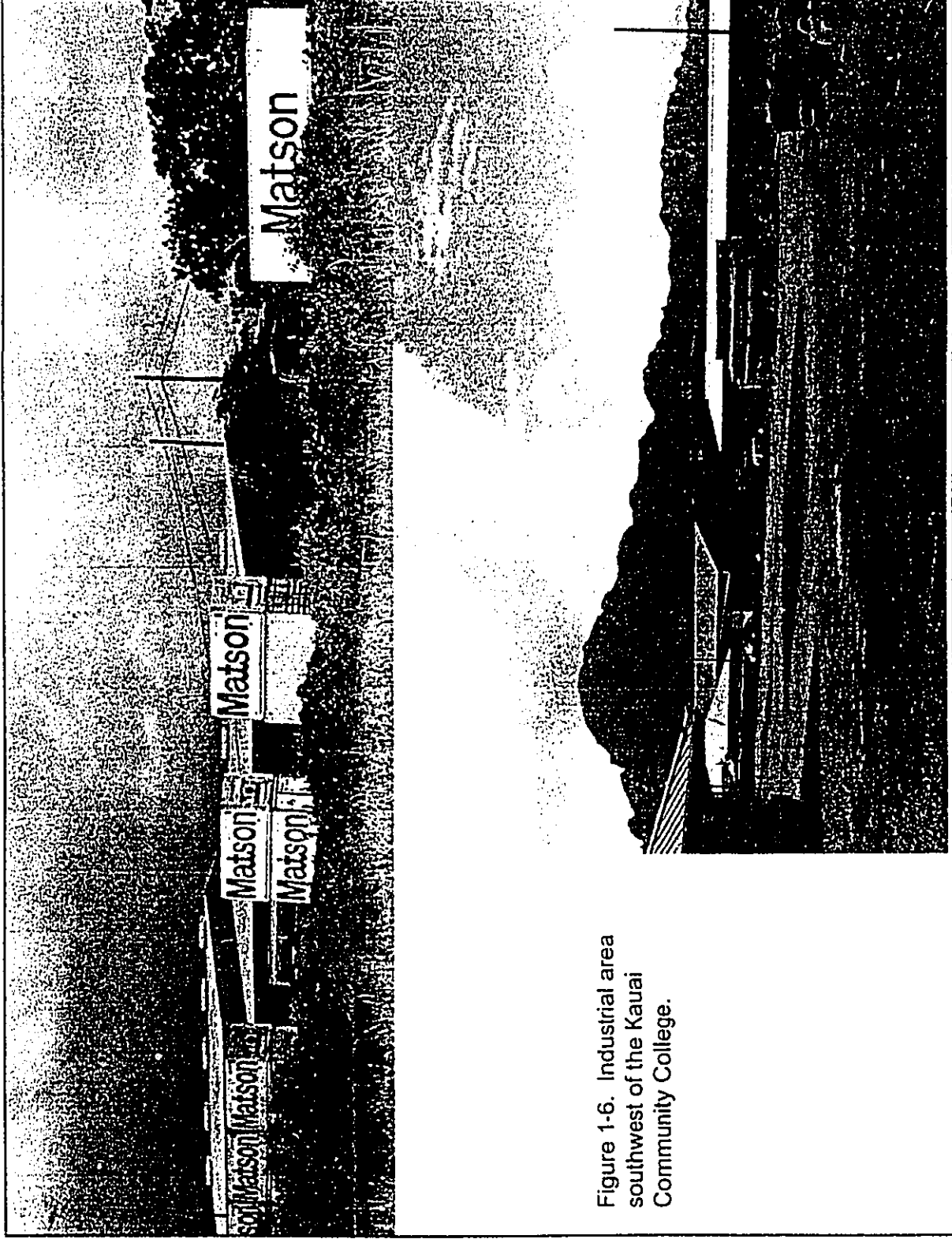


Figure 1-6. Industrial area southwest of the Kauai Community College.

