January 26, 1995

TO: Eugene Imai, Comptroller
    Department of Accounting and General Services

SUBJECT: Final Environmental Impact Statement for the New Nanakuli
    Public Library, Nanakuli, Oahu

I am pleased to accept the Final Environmental Impact Statement for the New Nanakuli
Public Library, Nanakuli, Oahu as satisfactory fulfillment of the requirements of
Chapter 343, Hawaii Revised Statutes. This environmental impact statement will be
a useful tool in the process of deciding if the action described therein should be allowed
to proceed. My acceptance of the statement is an affirmation of the adequacy of that
statement under the applicable laws and does not constitute an endorsement of the
proposed action.

When the decision is made regarding the proposed action itself, I expect the appropriate
legislative bodies and governmental agencies to consider if the societal benefits justify the
economic, social and environmental impacts which will likely occur. These impacts are
adequately described in the statement which, together with the comments made by
reviewers, provides useful analysis of the proposed action.

[Signature]

BENJAMIN J. CAYETANO

c: Lawrence Miike
NEW NANAKULI PUBLIC LIBRARY
FINAL
ENVIRONMENTAL IMPACT STATEMENT
AND
SITE SELECTION

Prepared for:
Department of Accounting and General Services
State of Hawaii
Honolulu, Hawaii

Prepared by:
DHM inc.
1975 Ualakaa Street
Honolulu, Hawaii 96822

NOVEMBER 1994
FINAL
ENVIRONMENTAL IMPACT STATEMENT
and
SITE SELECTION STUDY
for the
NEW NANAKULI PUBLIC LIBRARY

LOCATION: Nanakuli, Oahu, Hawaii

PROPOSING AGENCY: Department of Accounting and General Services, State of Hawaii
1151 Punchbowl Street, Room 430
Honolulu, Hawaii 96813

DAGS JOB NO. 12-36-5964

ACCEPTING AUTHORITY: Governor
State of Hawaii

PREPARED BY: DHM Planners, inc.
Mrs. Duk Hee Murabayashi, President
1975 Ualakaa Street
Honolulu, Hawaii 96822
Telephone: (808) 947-0002

RESPONSIBLE OFFICIAL: Robert P. Takushi, Comptroller
Date SEP 29 1994
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SUMMARY

A. Description of Action
The State of Hawaii Department of Education, Hawaii State Public Library System, proposes to construct a new public library in Leeward Oahu to serve the Nanakuli and Maili communities. This study represents the State's initial planning effort for the library by identifying and evaluating potential library sites and assessing the environmental impacts of the viable sites in accordance with Chapters 341, 343, and 344, Hawaii Revised Statutes. Following an initial identification of six "possible sites," five "candidate sites" were selected for detailed evaluation and for environmental assessment. These are:

Site A: State-owned land at the base of Puu o Hulu Kai, at Maili Point. The site is located at the intersection of Farrington Highway and Kaukama Street.

Site B: Two privately owned parcels between Farrington Highway and the U2 drainage channel, just Makaha-side of the Ulehawa Stream channel.

Sites C and D: State-owned land, formerly the site of Camp Andrews military reservation, across Farrington Highway from Nanaikapono Elementary School.

Site E: Privately owned commercial land just Ewa of the Pacific Shopping Center. The Nanakuli Inn is on a portion of this site.

B. Significant Impacts and Mitigation Measures
The significant beneficial impacts of the proposed project will include the provision of a much needed public library in the Nanakuli-Maili area, and the provision of specialized library educational and cultural programs and features that ensure the continued maintenance and enhancement of public education. The project will provide short-term economic benefits from construction expenditures and employment, and long-term economic benefits associated with the operation and maintenance of the facility.
There will be some short-term adverse impacts associated with construction activities, all of which can be mitigated by existing State and City and County regulations.

The main adverse impacts depend on the site selected. Two sites would involve the displacement of residents and businesses. Although the disruption cannot be mitigated, any displaced family or business would receive financial relocation assistance and moving expense reimbursement in accordance with State law.

C. Alternatives Considered

1. No Action
   The "no action" alternative would mean that the existing limited bookmobile service would remain in operation. For more complete library service, the residents of Maili and Nanakuli would continue using the Waianae or Ewa Beach libraries, both of which have space deficiencies and are inconveniently located in relation to the Maili and Nanakuli communities. The "no action" alternative is unacceptable to the community since the limited bookmobile service and existing library locations are inadequate to serve the needs of the existing population. This alternative is even more unrealistic in view of the projected growth in Maili and Nanakuli.

2. Expansion of Bookmobile Services
   Expansion of bookmobile services is considered an unacceptable alternative due to the size and projected growth of the Maili and Nanakuli areas, and the physical limitations associated with the bookmobile.
3. **Use of New Library Facility in Kapolei**
A new library in Kapolei is currently in the planning stage and is intended to serve all of West Oahu in the same way the Hawaii State Library currently serves Oahu. Use of the Kapolei facility as a branch library by residents of Maili and Nanakuli is an unacceptable alternative due to the distance from the community and due to population projections which warrant a separate branch library.

D. **Unresolved Issues**
The potential impacts of the proposed action are generally known and appropriate mitigation measures have been developed to address these impacts.

One unresolved issue has the potential for affecting the development of the public library and/or the timeframe within which it is developed on two of the five candidate sites. The issue is the land ownership and title claim dispute between the State of Hawaii and the State Department of Hawaiian Home Lands for Sites A and B. The dispute is currently being reviewed by the Governor’s Task Force on DHHL Title and Related Claims, and as a result, the land ownership/title claim of Sites A and B is considered an unresolved issue.

A second unresolved issue was included in the Nanakuli Library Draft EIS because multiple parties were interested in the use and/or ownership of all or part of the 30-acre State-owned parcel affecting library sites C and D (former Camp Andrews). However, on October 28, 1994, the State Board of Land and Natural Resources approved the administrative transfer of +/- 16,000 acres of land to the DHHL to "make their lands whole." Fifteen of the 30 acres at the former Camp Andrews site are among the lands to be transferred. The remaining 15 acres will be retained by the State for a potential new elementary school and for a potential public library. The actual apportionment of the 30-acre site remains unresolved, although the State of Hawaii has first choice for school and/or library sites.
compatibility with land use plans and policies and list of permits and approvals

Development of a new public library will be subject to various governmental permits and approvals, depending on the State Land Use and City and County of Honolulu development plan and zoning designations of the site selected. Four of the five candidate sites are within the State Urban District; one site is in the State Conservation District and a land use district boundary amendment would be required for the proposed library use. Two candidate sites are currently designated Public Facility on the Waianae Development Plan Land Use Map, and the other three sites would require a designation change. The proposed library use is not a permitted use within the Preservation zoning of one candidate site and a zoning amendment would be required.

Permits and approvals will also depend, to some degree, on the site selected. All necessary approvals are discussed at greater length in Chapter XI. Depending on the site and final plans, permits and approvals may be required from:

- Corps of Engineers, Department of the Army
- State of Hawaii, Department of Land and Natural Resources
- State of Hawaii, Department of Health
- State of Hawaii, Department of Transportation
- City and County of Honolulu, Building Department
- City and County of Honolulu, Department of Land Utilization
- City and County of Honolulu, Department of Public Works
- City and County of Honolulu, Dept. of Transportation Services
- City and County of Honolulu, Dept. of Wastewater Management
CHAPTER I

Project Description
I. PROJECT DESCRIPTION
A. STUDY PURPOSE

The State of Hawaii Department of Education, Hawaii State Public Library System, proposes to construct a new public library in Leeward Oahu to serve the Nanakuli and Maili communities on the island of Oahu.

The Hawaii State Public Library System (HSPLS) has developed a Master Plan for Public Libraries¹ (hereinafter referred to as 1991 Master Plan) to assist it in meeting its mission for the next decade, which is to:

...serve as the lead state agency to provide individuals at each stage of their lives with free access to information, and to provide materials and customer services that foster reading and life-long learning.

One of the primary products of the master planning effort is a strategic plan for the development and improvement of HSPLS facilities. Strategic facilities needs for the next ten years include the location of new libraries, consolidation of existing libraries, and the modification of existing libraries. Included as part of the near-term plans (July 1991-June 1994) is the construction of a library to service the Nanakuli and Maili areas. The service area for this new facility extends from Kahe Point to Mailiili Channel, as shown on Exhibit I-1.

This Site Selection Study and Environmental Impact Statement (EIS) are intended to accomplish the following:

1. To identify and evaluate a minimum of three candidate sites for the public library within the Nanakuli-Maili service area.
2. To assess each candidate site in accordance with requirements of Chapter 343, Hawaii Revised Statutes, and the Department of Health's Title 11, Chapter 200, "Environmental Impact Statement Rules."

B. PRESENT CONDITIONS
The Hawaii State Public Library System is made up of the Hawaii State Library and five library districts: East Oahu, West Oahu, Hawaii, Kauai, and Maui. It also operates the Library for the Blind and Physically Handicapped.

The West Oahu Library District has a total of nine libraries, located in Pearl City, Aiea, Salt Lake/Moanalua, Mililani, Wahiawa, Waialua, Waipahu, Ewa Beach, and Waianae. New libraries are planned for Kapolei and Nanakuli. Exhibit II-2 shows the location of existing and proposed libraries in the West Oahu District.

The Nanakuli and Maili communities are currently serviced by the Waianae Library, located on Farrington Highway across from Waianae Intermediate School, about two miles northwest of Mailiili Channel. The next closest library is the Ewa Beach public and school library in Ewa Beach, about 13 miles (driving distance) east of Kahe Point.

Presently, the Leeward Oahu Bookmobile services the area every other week, stopping in six different locations for 30 to 60 minutes each.

The Library Master Plan recommends expansion and renovation of the existing Waianae Library building for the long range (July 1997 - June 2000) and recommends replacing the existing Ewa Beach library on a new site in the mid-term (July 1994 - June 1997). The new library in Kapolei is planned for the near term (July 1991 - June 94), as is the Nanakuli Library. HSPLS has negotiated a site for the Kapolei library with Campbell Estate, and HSPLS is in the planning stage now. The Kapolei library is intended to service West Oahu in the same way the Hawaii State Library currently serves Oahu. Once the Kapolei library is completed, the Hawaii State Library will primarily serve East Oahu.