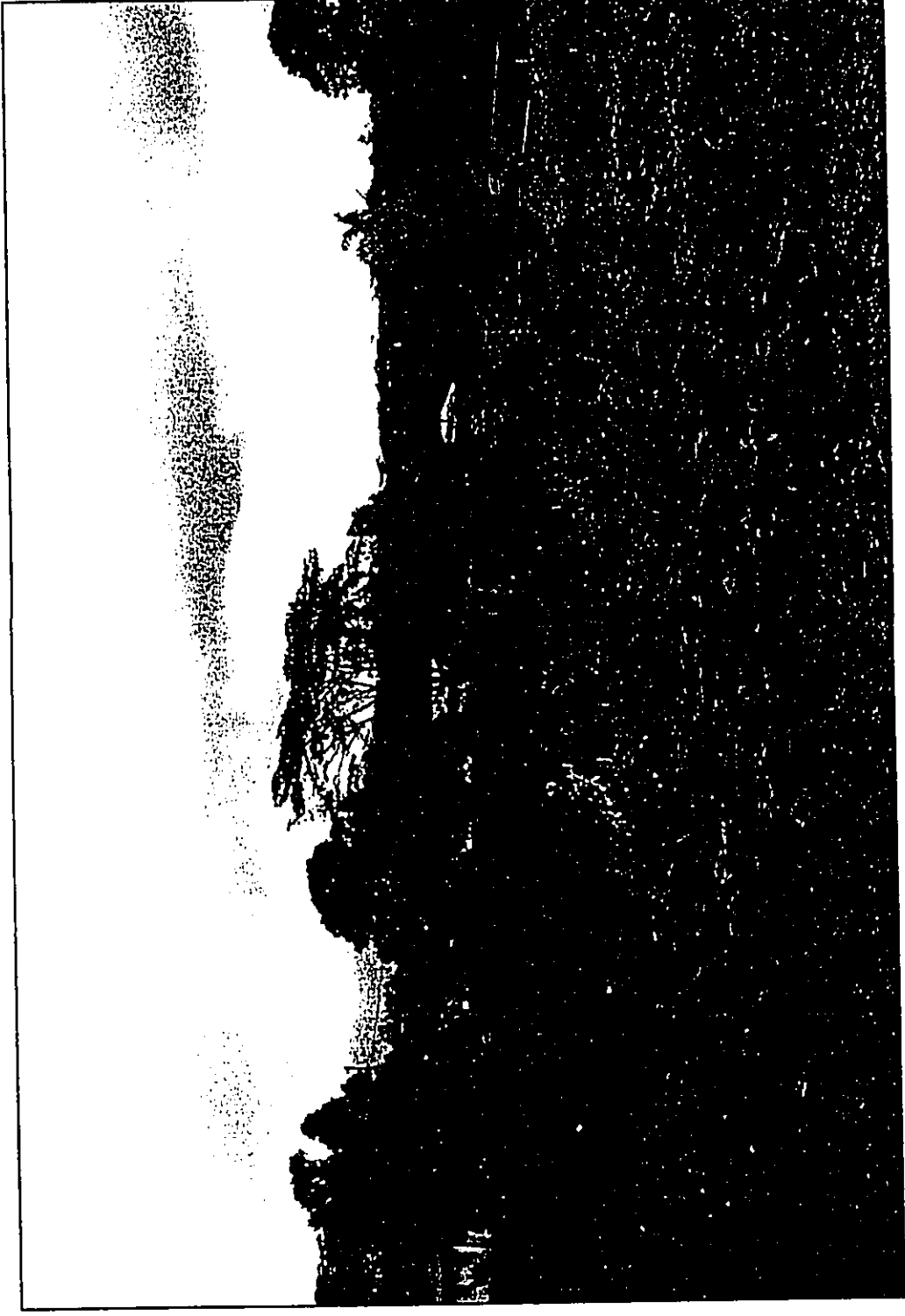


Figure 1-7. A diversified farm located to the east of Kauai Community College.

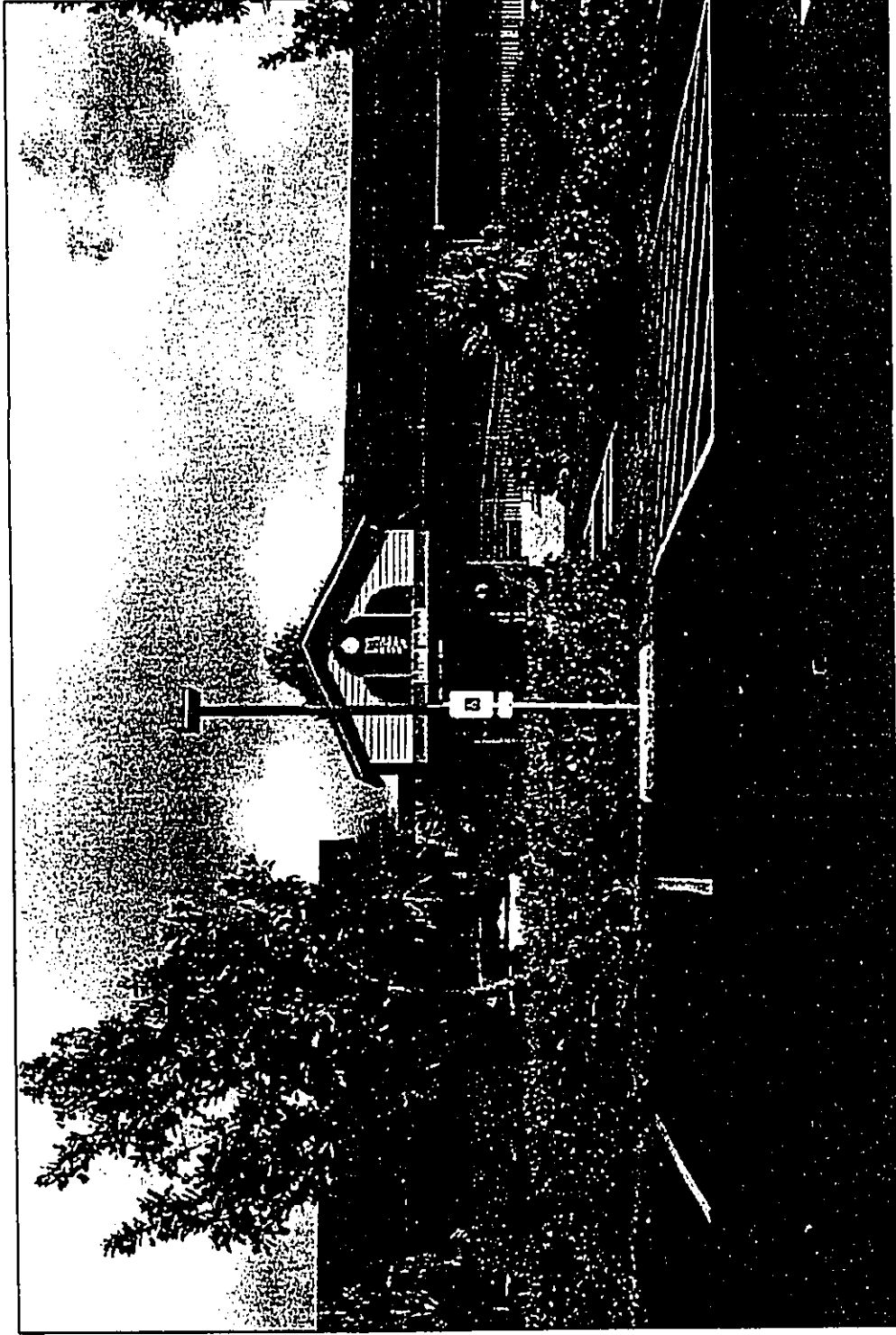


Figure 1-8. Island School for children located behind Kauai Community College.