C. PROJECT NEED
The population of the Waianae region (Nanakuli, Maili, Makaha, and Waianae) increased 18.8 percent from 1980 to 1990, nearly double the population growth of 9.7 percent for the entire island. The 1980 population
for the district was 31,487, and 37,411 in 1990. Recent growth has added greater emphasis to the communities’ library needs.

According to the Master Plan, its ten-year time frame is appropriate for the services component of the plan, but this time frame is impractical for the facilities component of the plan. Facilities site planning, design, and construction is a long process, and once constructed, facilities are expected to serve the public far beyond ten years. Therefore, the facilities component of the Master Plan is based on twenty year expectations.

The 1991 population of the Nanakuli-Maili service area (assuming distribution for planned libraries in Nanakuli and Kapolei) was 18,765. The Master Plan’s projected service area population for the year 2010 is 21,204, and the planning district growth rate was identified as 1.13 percent. The Hawaii State Public Library System proposes a facility in Nanakuli-Maili to satisfy the requirements of the projected population in 2010.

D. LIBRARY DEVELOPMENT REQUIREMENTS

Nanakuli Public Library, to be located within the designated service area (Exhibit I-1), will consist of the following features: library building; driveway or access road from existing road to parking area; paved parking area; utilities to provide water, electricity, sewer, and telephone service; on-site drainage improvements; and landscaping.

The Nanakuli library will emphasize Hawaiian in its resource and program development, as well as in the architectural and landscape design. A unique aspect of the Nanakuli Public Library will be a Hawaiian cultural feature. While not fully defined or developed at this time, the Hawaiian cultural feature will serve to personalize the library to the community it serves. Some preliminary concepts of what the feature may involve include working with Bishop Museum to display Hawaiian artifacts from or reflective of the area’s past.
1. Building Area Requirements
The 1991 Master Plan facilities guidelines indicate that the minimum size library should be approximately 5,000 gross square feet (not including library program room) to justify the expense of its core requirements. The Master Plan also indicates that branch libraries will be allocated on a statewide basis of 0.6 gross square feet (gsf) per capita based on a twenty-year population projection. Therefore the minimum service population that warrants a 5,000 gsf separate branch library is 8,350 people.

Based on the 0.6 gsf per capita figure, the 1991 Master Plan calls for construction of a 13,000 gsf facility to meet the Nanakuli-Maili 2010 population projection of 21,204. However, for site selection purposes, the HSPLS has increased the proposed building area to 15,000 gsf to accommodate a larger population than projected in the 1991 Master Plan, and to allow space within the library facility for a Hawaiian cultural feature.

The library building will contain all library uses on a single level, and will provide space for a lobby, large group room, librarian’s office, staff workroom, storage stack area, and storeroom. Additional areas include a staff lounge and restroom, public toilets, mechanical/electrical room, and a grounds maintenance room.

2. Parking Requirements
Paved parking and loading spaces shall be provided in accordance with the City and County of Honolulu Land Use Ordinance, which requires libraries to provide one off-street parking space per 300 square feet of floor area. Therefore, the Nanakuli Public Library will require a minimum of 50 off-street parking spaces. The Library Master Plan requires parking to be within 500 feet (pedestrian distance) of the library public entrance.

Compliance with handicapped parking requirements is assured, and appropriate landscaping and fencing shall also be provided around parking areas.
3. **Land Area Requirements**

For single-floor designs, the 1991 Master Plan requires a site 3.5 times the footprint of the building itself. The 3.5 multiplier is needed to accommodate the building, parking, landscaping, driveways, walks, etc. Using the 3.5 multiplier with the proposed 15,000 gsf building, the projected land requirement for the proposed Nanakuli Library is determined to be at least 1.2 acres (52,500 square feet). However, a larger site may be acquired if physical or land use restrictions (such as slope or zoning regulations) impact site planning for the facility.

A land area of 2.3 acres is proposed for the Nanakuli Public Library. This size site is needed because of the following factors:

- a. Nonresidential use within residential zoning requires an additional 20 foot Front Yard, and an additional 10 foot Side and Rear Yard setback;
- b. Farrington Highway requires a 10 foot street setback in addition to the Front Yard requirement; and
- c. Space for future expansion of the building and parking areas is provided.

E. **USE OF PUBLIC FUNDS OR LAND**

The project will be funded by public Capital Improvement Program (CIP) appropriations from the State Legislature. In an effort to minimize tenant relocation and land acquisitions costs, State lands will be given first consideration in the selection of sites.

Funds for the planning, site selection, and EIS were appropriated under Act 296/91, Session Laws of Hawaii 1991. Design and construction funds were not appropriated during the 1994 Legislative Session, and will be requested again in 1995.
F. DEVELOPMENT SCHEDULE

Depending on successful funding by the Legislature, the library is scheduled to open in 1998. The present schedule to select a library site and construct the facility is as follows:

July 1994 Complete Site Selection Study and EIS
Dec. 1996 Complete Master Plan and Design
Dec. 1997 Complete Construction

The project schedule is dependent on the selection of lands, and in the case of private lands, implementation of acquisition proceedings. Selection of State-owned lands would eliminate some of these proceedings. Relocation of any existing land tenants may also impact the construction time frame of the facility.
CHAPTER II

Identification of Candidate Sites
II. IDENTIFICATION OF CANDIDATE SITES

A. SITE SELECTION METHODOLOGY

The objective of the site selection process is to identify and evaluate
appropriate alternative sites for the proposed Nanakuli Public Library within
the library service area. This is accomplished through a three-step process.
First, "possible sites" in the area are identified for preliminary evaluation.
Second, a set of minimum criteria is used to eliminate unsuitable sites and to
narrow the choices for more in-depth analysis. Each "possible site" meeting
the minimum criteria is accepted as a "candidate site," and is further
evaluated against established physical, community, and cost evaluation
criteria. The results are tabulated and summarized.

B. "POSSIBLE SITES" AND MINIMUM SITE CRITERIA

1. "Possible Sites"

The proposed library service area was first screened for "possible sites"
for the new Nanakuli Public Library. Through the use of tax key maps
and site visits, six "possible sites" were identified for preliminary
evaluation. These sites met the basic criteria of 1) utilizing available
State-owned lands, 2) being located on a main thoroughfare in a
central location, 3) being convenient to mass transit, and 4) being
between 1 and 2.5 acres in size. The six possible sites are shown on
Exhibit II-1.

Possible library sites on or adjacent to existing school sites were
considered. However, no such location was identified as a "possible
site" due to three factors:

1) HSPLS Policy: The HSPLS 1991 Master Plan discourages joint
community-school library facilities.

"School sites are typically not ideal public library sites. For a
public library, a high-visibility, high-traffic location is ideal.
For a school, dispersion among residential areas is ideal;
elementary schools prefer areas with light or no traffic,
forcing adult traffic to go out of its way to come to the library.
Additionally, the public and school library facility and its site
rarely provide space for any growth to respond to growth in the public library service population."²

Because these disadvantages in combined public-and-school libraries present significant, inherent barriers to efficient public library service, the Library Master Plan recommended:
- Not establishing any new public-and-school libraries; and
- Phasing out existing public-and-school libraries over time.

2) There is not sufficient land area available on or adjacent to existing school sites in the Maili and Nanakuli areas.

3) The existing school sites (with the exception of Nanaikapono Elementary) are not located on, or highly visible from, a main thoroughfare.

2. Minimum Criteria
A set of minimum criteria reflecting general site requirements and physical land development constraints was then used to eliminate unsuitable sites and to narrow the choices for more in-depth analysis. The minimum criteria which the selected library site must meet were developed from standards established by The Department of Accounting and General Services and planning guidelines from the 1991 Library Master Plan. Each of the possible sites was field checked and analyzed using information derived from City and County of Honolulu Tax Maps, USGS topographic maps, Federal Flood Insurance Rate Maps, City Tsunami Inundation Zone maps, State Land Use District maps, and City Development Plan and Zoning maps.

The minimum criteria used for Nanakuli Library are based on the factors listed below:

a. **Land Area:** The usable area of the potential library site must be a minimum of 1.2 acres based on standards established in the Master Plan, and a maximum of 2.5 acres, determined to be necessary due to land use restrictions (such as zoning setbacks).

b. **Central and Visible Location:** The site should be on and visible from a main thoroughfare in the area, with existing accessibility.

c. **Site Shape:** The length to width ratio of the site must not exceed 2.5 to 1.

d. **Slope:** The site should have an average slope less than 15 percent.

e. **Landslide Potential:** The site must not be located within a known or potential landslide area.

f. **Traffic:** The site must not be located in an area hazardous from the standpoint of pedestrian and traffic safety unless mitigative safety provisions can be made.

g. **Historic Sites:** Development of the site must not result in the destruction of buildings or sites designated as historic and deserving of preservation.

h. **Displacement:** The site should be developable with minimal disruption to the existing community. Displacement of existing residences, businesses, or public uses is undesirable.

When the minimum criteria were applied to the six possible sites, Sites 2 and 3 were combined for consideration as one candidate site due to the inadequate size of each site individually. Since Sites 5 and 6 were adjacent to each other on the same parcel, it was decided to consider them as one site (in the location of Site 5), and the exact location could be negotiated with the landowner if necessary.
After the public information meeting in Nanakuli, at which time the initial six "possible sites" were presented, input from the community resulted in the consideration of a new site due to the site's size and ideal location within the community. The new site is located along Farrington Highway, adjacent to the existing Pacific Shopping Center. Consideration of an existing commercial site in Maili was also suggested by the landowner's realtor, however the site is smaller than the necessary 2.3 acres.

During the EIS Consultation Phase, the City and County of Honolulu Planning Department suggested consideration of another potential site. The site, TMK 8-7-8:77, is located along Lualualei Naval Road, mauka of the Pacific Shopping Center. Since the site is not located on or visible from the main thoroughfare in the area, Farrington Highway, it did not meet the minimum criteria.

As a result of the minimum criteria phase, five sites were considered suitable for the proposed library use, and warranted further evaluation as "candidate sites."