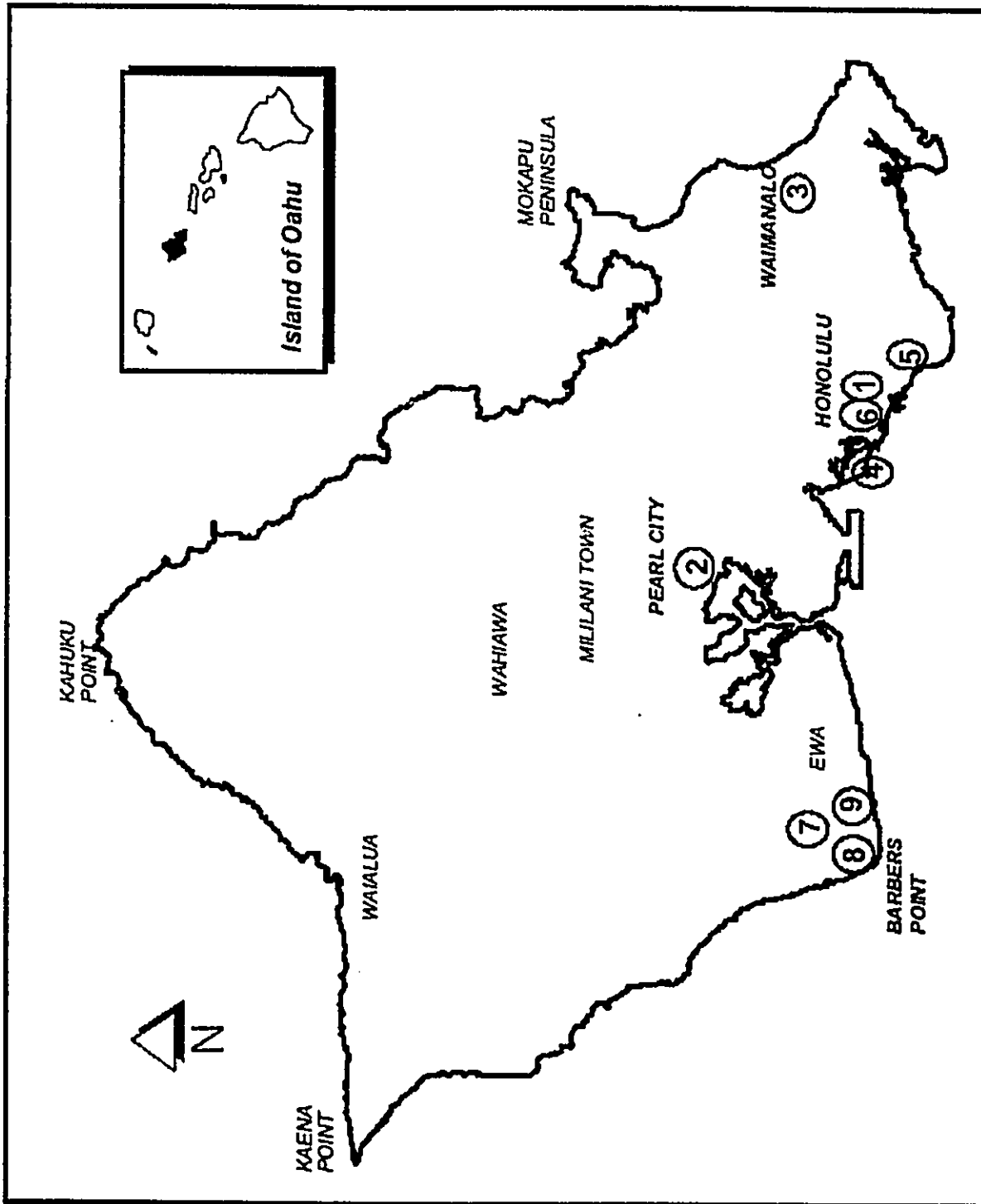


Figure 1.10 Air Quality Monitoring Stations on the Island of Oahu, HI.

Exhibit 12
Traffic Assessment

Final Environmental Assessment

Kaua'i Community College, University of Hawai'i
One Stop Center - Phase 1 & 2
Lihu'e, Kaua'i, Hawai'i

Traffic Assessment
Kauai Community College One-Stop Center
January, 2004

The proposed project to develop a One-Stop Center at the Puhii campus of Kauai Community College is not expected to have a significant impact to traffic. The center will include office space for the college, a University Center, bookstore, and some classroom space; it will be in a separate 2-story structure totaling approximately 60,000 square feet in floor area and is intended to serve as the "front door" to the campus.