C. CANDIDATE SITES

The five candidate sites selected as potential locations for the new Nanakuli Public Library are shown on Exhibits II-2 through II-6, at the end of this chapter. The boundaries of Sites A, C, D, and E are conceptual in nature and can be refined or modified to accommodate the desired library facilities layout or landowner preferences once a final site is selected.

<table>
<thead>
<tr>
<th>Candidate Site No.</th>
<th>&quot;Possible Site&quot; No.</th>
<th>Tax Map Key</th>
<th>Library Acreage</th>
<th>Landowner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site A</td>
<td>1</td>
<td>8-7-6:por. 2 &amp; 5</td>
<td>2.3</td>
<td>State of Hawaii</td>
</tr>
<tr>
<td>Site B</td>
<td>2 &amp; 3</td>
<td>8-7-33:11 &amp; 12</td>
<td>2.3</td>
<td>Private</td>
</tr>
<tr>
<td>Site C</td>
<td>4</td>
<td>8-9-2:por. 1</td>
<td>2.3</td>
<td>State of Hawaii</td>
</tr>
<tr>
<td>Site D</td>
<td>5 &amp; 6</td>
<td>8-9-2:por. 1</td>
<td>2.3</td>
<td>State of Hawaii</td>
</tr>
<tr>
<td>Site E</td>
<td>--</td>
<td>8-7-8:por. 11, 65, 75</td>
<td>2.3</td>
<td>Private</td>
</tr>
</tbody>
</table>
A detailed analysis was undertaken of each candidate site. This involved evaluating each candidate site against established criteria and rating each site individually on how it met the criteria. The Site Evaluation Criteria are based on standards established by DAGS and HSPLS to assess the relative merits of candidate sites selected as potential locations for a new library.

All criteria are considered equal. The site evaluation criteria are outlined below, and a full description of the criteria is found in Chapter V. The evaluation of each candidate site against the Site Evaluation Criteria is also contained in Chapter V.

1. **Physical Criteria**
   a. **Site Characteristics**
      Slope, Shape, Soil and Foundation Characteristics, Natural Beauty, and Aesthetic Qualities
   b. **Roadways and Utilities**
      Roadways, Water Service, Sewer Service, Drainage Facilities, Power and Communication
   c. **Accessibility and Safety**
      Vehicular Access, Vehicular Safety, Pedestrian Access and Safety

2. **Community Criteria**
   a. **Government**
      State Land Use Designation, City and County Development Plan, City and County Zoning, Subdivision/Consolidation, Special Management Area, and National Food Insurance Program
   b. **Community Effects**
      Land Ownership, Existing Use and Displacement, Surrounding Land Use, Proximity to Commercial Center, Visibility from Major Highway, and Scenic Value

3. **COST CONSIDERATIONS**
   a. Land Acquisition Costs
   b. On-site Improvements
   c. Off-site Improvements
Site C: TMK 8-9-2: por. 1
Site D: TMK 8-9-2: por. 1

Exhibit II-5
Candidate Site C & D
Site E: TMK 8-7-8:11, 65 & 75

Exhibit II-6
Candidate Site E

1" = 200 feet
CHAPTER III

Environmental Conditions in the Service Area
III. ENVIRONMENTAL CONDITIONS IN THE SERVICE AREA

A. PHYSICAL

1. Land Use and Land Ownership

The library service area is relatively rural in character with a mix of land uses including residential, commercial, industrial, public facilities, recreation, agriculture, and military. Commercial land uses are scattered along Farrington Highway, surrounded primarily by single family residential development. Land uses makai of the highway are limited to recreation and preservation, with the exception of an elementary school and a small residential area in Nanakuli. Agriculture-zoned lands mauka of the denser urban development contain both residential and agricultural land uses on two- to five-acre lots. Limited industrial land uses exist along the lower portion of Lualualei Naval Road. Lualualei Naval Reservation encompasses the majority of the Nanakuli-Maili land area, extending from the agriculture lands to the ridge of the Waianae Mountain Range.

The majority of the urban and agricultural lands are privately owned, however, a significant amount of land in Nanakuli is under the administration of the Department of Hawaiian Home Lands, and is currently or proposed for residential use. The United States government owns the Naval Reservation. State-owned lands in the service area are limited to existing public facilities, with the exception of the 30-acre vacant site in Nanakuli (Sites C and D), across from Nanaikapono Elementary School, and land at the base of Puu O Hulu Kai near Maili Point (Site A).

Library candidate site A encompasses portions of two State-owned parcels (8-7-6: 2 and 5), both of which are vacant and unused. (Refer to Exhibit II-3.) The parcels are the subject of a land ownership dispute between the State and the Department of Hawaiian Home Lands (DHHL). The dispute is currently being reviewed by the Governor’s Task Force on DHHL Title and Related Claims. Parcels 2 and 5 have also been identified by the Department of Land and Natural Resources’ Division of Land Management (DLM) as a possible site for homeless housing projects in the Waianae Coast area. According to the Oahu
land agent of DLM, this situation does not preclude the consideration of other public uses for the site, such as a library. Site A is surrounded primarily by vacant land except for the residential land use across Kaukama Street from the site. Three military-related (WWII) structures are situated in the vicinity of the site.

Site B (Exhibit II-4) consists of two privately owned parcels, one of which (parcel 12) is encumbered with five single family homes and an existing private road that provides the only access to nine homes across the U2 (Ulehawa) drainage channel. According to the City and County tax office, parcel 12 is part of a condominium plan which includes parcel 21 (located mauka of parcel 12, across the drainage channel). Between the two parcels, there is one landowner, 15 units, and 13 lessees on record at the tax office. The other parcel (11), owned by a single landowner, is vacant and unused. Both parcels 11 and 12 are former government lands converted to private ownership and, like Site A, are the subject of a DHHL claims dispute with the State. Site B is surrounded by residential lands with the exception of an adjacent small grocery store to the north.

Sites C and D (Exhibit II-5) are located on a 30-acre State-owned parcel which is clear of DHHL title claims. The parcel is often referred to as the former Camp Andrews site since the military reservation once occupied the site. An unapportioned fifteen acres of the property have been transferred to DHHL for development of new projects to serve the adjoining Nanakuli Homesteads. The remaining 15 acres of the site is proposed to be retained by the State. The Department of Education (DOE) is interested in approximately 12 acres of the property as a potential elementary school site, and 2.3 acres within the parcel may be utilized for the new Nanakuli Library. The State of Hawaii has first choice for school and/or library sites.3

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3 State of Hawaii, Office of State Planning, Personal communication with Ms. Mary Alice Evans, October 31, 1994.
The former Camp Andrews parcel is presently vacant except for a lease to Head Start for operation of a pre-school in the southern corner of the property and a revocable permit to DHHL for a cesspool in the northern corner. The land area of Sites C and D is vacant. The sites are primarily surrounded by the vacant land of the parcel except for the residential lands along the northwest side of Site C and the drainage channel along the northwest side of Site D. Nanakuli Beach Park and Nanaikapono Elementary School are located across Farrington Highway from Sites C and D respectively.

Site E (Exhibit II-6) consists of three parcels of privately owned, commercial land. The site is clear of DHHL title claims. There are four buildings on the site, housing a total of approximately 10 businesses. Parcels 65 and 75 each contain one building and two businesses. Parcel 11 has two commercial buildings adjacent to the southwest (makai) property line. The remainder of parcel 11 has been extensively cleared and graded, and is currently being used primarily as a truck and auto wrecker yard. According to the landowner, the site is on the market for sale, and offers are currently being considered for development. The Pacific Shopping Center is west of Site E, across a State road easement; Food Giant Supermarket is immediately southwest of the site; and commercial and residential land uses are located east of the site. A portion of the U3 drainage channel, which feeds the Ulehawa Stream Channel, borders the northern property line, across from which is vacant land. Ulehawa Beach Park is across Farrington Highway.

2. **Climatic Characteristics**

The Waianae coast is one of Hawaii’s driest localities. The average annual rainfall along the coastline is less than ten inches. The mean maximum temperature is in the mid-eighties and the mean minimum temperature is in the high sixties (degrees Fahrenheit).
3. **Topography and Soil**
   The urban and agricultural lowlands of Nanakuli and Maili have a very gentle slope between 10 and 40 feet above mean sea level. The gentle slope throughout the valleys accounts for the poorly defined surface drainage pattern.

   The predominant soils within the coastal area belong to the Mokuleia and Mamala series, and Coral Outcrop. Mokuleia clay in Maili is a sticky plastic clay with slow permeability. In Nanakuli, Mamala clay loam is shallow and stony, and the areas of Coral Outcrop consist of 80 to 90 percent coral with minimal soil.

   Site-specific slopes and soil-types are described in Chapter V.

4. **Flood and Tsunami Hazards**
   Portions of two candidate sites, Sites B and E, are within "special flood hazard areas inundated by 100-year flood," according to the Federal Emergency Management Agency's Flood Insurance Rate Maps. The flood zones, for which base flood elevations have been determined, are shown on Exhibit III-1. City and County of Honolulu building codes require that the first floor of a structure be located at the base flood elevation. Sites A, C, and D are within Zone D, "areas in which flood hazards are undetermined," and do not require raised structures.

   The tsunami inundation zone is delineated by Oahu Civil Defense. All five candidate sites are within the tsunami zone.

5. **Flora and Fauna**
   The area along Farrington Highway is highly developed and the existing vegetation consists primarily of non-native species including landscape plants, kiawe, koa haole, and dry, scrubland grasses and shrubs. There are no known endangered species of flora within the developed study area.
Candidate Site B

Candidate Site E

Legend:
- Special Hazard Areas Inundated by 100-Year Flood
- Zone AE: Base flood elevations determined.
- Zone VE: Coastal flood with velocity hazard; base flood elevations determined.
- Other Areas:
  - Zone D: Flood hazards undetermined.

Exhibit III-1
Flood Zones - Sites B and E
Domestic pets, feral animals, livestock and rodents make up the majority of the non-human mammals inhabiting the area. Birds associated with the kiawe and lowland vegetation type in the area include the cardinal, barred dove, spotted dove, mockingbird, golden plover, pueo, ricebird, and white eye. Of these birds, all but the native Hawaiian pueo and indigenous golden plover are introduced species.

6. **Hydrology**
   The gentle slope throughout the valleys accounts for the poorly defined surface drainage pattern. Three intermittent streams flow through the Nanakuli-Maili area: Nanakuli Stream, Ulehawa Stream, and Maililii Stream. The latter two streams have been channelized near their outlet at the ocean. Man-made channels within the developed areas also direct surface runoff to the existing stream channels. All candidate sites, except Site A, are adjacent to an existing City and County drainage channel.

7. **Air Quality**
   While there is no air monitoring station in the study area, air quality is believed to be in compliance with State and Federal standards due to the rural, lightly developed nature of the area. The State Health Department’s nearest air monitoring station, located about eight miles away at Barber’s Point, indicates compliance with State and Federal standards despite being located adjacent to Campbell Industrial Park.

   Air sampling conducted in 1991 for the Lualualei Golf Course project found carbon monoxide (CO) levels in the 1 to 4 milligrams per cubic meter (mg/m³) range at the Farrington Highway/Hakimo Road intersection during the morning and afternoon peak traffic hours under light-to-moderate wind conditions. The State one-hour standard is 10 mg/m³, and the Federal standard is 40 mg/m³.

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Ambient air quality is sometimes affected by the many agricultural animal industries located in Lualualei Valley, and on occasion foul odors from these activities can be detected downwind. The Nanakuli Landfill on Lualualei Naval Road is also a source of dust and exhaust emissions.

8. **Historic and Archaeological Resources**
   An archaeological assessment (included as Appendix A) and a historical and archaeological literature search (Appendix B) were conducted by Aki Sinoto Consulting to evaluate each site for potential cultural resources. The evaluation included a brief background research of previous archaeological work within or in the vicinity of the candidate sites, historical literature and documents review, and on-site inspections.

   No surface archaeological sites were identified in the candidate sites during the on-site field inspections. The research confirmed extensive land clearing and development activities in each of the candidate sites. Although only a few archaeological studies have been conducted along the coastal and immediate inland portions of Lualualei, results of these studies indicate a paucity of traditional Hawaiian remains. Based on the negative results of previous archaeological investigations, together with the current conditions of each site, no significant archaeological remains are expected in any of the candidate site areas.

9. **Scenic Characteristics**
   The predominant scenic feature in the area is the panoramic ocean view. The distant steep slopes of the Waianae Mountain range provide a backdrop to the expansive Lualualei Valley, with smaller ridges visually and physically separating the leeward valleys from one another.

   Nanakuli and Maili are within the Nanakuli Viewshed and the Waianae Viewshed, respectively, according to the City and County
Coastal View Study.\textsuperscript{5} Farrington Highway is identified as a "coastal road with continuous coastal views" in the vicinity of Sites A, B, and E. Makai views along some portions of the highway are blocked by sand dunes, such as across from Site E. Along Sites C and D, the road has "intermittent coastal views" due to Nanaikapono Elementary School.

The study did not identify any "significant stationary viewpoints" along the coastline between Sites A and D. However, the mountain peaks at Maili Point (Puu O Hulu Kai and Puu O Hulu Uka), near site A, are labeled "important coastal land forms."

B. **PUBLIC FACILITIES AND SERVICES**

1. **Water**
   
   The Nanakuli-Maili area is served by the City and County Board of Water Supply (BWS). A 24-inch water transmission line is located along Farrington Highway in Nanakuli, serviced by the BWS reservoir located above Hakimo Road. Twelve-inch and six-inch water mains also exist along Farrington Highway through Maili and Nanakuli. Water mains extend mauka from Farrington Highway to serve the urban and agricultural land uses in the region.

2. **Wastewater**

   The City and County Department of Wastewater Management operates the Waianae Sewage Treatment Plant (STP) and sewer system in the area. An existing 30-inch interceptor sewer line is located within the Farrington Highway right-of-way, through Nanakuli and Maili to the Waianae STP, with branch mains extending mauka to serve some existing subdivisions. Existing 24-inch, 18-inch, and 8-inch sewer lines are also located in Farrington Highway. All development within the county's service limits is required by state law to connect to the public sewers in accord with State Department of Health wastewater rules.

\textsuperscript{5}City and County of Honolulu, Department of Land Utilization, Coastal View Study, 1987.
3. **Drainage**

Drainage within the Nanakuli-Maili area generally sheet flows from the mauka areas into the three intermittent streams or drainage channels. Storm drainage facilities within the service area generally consist of systems of channels, ditches, culverts, and catch basins which discharge into streams and/or the ocean.

All candidate sites, except Site A, are adjacent to existing City and County drainage channels. Sites B and E are adjacent to branch drainage channels U2 and U3, respectively, which feed the main Ulehawa Drainage Channel. Sites C and D are adjacent to a large concrete channel draining mauka residential lands. An existing underground drainage system along Kaukama Street includes a catch basin at the corner of Kaukama Street and Farrington Highway, adjacent to Site A. A 36-inch drain line enters the catch basin from upper Kaukama Street, and a 42-inch drain line extends from the catch basin to the ocean outfall.

4. **Power and Communication**

Electric power within the service area is provided by Hawaiian Electric Company. GTE Hawaiian Tel provides telephone service. Gasco has an existing underground line along Farrington Highway between Helelua Street and Auyong Homestead Road.

5. **Traffic**

Farrington Highway, a State highway, is the principal roadway in the service area and along the entire leeward coast. It is the only roadway for through traffic along the Waianae Coast and links with the H-1 Freeway near Kapolei. In the service area, the highway runs near and parallel to the shoreline, is undivided with four lanes, and has a posted speed limit of 35 miles per hour. Paved shoulders vary from five to eight feet wide, and an asphalt sidewalk is provided on the mauka side. County roadways run primarily mauka, connecting Farrington Highway with residences, agricultural lands, and military lands.
There are traffic signals at major intersections along Farrington Highway, however there are very few designated turn lanes, which results in traffic delays and congestion during peak traffic hours. In the vicinity of the candidate sites, there are traffic signals at Hookele, one block west of Site A; Mohihi Street, east of Site B and Ulehawa Channel; Haleakala Avenue, Nanaikapono Elementary School, and Nanakuli Avenue, near Sites C and D; and Lualualei Naval Road and Helelua Street, near Site E. None of the traffic signal-controlled intersections near the candidate sites have designated turn lanes.

Farrington Highway is slated for some intersection improvements, primarily involving the addition of turning lanes.

6. Schools, Medical, and Recreational Facilities
The Nanakuli school complex consists of a combined high and intermediate school and two elementary schools. Site selection and planning for a third elementary school in Nanakuli is currently underway to relieve present overcrowding and accommodate projected growth in enrollment. Maili Elementary school is a part of the Waianae school complex.

Due to DHHL land title claims and proposed rental agreements for use of the Nanaikapono Elementary School site, the Department of Education is considering relocating the school to the former Camp Andrews parcel (location of Sites C and D).

The Waianae Coast Comprehensive Health Center (located north of Mailiili Channel) and its satellite Nanakuli Clinic (located across from Nanaikapono Elementary School, near Site D) service the leeward coast. The next closest medical facility is St. Francis Medical Center-West in Ewa.

Recreation facilities in the area consist primarily of beach parks makai of Farrington Highway, and neighborhood parks/playgrounds adjacent to some existing elementary schools.
7. Police and Fire Protection
Police protection in the service area is provided by the Waianae police
substation in Waianae. Fire protection is provided by the Nanakuli
fire station on Haleakala Avenue and the Waianae station on
Farrington Highway near Waianae Intermediate School.

C. SOCIO-ECONOMIC CHARACTERISTICS
1. Population and Housing
The population of the Waianae region (Nanakuli, Maili, Makaha, and
Waianae) increased 18.8 percent from 1980 to 1990, nearly double the
population growth of 9.7 percent for the entire island. The 1980
population for the region was 31,487, and 37,411 in 1990.

The 1990 resident population of Maili and Nanakuli respectively was
6,059 and 9,575. The median age in Maili and Nanakuli (25 years) is
lower than the island-wide median of 32 years, however the percent of
the population under 18 years of age is significantly higher than the
island-wide percent (37% for Maili/Nanakuli; 25% island-wide). The
average household size in Nanakuli (4.6 persons) and Maili (4.2) is also
higher than the Oahu average household size of 3 persons. Residents
in the library service area are more likely to own their own homes than
residents island-wide, however the median value of owner occupied
homes is less than half the Oahu median.

While the same four ethnic groups make up 80 to 85 percent of the
population in Maili and Nanakuli and on Oahu, there is a significantly
greater proportion of Hawaiians in the study area. There is also a
much higher percent of Samoans in the study area.

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6 All data, unless otherwise noted, is based on the U.S. Bureau of the Census, 1990 Census of Population
and Housing, Census Tracts, Hawaii.
2. **Employment and Income**

The labor force profile for the Maili and Nanakuli areas differs in some respects from that of the county, as shown on the table below. Most notably, the project area has fewer eligible people in the labor force, a higher unemployment rate, fewer high school and college graduates, and a larger percent of the population living below the poverty line.

<table>
<thead>
<tr>
<th></th>
<th>Maili</th>
<th>Nanakuli</th>
<th>Oahu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawaiian</td>
<td>35%</td>
<td>52%</td>
<td>11%</td>
</tr>
<tr>
<td>Filipino</td>
<td>23%</td>
<td>13%</td>
<td>14%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>20%</td>
<td>15%</td>
<td>32%</td>
</tr>
<tr>
<td>Japanese</td>
<td>6%</td>
<td>3%</td>
<td>23%</td>
</tr>
<tr>
<td>Samoan</td>
<td>5%</td>
<td>6%</td>
<td>2%</td>
</tr>
</tbody>
</table>

- % Persons 16 year & over in Labor Force: 65% 61% 71%
- % Civilian Labor Force Unemployed: 11% 7% 4%
- % High School Graduates: 67% 67% 81%
- % Bachelors Degree or Higher: 8% 4% 25%
- Median Household Income: $39,800 $34,400 $40,600
- % Below Poverty Line: 16% 20% 8%
CHAPTER IV

Relationship to Plans, Policies, and Controls
IV. RELATIONSHIP TO PLANS, POLICIES, AND CONTROLS

The plans and policies relating to the proposed project range from broad program guidance offered by the Hawaii State Plan to land use controls governing the development of the selected site. A number of State and County plans, policies and controls guide development within the State of Hawaii and the City and County of Honolulu. The proposed project will be developed in consonance with various land use plans, policies, and regulatory controls. The following is a review of these plans and policies.