Vehicular access will be provided from the existing access road to the campus, which intersects with Kaunualii Highway opposite Puhii Road at a signalized intersection. Parking will be provided in areas identified for this purpose in the Long-Range Development Plan for the campus.

The project is estimated to have a maximum traffic impact of 85 vehicles per hour in the peak direction during the peak hour. This impact is less than the 100 vehicles per hour that has been suggested by the Institute of Transportation Engineers as the threshold for conducting a traffic impact or site access study.

This traffic assessment has been prepared to provide information about traffic conditions in the vicinity of the project. The project would increase the daily traffic at the intersection of Kaunualii Highway and Puhii Road by approximately 3.6%. This increase compares to average increases in daily traffic volumes of 2.5% per year (based on recent growth in volumes) and 4.8% per year (using long-range forecasts based on projections of population and economic activity) on the highway system west of Lihue.

Existing Volumes at Nearest Intersection

The State Highways Division conducts traffic counts at various locations along major roadways on the island of Kauai during odd-numbered years. From these counts, estimates have been developed for average daily traffic volumes for defined segments of State highways. Table 1 shows these average daily traffic volumes for two segments of Kaunualii Highway near the proposed connection.

Table 1 - Average Daily Traffic, Kaunualii Highway

	1993	1995	1997	1999	2001
Maluhia Road to Puhii Road	18,995	19,811	20,183	22,012	21,206
Puhii Road to Newilii Road	24,938	26,578	26,069	27,134	25,846

Source: State of Hawaii, Department of Transportation, Highways Division. *Traffic Summary, Island of Kauai 2001*

As shown in Table 1, traffic volumes on the highway exhibit an increasing trend. The average annual increase in daily traffic on Kaunualii Highway between Maluhia Road and Puhii Road from 1993 to 1999 was 2.5%.

The approaches and departure legs of the intersection of Kaunualii Highway and Puhii Road were counted in October, 2001. Highest counts were recorded between 7:00 AM and 8:00 AM (AM Peak Hour) and between 3:15 PM and 4:15 PM (PM Peak Hour). Data from these counts are shown in Table 2.

Table 2 - Traffic Count at Intersection (counts taken in October, 2001)

	24-hour total		AM Peak Hour		PM Peak Hour	
	approach	departure	approach	departure	approach	departure
East leg (Kaunualii Hwy.)	13,644	13,689	884	945	1,141	1,022
North leg (college road)	1,758	1,908	108	409	193	92
West leg (Kaunualii Hwy.)	11,107	11,806	823	605	786	1,052
South leg (Puhii Road)	3,643	3,045	308	206	321	242
Total	30,152	30,448	2,123	2,165	2,441	2,408

Source: State of Hawaii, Department of Transportation, Highways Division. *Traffic Survey Data, Island of Kauai 2001* (Station 6)

Project Traffic Estimates

Traffic estimates for the project were based on factors published by the Institute of Transportation Engineers for community colleges and for office buildings. The factors and traffic estimates for the project are shown in Table 3.

Table 3 - Project Traffic Generation

Free-standing general office building	Trip factors from ITE, Trip Generation 6 th ed. per KGSF		Project Traffic Estimates	
	%entering	%exiting	entering	exiting
Average weekday	11.01	50%	330	330
AM Peak Hour	1.56	88%	82	12
PM Peak Hour	1.49	17%	15	74
Community College				
Average weekday	18.36	50%	550	550
AM Peak Hour	1.78	80%	85	22
PM Peak Hour	1.66	46%	46	74

KGSF = 1000 gross square feet of building area

Rates for community college use would provide larger estimates of project traffic. If the project traffic generation were to be assumed to be all new (added) traffic in the area, the project's peak hourly traffic would be 85 vehicles per hour in the peak direction, less than the threshold impact of 100 added vehicles per hour in the peak direction that has been suggested by the Institute of Transportation Engineers (ITE) for conducting a site access or traffic impact study (from ITE, *Traffic Access and Impact Studies for Site Development, A Recommended Practice*, 1991).

The project traffic impact, however, is expected to be less for several reasons. The project will consolidate activities that are already occurring on the campus into one location within the campus and would not generate additional traffic (the reuse of existing facilities vacated by users moving into the new One-Stop Center could result in new added traffic, which could be estimated using the Community College rates). The center is also envisioned as a gathering place, which could mitigate peaks in traffic from the community college by easing the peak volumes that often occur immediately before or after classes. The magnitude of the project traffic impacts on the existing roadway system would be further lessened, as traffic approaching or departing the site will be distributed both east toward Lihue and west toward Waimea.

Comparison of Project Traffic to Increases Due to Other Growth

Traffic approaching Lihue from the west is expected to increase significantly with increases in population and economic activity on Kauai. The *Kauai Long-Range Transportation Plan* (May 1997) estimates that daily traffic volume across the "Puhi screenline" will total 58,850 vehicles per day in year 2020. When compared with the average daily traffic on 22,012 vehicles per day on the segment of Kaunualii Highway between Maluhia Road and Puhi Road in 1999, this future volume would represent an average annual increase of 4.8% in highway traffic.

The State Department of Transportation will be constructing improvements to widen Kaunualii Highway between Lihue and Maluhia Road. In addition, improvements to alternative corridors to reduce traffic on Kaunualii Highway have been identified.

The additional traffic at the intersection due to the One-Stop Center (1,100 vehicles per day) represents a 3.6% increase in traffic over a 24-hour weekday period (30,152 vpd entered the intersection in 2001). Increases in peak hour volumes would be about 5% in the peak hour. These increases compare to an average annual increase in highway traffic of about 4.8% derived from the long-range plan projections.