A. HAWAII STATE PLAN

The Hawaii State Plan establishes a statewide planning system that provides goals, objectives, and policies which detail priority directions and concerns of the State of Hawaii. The proposed Nanakuli Public Library should conform with the following policies of the State Plan:

Facility Systems- In General
(b)(1) Accommodate the needs of Hawaii’s people through coordination of facility systems and capital improvements in consonance with state and county plans.

(b)(2) Encourage flexibility in the design and development of facility systems to promote prudent use of resources and accommodate changing public demands and priorities.

Policies of the Hawaii State Plan that the new Nanakuli Public Library will help to implement through its services and special programs include:

Physical Environment- Land, Air, and Water Quality
(a)(2) Greater public awareness and appreciation of Hawaii’s environmental resources.

(b)(1) Foster educational activities that promote a better understanding of Hawaii’s limited environmental resources.

Socio-Cultural Advancement- Education
(b)(2) Ensure the provision of adequate and accessible educational services and facilities that are designed to meet individual and community needs.

(b)(3) Provide appropriate educational opportunities for groups with special needs.
(b)(4) Promote educational programs which enhance understanding of
Hawaii's cultural heritage.

Socio-Cultural Advancement - Leisure
(b)(1) Foster and preserve Hawaii's multi-cultural heritage through
supportive cultural, artistic, recreational, and humanities-oriented
programs and activities.

(b)(2) Provide a wide range of activities and facilities to fulfill the
cultural, artistic, recreational needs of all diverse and special groups
effectively and efficiently.

Socio-Cultural Advancement - Culture
(b)(1) Foster increased knowledge and understanding of Hawaii's ethnic
and cultural heritages and the history of Hawaii.

(b)(2) Support activities and conditions that promote cultural values,
customs, and arts that enrich the lifestyles of Hawaii's people and which
are sensitive and responsive to family and community needs.

(b)(3) Encourage increased awareness of the effects of proposed public and
private actions on the integrity and quality of cultural and community
lifestyles in Hawaii.

Priority Guidelines to Promote Quality Education
(5) Increase and improve the use of information technology in education
and encourage programs which increase the public's awareness and
understanding of the impact of information technologies on our lives.

B. STATE LAND USE LAW
Pursuant to the Hawaii Land Use Law (Chapter 205, HRS), all lands in the
State are classified by the State Land Use Commission (LUC) into four land
use districts: Urban, Agricultural, Rural, and Conservation. The proposed
library is a permissible use within the Urban District. Candidate Sites B, C,
D, and E are within the Urban District. Site A is within the Conservation
District where a library is not a permitted use. Therefore, a land use district
boundary amendment from Conservation to Urban would be required from
the Land Use Commission. Exhibit IV-1 displays the State land use districts
in the vicinity of the candidate sites.
C. **HAWAII STATE PUBLIC LIBRARY MASTER PLAN**

The development requirements for public libraries are described in detail in the Hawaii State Public Library System Master Plan, Volume 2 Technical Appendix (1991). The Master Plan emphasizes that "the HSPLS should recognize that, because each community in which libraries are located is unique, there may be valid reasons for exceptions to HSPLS policies. Therefore each facility project must be carefully reviewed on its own merits as well as for compliance with overall policy." The following policies have relevance for the Nanakuli Public Library:

- *Library needs are based on a uniform standard of 0.6 gross square feet (gsf) per capita so that libraries are distributed equally throughout the state.*

- *Selected individual facilities may require gross square feet beyond the 0.6 gsf per capita in their respective areas, to accommodate special collections or services.*

- *Libraries should be located so that they are conveniently accessible for most of Hawaii's population. Library locations are based on 10 minutes driving time at mid-day or 2 road miles for urban Honolulu.*

- *Services should be very similar at all branch libraries with some differences due to particular clientele....At the same time, community libraries should have the ability to customize their collections and program activities to meet local needs.*

- *School sites are typically not ideal public library sites.*

D. **CITY AND COUNTY OF HONOLULU GENERAL PLAN**

Policies of the City and County General Plan that the new Nanakuli Public Library project should conform to include:

- *Natural Environment, Objective B*

  - *Policy 3: Locate roads, highways, and other public facilities and utilities in areas where they will least obstruct important views of the mountains and the sea.*
Physical Development and Urban Design, Objective A
Policy 2: Coordinate the location and timing of new development with the availability of adequate water supply, sewage treatment, drainage, transportation, and public safety facilities.

Policy 8: Locate community facilities on sites that will be convenient to the people they are intended to serve.

Physical Development and Urban Design, Objective E
Policy 5: Require new developments in stable, established communities and rural areas to be compatible with the existing communities and area.

Policy 9: Design public structures to meet high aesthetic and functional standards and to complement the physical character of the communities they will serve.

Public Safety, Objective B
Policy 9: Design safe and secure public buildings.

Policies of the City and County General Plan that the services and programs provided by the proposed library will help the City and County to implement include:

Natural Environment, Objective A
Policy 10: Increase public awareness and appreciation of Oahu's land, air, and water resources.

Health and Education, Objective B
Policy 1: Support education programs that encourage the development of employable skills.

Policy 2: Encourage the provision of informal educational programs for people of all age groups.

Culture and Recreation, Objective A
Policy 1: Encourage the preservation and enhancement of Hawaii's diverse cultures.

Policy 2: Encourage greater public awareness, understanding, and appreciation of cultural heritage and contributions to Hawaii made by the City's various ethnic groups.

Policy 3: Encourage opportunities for better interaction among people with different ethnic, social, and cultural backgrounds.

Policy 4: Encourage the protection of ethnic identities of the older communities of Oahu.
**Culture and Recreation, Objective B**

*Policy 1:* Encourage the restoration and preservation of early Hawaiian structures, artifacts, and landmarks.

*Policy 4:* Promote the interpretive and educational use of cultural, historic, architectural, and archaeological sites, buildings, and artifacts.

**Culture and Recreation, Objective C**

*Policy 1:* Encourage and support programs and activities for the visual and performing arts.

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**E. CITY AND COUNTY OF HONOLULU DEVELOPMENT PLAN**

The proposed project will be required to conform to and implement the Development Plan of the City and County of Honolulu. The Development Plan (DP) includes general urban design principles and controls for both public and private developments which are to be applied by all city agencies in the performance of their duties. These include protecting public views, preserving and enhancing open space, and setting general height and density controls. Specific recommendations for public buildings include: a central location within their service area; easily accessible to public and private transportation; screening from incompatible uses; and energy efficiency through the use of natural ventilation and alternate energy sources.

The DP Public Facilities Maps (DPPFM) depict proposed public facilities and their respective time frame for land acquisition and/or construction. Since none of the Candidate Sites are currently designated for a proposed library on the Waianae DPPFM, an amendment to this map would be required.

The DP Land Use Maps depict land use categories which reflect the type of permitted development within the designated area. Changes in the land use maps to depict completed public facilities that are already shown on the DPPFM do not require processing a "DP amendment." Prior to such changes, responsible agencies must submit a Letter of Project Completion to inform DGP and the City Council that projects have been completed. A change to the Waianae Land Use Map would be required for Site A which is designated Preservation, and Sites B and E which are designated Residential and Commercial, respectively. Sites C and D are already designated Public Facility. Existing land use designations are shown on Exhibit IV-2.
Exhibit IV-2
City & County Development Plan Land Use Designations
The DP Public Facilities Map identifies the system of parks, public thoroughfares, public or private facilities for utilities, and the location, relocation, or improvement of major public buildings. This map distinguishes between facilities planned to begin land acquisition or construction within the next six years and those planned beyond the next six years. The Waianae Public Facilities Map shows a symbol for publicly funded improvements to Farrington Highway in the "within six years" category. According to the Department of Transportation, these are intersection improvements. The map also shows a symbol for a publicly funded sewer improvement district, site to be determined, within six years in the general vicinity of Sites C and D. The Department of Wastewater Management has no plans for improvements in that area.

F. CITY AND COUNTY OF HONOLULU LAND USE ORDINANCE
The proposed Nanakuli Public Library will be required to meet the requirements of the Land Use Ordinance of the City and County of Honolulu, including parking requirements and zoning district regulations such as height limits, maximum building areas, and building setbacks. A public library would be permitted as a principal use within the R-5 Residential zoning district of Sites B, C, and D, and within the B-2 Commercial Business zoning of Site E. Site A is zoned P-1 Preservation, and would require a zoning amendment if selected.

G. COASTAL ZONE MANAGEMENT PROGRAM / SPECIAL MANAGEMENT AREA
The objectives and policies of the Hawaii Coastal Zone Management (CZM) Program are included in the Shoreline Protection Act of 1975 (Chapter 205A-2, HRS). The coastal areas of Oahu are within the County's Special Management Area (SMA) and are subject to Chapter 205A. The five candidate sites are all located within the SMA and a Special Management Area Permit from the City and County of Honolulu is required.
CHAPTER V

Evaluation of Candidate Sites
V. EVALUATION OF CANDIDATE SITES

As described in Chapter II, five candidate sites were selected after having met the minimum criteria for library sites. To assess the relative merits of the candidate sites selected as potential locations for a new library, each site was evaluated against a set of Site Evaluation Criteria. The Site Evaluation Criteria, discussed below, are based on standards established by DAGS and HSPLS, and represent a wide range of considerations that are important in selecting an appropriate site for new library facilities.

The criteria are grouped into three categories:

*Physical Criteria* are used to compare the physical parameters which define site development and operational constraints and opportunities, such as site characteristics; adequacy of roadways and utilities; and accessibility.

*Community Criteria* enable evaluation of site development in terms of governmental land use regulation and the relationship of the facility to the surrounding community.

*Cost Considerations* are used to compare the relative costs associated with project development, such as land acquisition, and on-site and off-site improvements.

Each of the candidate sites was rated "good," "fair," or "poor" with respect to the physical and community criteria, and dollar amount estimates were made for cost considerations. Evaluation Summary Tables are provided in section D of this chapter so the relative merits of each site can be easily compared. These ratings and cost estimates are intended for use as a basis for discussing the relative advantages and disadvantages of each site in order to facilitate selection of a site. The evaluation is for comparison purposes only, and no attempt is made to recommend a particular site.