• • •

Appendix A
**List of Agencies and Individuals Consulted
Copies of Response Letters**

Final Environmental Assessment

**Kaua'i Community College, University of Hawai'i
One-Stop Center - Phase 1 & 2
Lihu'e, Kaua'i, Hawai'i**



DEPARTMENT OF THE ARMY
U. S. ARMY ENGINEER DISTRICT, HONOLULU
FT. SHAFTER, HAWAII 96858-5440

REF: TO
ATTENTION OF

Regulatory Branch

March 15, 2005

Ms. Rose Cruz Churma
Project Coordinator
AM Partners, Inc.
1100 Alakea Street, Suite 800
Honolulu, HI 96813

Dear Ms. Churma:

This responds to your request for written comments for the preparation of a draft Environmental Assessment (dEA) which addresses activities proposed for a new One Stop Center at the Kauai Community College campus, Kauai Island (TMK 3-4-7: por. 3).

Our records indicate that waters of the United States, as represented by perennial or intermittent streams and wetlands do not occur within the proposed project area. The dEA should state in appropriate sections that there is no potential for these kinds of waters of the U.S. on adjacent properties to be impacted by construction of project structures and associated ground-disturbing activities within the proposed improvement area. Upon receipt of the dEA which contains these findings, it can be determined that a Department of Army (DA) permit for Section 404 activities of the Clean Water Act will not be required for the proposed improvements at the Kauai Community College campus.

Thank you for your consideration of potential impacts to the aquatic environment in the Lihue watershed. Please contact Mr. Farley Watanabe of my staff at 438-7701, or by facsimile at 438-4060, if you have any questions or need additional information. In future correspondence with this program please address mail to: Chief, Regulatory Program, U.S. Army Engineer District, Honolulu, Building 230, Ft. Shafter, HI, 96858. Please refer to File Number POH-2005-188 in any written correspondence with us concerning the One Stop Center.

Sincerely,

George P. Young, P.E.
Chief, Regulatory Branch



STATE OF HAWAII

DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P.O. BOX 119, HONOLULU, HAWAII 96810

LEIDA LINGLE
GOVERNOR

RUSS K. SAITO
COMPTROLLER
KATHERINE H. THOMASON
DEPUTY COMPTROLLER

(P)1076 :

MAR - 7 2005

Ms. Rose Cruz Churma
AM Partners, Inc.
1100 Alakea Street, Suite 800
Honolulu, Hawaii 96813

Dear Ms. Churma:

Subject: Letter of Consultation
Kauai Community College, One Stop Center

Thank you for the opportunity to provide comments prior to the subject project's Draft Environmental Assessment. This project does not directly impact any of the Department of Accounting and General Services' projects or existing facilities. Therefore, we have no comment to offer at this time.

If you have any questions, please have your staff call me at 586-0526 or Mr. Bruce Bennett of the Planning Branch at 586-0491.

Sincerely,

ERNEST Y. W. LAU
Public Works Administrator

BB:mo

cc: Ms. Genevieve Salmonson, DOH-OEQC



**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

Strategic Industries Division
225 South Beretania Street, Leleopa'a A Kanehahala Bldg., 5th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2159, Honolulu, Hawaii 96804
Web site: www.hawaii.gov/edbt/ei/

LINDA BRIGLE
DIRECTOR
THEODORE LEVY
DIRECTOR
MARK K. ANDERSON
ACTING DEPUTY DIRECTOR

(808) 597-3307
(808) 597-3020

Telephone
Fac

Ms. Rose Cruz Churma
March 9, 2005
Page 2

March 9, 2005

Ms. Rose Cruz Churma
AM Partners, Inc.
1100 Alahea St., Suite 800
Honolulu, Hawaii 96813

Dear Ms. Churma:

Re: Letter of Consultation
Kauai Community College, One Stop Center

In response to your August 17, 2004, notice, thank you for the opportunity to provide comments on the Draft Environmental Assessment for the Kauai Community College One Stop Center. This two-structure facility will provide a campus gateway that enhances the identity of the college. We would like to call your attention to: (1) State energy conservation goals, (2) energy saving design practices and technologies, and (3) recycling and recycled-content products.

1. State energy conservation goals. Project buildings, activities, and site grounds should be designed with energy saving considerations. The mandate for such consideration is found in Chapter 344, HRS ("State Environmental Policy") and Chapter 226 ("Hawaii State Planning Act"). In particular, we would like to call to your attention HRS 226 18(c)(4) which includes a State objective of promoting all cost-effective energy conservation through adoption of energy-efficient practices and technologies.

Applicable portions of Act 77, SLH 2002, relating to energy resources, should be addressed. In addition, please refer to Administrative Directive No. 98-03 that governs the use of solar water heating systems in State facilities. We also recommend that you consider the Kauai County Energy Code early on in your project.

2. Energy saving design practices and technologies. We recommend that energy efficient design practices and technologies be specifically addressed. Energy efficiency is improved with effective building location, orientation and massing, and the placement of vegetation for shade or wind protection. Some of the methods and technologies that could be considered, as appropriate, include:

- Establish the building on an east-west axis;
- Minimize east- and west-facing glass;
- Use natural ventilation to increase comfort of occupants;
- Maximize use of natural lighting without heat gain;
- Use high efficiency compact fluorescent lighting;
- Use insulation/radiant barrier for an equivalent R-19 value in ceiling; use ceiling fans;
- Use solar water heating; and
- Use landscaping for dust control and to minimize heat gain to area.