A discussion of the criteria and ratings are described below. The application of the criteria to the candidate sites is italicized and follows the description of each criterion.
A. PHYSICAL CRITERIA

1. Site Characteristics
   a. Shape - The site should generally be rectangular in shape and should be oriented in such a way that the library can be sited with northern exposure. This orientation optimizes natural ventilation in the event of air conditioning failure.

      Good - The site is generally rectangular in shape with a length to width ratio of 1.5 : 1 to 2.0 : 1, with the long side having northern exposure.

      Fair - The site is fairly rectangular in shape with a length to width ratio of 1 : 1 to 1.5 : 1, with the long side having northern exposure.

      Poor - The site is highly irregular in shape with a length to width ratio greater than 2 : 1, and/or cannot accommodate requirement for northern exposure.

      Sites A, C, and E can be configured to meet the "good" criterion. Site B is nearly square, rating "fair." Site D is somewhat irregularly shaped, however the long side has northern exposure and the average length to width ratio is 1.1 : 1, rating "fair" also.

   b. Slope - The average slope of a site represents the degree of steepness. The slope affects usability of a site and influences the location of various land uses such as buildings and parking. In general, the steeper the site, the more difficult and expensive it is to prepare the site for construction.

      Good - The average slope of the site is less than 5%.
      Fair - The average slope of the site is between 5 and 10%.
      Poor - The average slope of the site is greater than 10%.
All sites, except A, rated "good" since the average slope of each site is less than 5%. Site A has an average slope of 8.5% diagonally across the site, from the upper inside corner to the road intersection, and therefore rated "fair."

c. Soil and Foundation Characteristics - Soil and subsoil conditions affect the construction and maintenance of buildings, roads, utilities, sewage disposal, drainage systems, and landscaping. Soil properties and features identified by the United States Department of Agriculture, Soil Conservation Service, in their Soil Survey of the Island of Oahu are used to rate each soil type.

Good - Soils with more than 5 feet depth to bedrock, low shrink-swell potential, high sheer strength, high bearing capacity, low compressibility and/or rapid permeability.

Fair - Soils with moderate shrink-swell potential, moderate sheer strength, moderate bearing capacity, moderate compressibility and/or moderate permeability.

Poor - Soils with high shrink-swell potential, low sheer strength, low bearing capacity, high compressibility, low permeability and/or high organic matter content; or sites lacking soil cover.

Site B rated "fair" as Mamala stony silty clay loam soils cover the site. These soils have a shallow depth of 12 to 18 inches, low shrink-swell potential, and moderate permeability.

The lower half of Site A consists of Mokuleia clay soils which have more than five-foot depth to bedrock, moderate to low shrink-swell potential, and rapid permeability. The upper half of the site has Lualualei extremely stony clay soils having more than five-foot depth to bedrock, high shrink-swell potential, and slow permeability, which results in a "poor" rating. The
Luaualei soil type is susceptible to sliding on more than 15 percent slope, however the average site slope is 8.5 percent.

Sites C, D, and E rated "poor" due to their soil designation of "coral outcrop" which indicates a lacking of soil cover.

d. Aesthetic Qualities

Good - The site has some natural beauty in the form of pleasant views, trees, plants, rock formations, etc., which can be preserved and integrated into the design of the facility.

Fair - The site lacks most attractive natural characteristics but can be enhanced with appropriate site design and landscaping.

Poor - The site has no attractive features.

Site A, rated "good," has an expansive view of the ocean and Maili coastline due to its sloping elevation. The other four sites rated "fair" as they have some view of the ocean due to their location along Farrington Highway, but generally lack attractive natural characteristics.

2. Roadways and Utilities

a. Roadways - Roads serving a library site must be adequate to safely and efficiently accommodate automobile traffic serving the facility. The right-of-way (R-O-W) of existing roads must be wide enough to accommodate road improvements to meet city standards as well as provide adequate shoulders, sidewalks, etc.

Good - The roadways serving the site are adequate to accommodate immediate and long-term traffic projections for the facility.
Fair - The roadways serving the site are inadequate and will require widening or other improvements to meet the immediate and long-term needs of the facility.

Poor - Construction of roadways is required to provide access to the proposed facility.

All five sites are rated "good" as they are served by adequate roadways.

b. Water Service - Water of safe quality must be available in sufficient quantity and under adequate pressure to meet the library's domestic and fire protection needs. Board of Water Supply standards require that at least one fire hydrant be within 125 linear feet of a school site for exterior fire protection.

Good - The site has adequate water pressure and capacity available to meet ultimate library facility needs; and has adequate fire hydrants available.

Fair - The site has adequate water pressure and capacity available to meet the facility needs, but has no, or inadequate fire hydrants available.

Poor - The site has inadequate water service and will require the development or major extension of a water system to specifically meet facility needs.

Existing water mains in Farrington Highway fronting all the candidate sites are adequate to serve the proposed library. However, Site C does not have an existing fire hydrant within 125 feet of the site. Therefore Sites A, B, D, and E are rated "good" and Site C is rated "fair."
c. **Sewer Service**

Good - The site has adequate sewer lines available to meet the needs of the proposed facility.

Fair - The existing sewer lines are inadequate to meet the ultimate needs of the proposed facility and will require improvements.

Poor - There are no sewer lines in the vicinity of the site and the development or extension of sewer lines will be required to meet the proposed facility needs.

*Each of the five candidate sites could connect to existing sewer lines. The existing lines and Waianae sewage treatment plant are adequate to serve the proposed library facility. All sites are rated "good."*

d. **Drainage Facilities**

Good - The site has adequate drainage facilities available to accommodate the proposed project.

Fair - The site may be connected to off-site drainage facilities or drainage facilities can readily be provided to accommodate the project.

Poor - The site does not have adequate drainage facilities and may require the development of an extensive on-site and/or off-site drainage system to specifically accommodate the project.

*Site A may be connected to existing off-site drainage facilities along Kaukama Street, including a catch basin and 42-inch drain line. Sites B, C, D, and E are adjacent to existing drainage channels, into which an on-site drainage system could be connected. All sites rated "fair."*
e. **Power and Communication**

**Good** - Adequate existing electrical and telephone systems are available in the vicinity of the site.

**Fair** - Some off-site improvements will be required to provide adequate power and communications service to the site.

**Poor** - The site has insufficient power or communications service available and extensive improvements will be required to meet the library's needs.

*The electric and telephone utility companies will generally provide service to sites free of charge unless a considerable line extension distance is required or major improvements to an existing line are needed. All of the candidate sites are adjacent to existing electric and telephone lines, therefore all received a “good” rating.*

3. **Accessibility and Safety**

a. **Vehicular Access** - Circulation patterns affect the flow of traffic generated by the library. Through streets offer the greatest opportunity for smooth, safe access to and from the library site, while cul-de-sacs, dead-end streets, and flag lots can result in traffic congestion.

**Good** - The site has through streets along two or more sides.

**Fair** - The site has a through street along one side and a cul-de-sac or dead-end street along at least one other side.

**Poor** - The site is served only by one street.

*Site A is served by two through streets: Kaukama Street and Farrington Highway, and rated “good.” The remaining sites are served only by Farrington Highway and rated “poor.”*
b. **Vehicular Safety** - Roadways must be capable of safely handling traffic associated with a library. Through streets without dangerous conditions such as excessive gradients or curves or dangerous, congested intersections are preferred.

Good - The main access to the site is through an improved collector street free of blind curves, obstructions and other hazards.

Fair - Access to the site is via a collector street or major street which requires improvements in order to safely handle heavy traffic.

Poor - Access to the site is via a dead end street; or a heavily traveled highway.

*Site A is the only candidate site with potential access from a collector street (Kaukama Street) rather than from Farrington Highway. Site A rated "good" and Sites B through E rated "poor."*

c. **Pedestrian Access and Safety**

Good - The site has safe, visible (for security purposes) pedestrian access from adjacent roadways; and adequate and safe paved shoulders/walkways are available to the site.

Fair - The site may require shoulder/walkway improvements along access roads to insure safe pedestrian access.

Poor - The site may require traffic signals, pedestrian over/underpasses, or other measures in addition to shoulder/walkway improvements to insure safe pedestrian access.
Although Site A has adequate sidewalks along Kaukama Street, all sites rated "fair" because they will likely require shoulder/walkway improvements along Farrington Highway to ensure pedestrian safety.

B. COMMUNITY CRITERIA

This set of criteria is used to evaluate the compatibility of each candidate site with state and local land use designations, existing land use, and the surrounding community.

1. Government
   a. State Land Use Designation - All lands in the State are placed into one of four Land Use Districts to help assure that they are used for the purposes to which they are best suited. In general, libraries and urban-related developments are outright permitted uses within the Urban State Land Use District, while a Special Use Permit or boundary amendment is required for libraries within the Agricultural District. Within the Conservation District, boundary amendment would be required. Lands within the Agricultural and Conservation Districts but adjacent to the Urban District are preferred over Agricultural or Conservation District lands surrounded only by other Agricultural or Conservation District lands.

   Good - The site is within the Urban State Land Use District.

   Fair - The site is within the Agricultural or Conservation State Land Use District and is adjacent to the Urban District.

   Poor - The site is within an Agricultural or Conservation District and is not adjacent to the Urban District.

All sites, with the exception of Site A, rated "good" because they are within the Urban District. Site A had a "fair" rating since it is within the Conservation District, but is adjacent to Urban lands across Kaukama Street and Farrington Highway.
b. **City and County Development Plan**

   Good - The site is designated Public Facility (PF) on the regional Development Plan Land Use Map (DPLUM).

   Fair - The site is designated Single-Family or Multi-Family Residential, or Commercial on the regional Development Plan Land Use Map.

   Poor - The site is designated for any use other than those identified above.

   *Only Sites C and D are rated "good" due to their Public Facility designation on the DPLUM. Sites B and E are designated Residential and Commercial, respectively, and are rated "fair."

   Site A received a "poor" rating as it is designated Preservation.*

c. **City and County Zoning**

   Good - The site is within a zoning district which allows libraries ("public uses and structures") as a principal permitted use.