3. Recycling and recycled-content products.
 - Develop a job-site recycling plan for construction and recycle as much construction and demolition waste as possible;
 - Incorporate provisions for recycling into the project – a collection system and space for bins for recyclables; and
 - Specify and use products with recycled content such as: steel, concrete aggregate fill, drywall, carpet and glass tile.

We are attaching a summary of our recently published *Hawaii Commercial Building Guidelines for Energy Efficiency* which is available at <http://www.archenergy.com/library/general/hawaii/>. We would also like to refer you to the sustainability guidelines at <http://www.hawaii.gov/dbedt/ert/rebuild/pdfs/momisustainable.pdf>.

If you need clarification of any of the above, please do not hesitate to contact me.

Sincerely,

Maurice H. Kaya
Chief Technology Officer

attachment

OFFICE OF THE SUPERINTENDENT
LUCIA LIMBLE
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF EDUCATION
P.O. BOX 2100
HONOLULU, HAWAII 96810

PATRICIA HAMAMOTO
SUPERINTENDENT

LUCIA LIMBLE
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. BOX 3178
HONOLULU, HAWAII 96813-3178

CHRISTINE L. FURUKO, M.D.
DIRECTOR OF HEALTH

Environmental Planning Office

March 8, 2005

July 1, 2004

Ms. Rose Cruz Churma
AM Partners, Inc.
1700 Alakea Street, Suite 800
Honolulu, Hawaii 96813

Dear Ms. Cruz Churma:

Subject: Letter of Consultation - Kauai Community College, One Stop Center

The Department of Education (DOE) has reviewed the brief description of the Kauai Community College One Stop Center.

The DOE has no comment concerning the proposed project. If you should have any questions, please call Rae Loui, Assistant Superintendent of the Office of Business Services, at 586-3444 or Heidi Meeker of the Facilities and Support Services Branch at 733-4862.

Thank you for the opportunity to respond.

Very truly yours,

Patricia Hamamoto

Patricia Hamamoto
Superintendent

PH:hy

c: Rae Loui, Asst. Supt., OBS
Daniel Hamada, CAS, Kapaa/Kauai/Waimea Complex Area

To: Persons Requesting Department of Health
Comments on Land Use Documents

From: June F. Harrigan-Lum, Manager
Environmental Planning Office *June F. Harrigan-Lum*

Our land use review coordinator position will be vacant beginning July 1, 2004. We will be filling this position as soon as possible. In the meantime, starting July 1, 2004, the Environmental Planning Office (EPO) will not be accepting any land use documents for coordinated replies.

If you would like to request to have staff in a specific branch or office to comment on your proposal, you are welcome to contact the staff directly. If a document has already been received by EPO and you wish to have us send it to a specific branch, you may call 586-4337 and ask for the clerical staff to send it to the appropriate branch. Please describe the document and the date of your cover letter.

You may call the above number and check with the clerical staff to see when coordinated responses from this office will resume.

Thank you for your cooperation and patience in this matter.

Enclosure

C: DDEH

LINDA LURKLE
DIRECTOR OF PLANNING



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
POST OFFICE BOX 621
HONOLULU, HAWAII 96809



PETER T. YOUNG
CHAIRMAN
BOARD OF LAND AND NATURAL RESOURCES
COMMISSIONER OF THE LAND RESOURCES MANAGEMENT
DAVID MATTHEWS
DEPUTY DIRECTOR, LAND
THOMAS T. GUN
DEPUTY DIRECTOR, WILDS
JONATHAN BROWN
DEPUTY DIRECTOR, PLANNING AND ZONING REGULATION
BUREAU OF CONSERVATION
COMMISSIONER AND CHIEF, LAND
CONSERVATION AND RECREATION DEPARTMENT
POURNOMY AND MELANIE
OFFICERS, PRESERVATION
HONOLULU, HAWAII
STATE PLANNING

HAWAII HISTORIC PRESERVATION
DIVISION REVIEW

Log #: 2005.0237
Doc #: 0503NM07

Applicant/Agency: Rose Cruz Churma
For: Kauai Community College

Address: AM Partners
1100 Alakea St, Suite 800
Honolulu, HI 96813

SUBJECT: Chapter 6E-42 Historic Preservation Review - DEA
One Stop Center

Ahupua'a: Puhi
District, Island: Lihue Kauai
TMK: (4) 3-4-07: 03

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 McHugh Date: 3/8/05

Title: Archaeologist for Kauai

LINDA LURKLE
GOVERNOR



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

March 11, 2005

RECEIVED

MAR 23 2005

AM Partners Inc.

RODNEY K HARAGA
DIRECTOR

Deputy Directors
MELISSA WATERS
BARRY FURUKAWA
BENJAMIN T. MCCOY
BONNIE S. JOHNSON

IN REPLY REFER TO

STP 8.1636

Ms. Rose Cruz Churma
AM Partners, Inc.
1100 Alakea Street, Suite 800
Honolulu, Hawaii 96813

Dear Ms. Churma:

Subject: Early Consultation
One Stop Center, Kauai Community College, University of Hawaii

In response to your request for our review of the proposed plans for the subject facility on the Kauai Community College campus, this is to advise you that the One Stop Center facility should not create an impact on our State highway facilities.

We appreciate the opportunity to provide our comments.