   Fair - The site is within any other zoning district and a zoning amendment will be required; however the site is adjacent to a zoning district which allows libraries as a principal permitted use.

   Poor - The site will require a zoning amendment; and is not adjacent to a district which allows libraries.

   *A library use is a principal permitted use in the R-5, Residential zoning district of Sites B, C, and D, and in the B-2, Community Business zoning district of Site E. These sites rated "good." Site A rated "fair" due to its P-1, Preservation zoning and its proximity to R-5, Residential zoning across Kaukama Street.*
d. **Subdivision/Consolidation**

*Good* - The site does not require subdivision or consolidation.

*Fair* - The site is a portion of a State or private parcel(s) and will require subdivision and/or consolidation. The subdivided/consolidated lots meet the minimum lot size for the particular zoning district.

*Poor* - The site is a portion of a State or private parcel and will require subdivision and/or consolidation. The subdivided/consolidated lots will not meet the minimum lot size for the particular zoning district and rezoning will be necessary.

*All five candidate sites rated “fair” because each would require subdivision and/or consolidation if selected for development of the proposed library facility, and the lots would conform to the respective zoning district requirements.*

e. **Special Management Area (SMA)**

Development of sites within the Special Management Area require a SMA permit and are subject to Chapter 205-A of the Hawaii Revised Statutes as amended and SMA Rules and Regulations of the City and County of Honolulu.

*Good* - The entire site is outside of the SMA.

*Fair* - A portion of the site is within the SMA.

*Poor* - The entire site is within the SMA.

*All five sites are located within the SMA and rated “poor” for this criterion.*
f. **National Flood Insurance Program**
   Development of sites within a designated flood hazard district -- Floodway district, Flood Fringe district, and Coastal High Hazard district, must be in compliance with the National Flood Insurance Program as administered by City and County of Honolulu through flood hazard prevention ordinances. The flood hazard districts are delineated on the Federal Emergency Management Agency's Flood Insurance Rate Maps (FIRM).

Good - The entire site is outside of the flood hazard district.

Fair - More than 50% of the site is outside of the flood hazard district.

Poor - More than 50% of the site is within the flood hazard district.

*Designated Zone D-Undetermined, Sites A, C, and D are outside the flood hazard district and rated "good." Less than one-half of Site E is within the flood hazard district (Zones VE and AE), with the majority designated Zone D. Site E rated "fair." Since two-thirds of site B is within the flood hazard district (Zone AE) and the remaining one-third is in Zone D-Undetermined, Site B rated "poor."*

2. **Community Effects**
   a. **Land Ownership** - The ownership of a site can affect the time-frame and cost associated with acquisition. Increased costs and excessive delays can result from negotiations or condemnation proceedings when an individual private owner is involved. Acquisition can be even further complicated when a site is under the ownership of more than one individual, when lessees are involved, or if there are acquisition or development restrictions associated with government-owned land.
Good - The site is owned by the Federal, State, or County government, and is unencumbered, and free of acquisition or development restrictions.

Fair - The site is owned by less than three individuals or businesses.

Poor - The site is owned by less than three individuals or businesses but has one or more lessees; or the site is owned by three or more individuals or businesses; or the site is owned by the Federal, State, or County government but has acquisition or development restrictions.

Sites C and D are on a 30-acre State-owned parcel, 15 acres of which is being transferred to DHHL. The State of Hawaii will have first choice as to the 15 acres it retains for possible school and library uses. As a result, both Sites C and D rate "good" at this time, but could possibly rate "poor" if either was on DHHL apportioned land. Site E rated "fair" as it is owned by two individuals or businesses. Sites A and B rated "poor" because they are the subject of a title claims dispute between the State and the Department of Hawaiian Home Lands; Site B also rates "poor" because it is owned by two individuals and there are several lessees involved.

b. Existing Use and Displacement

Good - The site is vacant and may be acquired without relocating any family, farm, or business.

Fair - The site may be acquired without relocating any combination of less than five families, businesses, or farms.

Poor - The site cannot be acquired without the relocation of any combination of five or more families, businesses, or farms.
Sites A, C, and D rated "good" since they are vacant. A "poor" rating was given Sites B and E because more than five homes and more than five businesses, respectively, would require relocation.

c. **Surrounding Land Use**

**Good** - The site is primarily surrounded by compatible uses, such as public or commercial facilities.

**Fair** - The site is primarily surrounded by residential land uses.

**Poor** - The site is surrounded by incompatible uses, such as industrial or agricultural activities that generate noise, dust or odors.

*Except for Site B, the candidate sites are primarily surrounded by compatible land uses, including vacant land, and rated "good." Site B is primarily surrounded by residential land uses and rated "fair."*

d. **Proximity to Commercial Center** - The location of a library site near a post office, restaurant, shopping center, civic center, park, or other high traffic area increases the site's visibility, and encourages use of the facility by making access to it convenient from other frequently used establishments.

**Good** - The site is adjacent to a commercial center or other high traffic area.

**Fair** - The site is within walking distance (0.5 mile) of a commercial center or other high traffic area.

**Poor** - The site is not within walking distance (0.5 mile) of a commercial center or other high traffic area.
Site E is located adjacent to the Pacific Shopping Center for a "good" rating. Sites C and D are within a half mile of the Pacific Shopping Center, and Site B is within a half mile of the Maili Commercial Center. Therefore, Sites B, C, and D rated "fair." Site A rated "poor."

e. **Visibility from Major Highway** - Visibility from Farrington Highway, the major highway transecting the service area, will enhance the public's ability to find the library as well as remind them of the facility's availability.

Good - The site is clearly visible from Farrington Highway.

Fair - The site is setback from the road, but is somewhat visible.

Poor - The site cannot be seen from Farrington Highway.

Due to their proximity to Farrington Highway, all the sites rated "good."

f. **Scenic Value**

Good - The site is not an aesthetic asset to the community and a public library facility would not interfere with scenic vistas.

Fair - The site has some aesthetic value to the community or may partially obstruct scenic vistas if a library is developed.

Poor - The site is an aesthetic asset to the community or would obstruct scenic vistas if a public library facility is developed.

With the exception of Site A, the candidate sites met the "good" criterion as they are not aesthetic assets and development would not interfere with scenic vistas. Site A rated "fair" because the open space of the presently vacant site and its prominent visible
location at the base of the puu and at the coastal point (Maili Point) has some aesthetic value that would be partially lost by the development of the project.

C. COST CONSIDERATIONS

An important consideration in the selection of a site for a new public library is the relative cost associated with site acquisition and development. To further compare the relative merits of the candidate sites, cost estimates are prepared for comparative land value, and on-site and off-site improvements. Cost estimates are for comparison purposes and are not intended to reflect actual expenditures. In situations where the cost will be approximately the same for each site, estimates are not included since the relative overall cost figures would not be affected. A summary of the site cost estimates is included in Section D of this chapter, Evaluation Summary Tables.

1. Land Acquisition Costs

Land acquisition costs include the comparative land value and improvement value of each site, plus the cost to relocate any occupants.

For comparison purposes, comparative land values are based on the 1994 assessed value of the land and existing improvements as determined by the City and County of Honolulu, Department of Finance, Real Property Assessment Division. Although a site owned by the State of Hawaii would not incur an actual land cost, an opportunity cost for forgone use of the land by the State would be included based on assessed value. Assessed property tax valuation is not intended to accurately reflect actual market value, but instead is to be used to compare the relative value of each candidate site. Actual acquisition costs will be determined by negotiations based on land appraiser reports or by the courts in condemnation proceedings if an agreement cannot be reached.

The assessed value of each parcel or parcels on which a potential library would be located is divided by the acreage of the parcel to yield a dollar per acre figure. The dollar per acre figure is multiplied by the number of acres of each parcel required for the school site. For sites

55
consisting of more than one parcel, the comparative land values of all affected parcels are added to calculate a comparative land value for the candidate site. The total 1994 assessed value for all improvements on each site is used as the improvement value for each site.

Additional acquisition costs are incurred for occupant relocation. By State law, any person displaced by a government agency is eligible for relocation benefits. The occupant relocation and replacement housing costs associated with two of the candidate sites are calculated based on the Hawaii Administrative Rules of the Housing and Finance Development Corporation, Chapter 391, Assistance to Displaced Persons. Relocation payments (for moving expenses) per individual or family have a fixed maximum of $500, and the cost associated with a candidate site is estimated by multiplying the number of houses on the site times $500. Relocation payments to a farm or business may equal the average annual net earnings over the previous two years. For the purposes of this study, the relocation cost attributed to an existing business on a candidate site is $25,000. This approximate figure is based on data from the Small Business Administration and the State of Hawaii Data Book.\(^7\)

Displaced persons are also entitled to replacement housing payments by the State. There is a $15,000 replacement housing payment limit to an owner occupant who buys, and $4,000 to an owner occupant who rents. Since this information is unknown for the five dwelling units on the site, the worst-case figure of $15,000 per unit is used for estimating the replacement housing payment.