Very truly yours,

RODNEY K HARAGA
Director of Transportation

PHONE (808) 594-1888



STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
711 KAPOLANI BOULEVARD, SUITE 500
HONOLULU, HAWAII 96813

FAX (808) 594-1885

Bryan J. Baptiste
Mayor



COUNTY OF KAUAI
Fire Department
Mokaha Building
444 Rice Street, Suite 205
Lihue, Hawaii 96756

Dennis Furushima
Fire Chief

March 7, 2005

HRD05/1755

March 22, 2005

Ms. Rose Cruz Churma
Attn: Gordon S. Wood
AM Partners, Inc.
1164 Bishop Street, Suite 1000
Honolulu, Hawaii 96813

Re: Letter of Consultation, Preparation of Draft Environmental Assessment, Kaua'i
Community College, One-Stop Center, Lihue, Island of Kaua'i TMK: 3-4-007:003

Dear Ms. Churma:

The Office of Hawaiian Affairs (OHA) is in receipt of your request for consultation regarding a proposed One-Stop Center at the Puhi Campus of the Kaua'i Community College.

The proposed buildings do not appear to adversely impact any known native Hawaiian rights, resources or practices in the area. An archaeological inventory survey of the affected parcels should occur with subsurface testing to determine the likelihood of adversely impacting any buried cultural deposits including unmarked human burial sites.

Please contact our Kaua'i representative of OHA, LaFrance Kapaka-Arboleda, at 242-3390 for additional contacts and information regarding the subject area. OHA would request to be kept abreast and informed of any further actions concerning this particular initiative.

If you have any questions or concerns, please contact Kai Markell, Policy Advocate, at 594-1945 or kaim@oha.org. Once again, thank you for your patience during our review and assessment of this important matter.

'O wau iho nō,

Clyde W. Nāmū'o
Administrator

AM Partners, Inc.
1100 Alakea Street, Suite 800
Honolulu, HI 96813

Attn: Rose Cruz Churma

Dear Ms. Churma,

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. The Fire Department does not have any specific concerns during this phase of the project.

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

Sincerely,

Russell Yee
Prevention Captain

Approved:

Robert F. Westerman
Fire Chief

Government Agencies
 Department of Agriculture
 State of Hawaii
 1478 South King Street
 Honolulu, HI 96814

UHM Water Resource Research Center
 Holmes Hall, Room 283
 2540 Dole Street
 Honolulu, HI 96822

Comptroller
 Department of Accounting & General Services
 P.O. Box 119
 Honolulu, HI 96810

Region IX Administrator, US EPA
 75 Hawthorne Street
 San Francisco, CA 94105

Department of Defense
 State of Hawaii
 3949 Diamond Head Road
 Honolulu, HI 96816-4495

Manager, EPA -- PICO
 309 Ala Moana Boulevard,
 # 1302
 Honolulu, HI 96850

Superintendent of Education,
 Hawaii Department of Education
 P.O. Box 2360
 Honolulu, HI 96804

Directorate of Facilities
 Engineering
 U.S. Army Support Command
 Hawaii
 Attn: Environmental Management
 Office
 Fort Shafter, HI 96858-5000

Chair, Hawaiian Homes
 Commission,
 Department of Hawaiian Home
 Lands
 P.O. Box 1879
 Honolulu, HI 96805

Commander, Naval Base Pearl Harbor
 Attn: Base Civil Engineer
 Box 110
 Pearl Harbor, HI 96860-5020

Department of Health
 State of Hawaii
 Environmental Planning Office
 P.O. Box 3378
 Honolulu, HI 96801

State Conservationist
 Resources Conservation Service
 U.S. Dept. of Agriculture
 P.O. Box 50004
 Honolulu, HI 96850

Department of Land & Natural Resources
 State of Hawaii
 P.O. Box 621
 Honolulu, HI 96809

Commander & Division Engineer
 U.S. Army Corps of Engineers
 Pacific Ocean Division
 Building 230
 Fort Shafter, HI 96858-5440

State Historic Preservation Officer
 State of Hawaii
 Dept. of Land & Natural Resources
 601 Kamokila Blvd., Rm. 555
 Kapolei, HI 96707

Commander, U.S. Coast Guard
 14th Coast Guard District
 300 Ala Moana Boulevard
 Honolulu, HI 96850

Pacific Islands Administrator
 Department of the Interior
 Fish & Wildlife Services
 300 Ala Moana Blvd., Rm. 3108
 Honolulu, HI 96813

Department of Business, Economic Development & Tourism
 Energy, Resources & Technology Division
 235 South Beretania St, 5th Fl.
 Honolulu, HI 96813

District Chief
 Department of the Interior
 US Geological Survey
 677 Ala Moana Boulevard, Room 415
 Honolulu, HI 96813-5412

Executive Director
 Housing Finance & Development Corp.
 677 Queen, Suite 300
 Honolulu, HI 96813

Honolulu Star-Bulletin
 500 Ala Moana Blvd.
 Suite 7-210
 Honolulu, HI 96813

Director, Environmental Health
 American Lung Association
 245 North Kukui Street
 Honolulu, HI 96817

Department of Transportation
 State of Hawaii
 869 Punchbowl Street
 Honolulu, HI 96813

Editor, Honolulu Advertiser
 P.O. Box 31000
 Honolulu, HI 96849

Office of Planning
 State of Hawaii
 235 South Beretania St, 6th Floor
 Honolulu, HI 96813

Editor, Sun Press
 45-525 Liliuku Road
 Kaneohe, HI 96744

Administrator, Office of Hawaiian Affairs
 711 Kapiolani Blvd, Suite 1250
 Honolulu, HI 96813

UHM Environmental Center
 2550 Campus Road, Crawford
 317
 Honolulu, HI 96822

UHM Hamilton Library
 Hawaiian Collection
 2550 The Mall
 Honolulu, HI 96822

UHM Marine Programs
 1000 Pope Road, Room 229
 Honolulu, HI 96822

Legislative Reference Bureau
 State Capitol, Room 004
 Honolulu, HI 96813

Kauai Department of Planning
 4444 Rice Street
 Lihue, HI 96766

County Engineer
 Department of Public Works
 4444 Rice Street
 Lihue, HI 96766

Manager, Kauai Department of Water
 3498 Puuloke Street
 Lihue, HI 96766

Kauai Police Department
 3990 Kaana Street, Suite 200
 Lihue, HI 96766

Kauai Fire Department
 Fire Chief's Office
 4444 Rice Street Suite 295
 Lihue, HI 96766

Kauai Community College
 Library
 3-1901 Kaunualii Highway
 Lihue, HI 96766

Editor
 The Garden Island Newspaper
 3137 Kuhio Highway
 Lihue, HI 96766

Private Sector
 Principal, Island School
 3-1875 Kaunualii Highway
 Lihue, HI 96766

Grove Farm Land Corporation
 Management Office
 3-2600 Kaunualii Highway,
 Suite 3000
 Lihue, HI 96766

Kukui Grove Center
 Management Office
 3-2600 Kaunualii Highway, Suite 3001
 Lihue, HI 96766

Mr. Ron Agor
 Agor Architecture
 4374 Kukui Grove Drive, Suite 204
 Lihue, HI 96766

Kauai Island Utility Cooperative
 4444 Pahee Street
 Lihue, HI 96766

The Gas Company
 Kauai Office
 3990 Rice Street
 Lihue, HI 96766

Verizon Hawaii
 Kukui Grove Center
 3-2600 Kaunualii Highway
 Lihue, HI 96766

Lihue Plantation Co., Ltd.
 AMFAC Sugar Kauai
 2970 Kela Street
 Lihue, HI 96766



architecture
planning
interiors
graphics

August 26, 2005

Genevieve Salmonson, Director
State of Hawaii, Office of Environmental Quality Control
Department of Health
Leleopapa A. Kamehameha
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Re: Draft Environmental Assessment
Kauai Community College (KCC), University of Hawaii
One-Stop Center
TMK: (5) 3-4-7:03

Attn: Leslie Segundo, Environmental Health Specialist

Dear Ms. Salmonson:

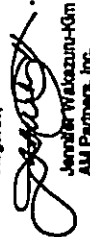
Thank you for your comments to the Draft Environmental Assessment (DEA) of the subject project as noted in your letter dated August 5, 2005.

GROWTH INDUCING AND CUMULATIVE IMPACTS: The Long Range Development Plan (LRDP) that was published in September 1999 establishes the student population for Kauai Community College at 3000 FTE (Full Time Equivalent). The LRDP does not have a horizon date when the 3000 FTE is predicted to occur. The University has no other master planning efforts that may generate secondary impacts with respect to implementation of this project.

SUSTAINABLE BUILDING GUIDELINES: As you had suggested in your letter, we will be incorporating as appropriate into the design plan, sustainable building guidelines described in your website.

Thank you again for taking the time to offer your comments. We will modify certain portions of the DEA to include issues noted in your letter. Should you have any other questions, please do not hesitate to give us a call.

Regards,


Jennifer Waiakazu-Kim
AM Partners, Inc.

1100 Alakoa Street • Suite 800 • Honolulu • Hawaii 96810
Phone: (808) 526-2828 • Fax: (808) 534-0027
Email: honolulu@ampartners.com • Website: www.ampartners.com

LURAL LARLE
OFFICE OF HEALTH



STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
DEPARTMENT OF HEALTH
LELOPAPA A. KAMEHAMEHA
235 SOUTH BERETANIA STREET, SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE: (808) 586-4185

GENEVIÈVE S. SALMONSON
DIRECTOR

to my attention
re:

August 5, 2005

Mr. Mynard Young
Office of Capital Improvements
University of Hawaii
1951 East West Road
Honolulu, Hawaii 96822

Ms. Jennifer Waiakazu Kim
AM Partners, Inc.
1100 Alakoa Street, Suite 800
Honolulu, Hawaii 96813

Dear Mr. Young and Ms. Kim:

The Office of Environmental Quality Control has received the draft environmental assessment for the Kauai Community College, University of Hawaii One-Stop Center, Tax Map Keys (5) 3-4-7, parcel 03 in the judicial district of Lahu'e, and offers the following comments for your consideration and response.

GROWTH INDUCING AND CUMULATIVE IMPACTS: Page 2 makes reference to the Long Range Development Plan (LRDP - published in September 1999) for a campus population of approximately 3,000 students. Please discuss the horizon for this 1999 LRDP and any other master planning efforts by the University with respect to Kauai Community College that may generate secondary impacts with respect to implementation of this project.

SUSTAINABLE BUILDING GUIDELINES: Page 3 makes reference to sustainability design. Please refer to, and incorporate as appropriate into the design plan, guidance elements concerning sustainable building found on our Internet website at <http://www.state.hi.us/health/eoqc/indicators/index.html>.

Thank you for the opportunity to comment. If there are any questions, please call Mr. Leslie Segundo, Environmental Health Specialist at (808) 586-4185.

Sincerely,


GENEVIÈVE S. SALMONSON
Director