\(^7\)According to the Small Business Administration (SBA), the net income of proprietorships and partnerships can be used as a measure of small business profits. Proprietorship and partnership income in Hawaii was $1.84 billion in 1991. According to the State Data Book, there were 71,835 proprietorships and partnerships in Hawaii in 1989.
**Site A**

<table>
<thead>
<tr>
<th>Description</th>
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<tbody>
<tr>
<td>TMK 8-7:6:2</td>
<td>97.014 acres</td>
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<tr>
<td>Assessed Value</td>
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<td>Per acre value</td>
<td>$460</td>
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<tr>
<td>TMK 8-7:6:5</td>
<td>0.455 acres</td>
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<tr>
<td>Assessed Value</td>
<td>$1,200</td>
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<tr>
<td>Per acre value</td>
<td>$2,640</td>
</tr>
</tbody>
</table>

Comparative Land Value: $1.700

Improvement Value: $1,700

Relocation/Replacement Housing Cost: $0

**Site B**

<table>
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<th>Description</th>
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<tr>
<td>TMK 8-7-33:11</td>
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<td>Assessed Value</td>
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<tr>
<td>Per acre value</td>
<td>$288,330</td>
</tr>
<tr>
<td>TMK 8-7-33:12</td>
<td>1.025 acres</td>
</tr>
<tr>
<td>Assessed Value</td>
<td>$1,350,100  (for parcels 12 &amp; 21, 2.631 acres)</td>
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<tr>
<td>Per acre value</td>
<td>$513,150</td>
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</table>

Comparative Land Value: $889,280

Improvement Value: $889,280

Relocation Cost: $250,320

Replacement Housing Cost: $75,000

**Sites C and D**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
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</thead>
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<tr>
<td>TMK 8-9-2:1</td>
<td>29.590 acres</td>
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<tr>
<td>Assessed Value</td>
<td>$2,441,200</td>
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<td>Per acre value</td>
<td>$82,500</td>
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</tbody>
</table>

Comparative Land Value: $189,750

Improvement Value: $189,750

Relocation/Replacement Housing Cost: 0

---

8The Real Property Assessment Division records show a total of 15 buildings on parcels 12 and 21, with values totalling $623,800. The average building value of $41,720 is used here since the buildings are not identified with a particular parcel.
Site E

TMK 8-7-9:11 2.764 acres
Assessed Value: $2,151,600
Per acre value: $778,440

TMK 8-7-9:65 .228 acre
Assessed Value: $328,600
Per acre value: $1,441,230

TMK 8-7-9:75 .500 acre
Assessed Value: $524,500
Per acre value: $1,049,000

Average per acre value: $860,450\(^9\)

Comparative Land Value: 2.3 acres x $860,450 = $1,979,000
Improvement Value: 4 buildings 363,200
Relocation Cost: 10 businesses x $25,000 = $250,000

$2,592,200

2. **On-Site Improvements**

Development of a new public library will require on-site improvements which would include clearing and grubbing of the site, rough grading, and the construction of the library facilities. Costs associated with construction of internal roadways and parking areas, drainage facilities, fine grading, topsoil import and landscaping, and most on-site utilities will be approximately the same for each site and are therefore not considered in the cost comparisons. Only those costs which may be substantially different for the various sites are included.

**Clearing and Grubbing**

The primary factors affecting cost differences among sites for clearing and grubbing are the size of the site and the number of buildings to be demolished. Since all candidate sites are approximately 2.3 acres in size, the cost for clearing, grubbing, and hauling of site vegetation would be about the same for each site. Sites B and E, however, would require demolition and disposal of dwelling units or buildings, at an estimated cost of $5,000 per building.

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\(^9\)Total assessed land value for the three parcels ($3,004,700) divided by the total land area (3.492 acres).
Site B
Demolish Buildings
5 buildings x $5,000 = $25,000

Site E
Demolish Buildings
4 buildings x $5,000 = $20,000

Rough Grading
All of the candidate sites, except Site A, have similar slope conditions and require approximately equal amounts of rough grading. Site A, with an average slope of 8.5 percent, would require considerable rough grading and possibly the construction of retaining walls. A grading cost of $150,000 per acre is used for the level sites, B through E, compared with a figure of $250,000 per acre for Site A.

Site A
2.3 acres x $250,000 = $575,000

Sites B, C, D, and E
2.3 acres x $150,000 = $345,000

Building Construction
Sites A, C, and D are not in the flood hazard zone, therefore the library building would be a one-story structure, slab on grade. The rough cost for this construction is $225 per square foot of building area.

Sites B and E are partially in flood zones which require that a building’s first floor be located at the base flood elevation for that zone (between 10 and 12 feet). This results in the addition of an elevator and more stringent structural systems. First and second story construction costs are $300 and $200 per square foot, respectively. Although a library building on Site E could be located outside of the flood zone, the worst-case situation is considered for cost comparison purposes.

Sites A, C, and D
Slab on Grade
15,000 s.f. x $225 = $3,375,000
**Sites B and E**

First Story  
15,000 s.f. x $300 =  $4,500,000  
Second Story  
15,000 s.f. x $200 =  $3,000,000  

3. Off-Site Improvements  
Development of the new library may require the extension, upgrade, or new construction of fire protection systems to serve the library site.  
Off-site improvements such as utilities, roads, sidewalks, and drainage facilities are considered equal.

**Water/Fire Protection**

All sites, except Site C have adequate existing water mains which can meet the ultimate water requirements for the library development, including fire protection requirements. No off-site water system costs are allocated to Sites A, B, D, and E. Site C requires the installation of a fire hydrant within 125 linear feet of the site.

**Site C**

Install a fire hydrant within 125 feet  
$15,000

D. EVALUATION SUMMARY TABLES

The following tables summarize the results of the above evaluation of the five candidate sites. The total number of Good, Fair, and Poor ratings for each site are tabulated for Physical Criteria and Community Criteria, and total dollar amounts are calculated for Comparative Land Values, On-Site Improvements, Off-Site Improvements.
## PHYSICAL AND COMMUNITY CRITERIA
### SUMMARY EVALUATION TABLE

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>CANDIDATE SITES</th>
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<tr>
<td>Site Characteristics</td>
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<td>CRITERIA</td>
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* Sites C and/or D may rate Poor (-) if they are within the DHHL portion of the parcel. Refer to Chapter V, Section 2.a.
## COST CONSIDERATIONS
### SUMMARY EVALUATION (IN DOLLARS)

<table>
<thead>
<tr>
<th></th>
<th>SITE A</th>
<th>SITE B</th>
<th>SITE C</th>
<th>SITE D</th>
<th>SITE E</th>
</tr>
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<td>$1,217,100</td>
<td>$189,750</td>
<td>$189,750</td>
<td>$2,592,200</td>
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|                      |            |             |            |            |            |
| **ON-SITE IMPROVEMENTS** |          |             |            |            |            |
| Clearing and Grubbing | -0.       | $25,000     | -0.        | -0.        | $20,000    |
| Rough Grading        | $575,000   | $345,000    | $345,000   | $345,000   | $345,000   |
| Building Construction| $3,375,000 | $7,500,000  | $3,375,000 | $3,375,000 | $7,500,000 |
| **TOTAL ON-SITE**    | $3,950,000 | $7,870,000  | $3,720,000 | $3,720,000 | $7,865,000 |

|                      |            |             |            |            |            |
| **OFF-SITE IMPROVEMENTS** |          |             |            |            |            |
| Water                | -0.        | -0.         | $15,000    | -0.        | -0.        |
| **TOTAL OFF-SITE**   | -0.        | -0.         | $15,000    | -0.        | -0.        |

| **TOTAL IMPROVEMENTS** | $3,950,000 | $7,870,000 | $3,735,000 | $3,720,000 | $7,865,000 |

| **ON AND OFF-SITE**   | $3,951,700 | $9,087,600 | $3,924,750 | $3,909,750 | $10,457,200 |

**TOTAL**
CHAPTER VI

Potential Impacts and Mitigation Measures
VI. **POTENTIAL IMPACTS AND MITIGATION MEASURES**

Many potential adverse impacts related to development will have been eliminated as a result of the multi-level screening process of the site selection process, described in Chapter II. Use of the "minimum criteria" eliminated sites with limited visibility and access, steep slopes, landslide potential, historic sites or buildings, large numbers of residents or businesses, and areas hazardous from the standpoint of pedestrian and traffic safety. The site evaluation criteria for the proposed library take into account a wide range of social, economic, physical, environmental, and land use factors in order to identify and avoid or minimize potential adverse impacts. The effects of construction and operation of the library are also considered during the site selection. As a result of this planning approach, the probability of significant adverse effects from the proposed project is minimized.

Nevertheless, there are some unavoidable potential impacts of the proposed action which may occur during construction and/or operation of the library. Potential impacts which may be expected from development of the new library and appropriate mitigation measures are discussed below.

A. **SHORT-TERM IMPACTS**

Short-term impacts are generally those associated with construction activities such as grading, utility installations, construction of structures, and increased traffic at the site.

1. **Construction Noise**

   During construction, there will be temporary and localized adverse noise impacts. Project-related construction activity may produce noise levels in excess of those specified under Title 11, Administrative Rules, Department of Health (DOH), Chapter 43, "Community Noise Control for Oahu." If so, a construction noise permit will be needed from the State DOH. Heavy vehicles required for construction must be in compliance with Title 11, Administrative Rules, Chapter 42, "Vehicular Noise Control for Oahu." The increase in noise levels will vary according to the particular phase of construction. The noisiest periods will occur during site preparation, when large earth-moving equipment is active. Even then, however, compliance with the DOH construction
noise limits and curfew times will ensure that project-related noise is mitigated, reducing significant adverse effect on residences and businesses near the site.

2. **Air Quality**
During construction activities, the project area will be subjected to increased levels of dust and vehicle exhaust emissions. Dust would be generated during clearing and grubbing activities and site excavation. Dust control measures stipulated by DOH regulations will be employed during the construction period. These controls consist of wetting down loose soil areas with water, oil, or suitable chemicals; good housekeeping on the job site; and paving or landscaping bare soil areas as quickly as possible.

Emissions would be generated during the operation of construction equipment and vehicles. Nitrogen oxide emissions from diesel engines can be relatively high compared to gasoline-powered equipment emissions, 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 very low and should be relatively insignificant compared to normal vehicular emissions from nearby roadways.

3. **Water Quality**
During construction, and particularly during grading and excavation for building foundations, soil will be exposed and potentially susceptible to runoff in the event of heavy rain. By adhering to City and County grading ordinances, soil runoff will be controlled. The runoff effluent will be directed to existing drainage systems (Site A) or drainage channels (Sites B-E). Mitigation of storm discharge during construction should include installation of appropriate measures such as installation of siltation berms and/or straw bale sediment barriers, sandbag sediment barriers, filter berms, filter fences, filter inlets or flexible downdrains.
Construction materials wastes must be appropriately disposed of and must also be prevented from leaching into receiving bodies of water. If construction dewatering is to be discharged into the municipal storm drainage system or drainage channel, a temporary Construction Dewatering Permit must be obtained from the Department of Public Works.

Best Management Practices will be employed during and after the construction to reduce and control the discharge of pollutants into Municipal Separate Storm Sewer System and State waters.

4. **Traffic**
Trucks, heavy equipment, and other vehicles will use existing roads to import and export materials and to access construction areas. The increased traffic from construction-related vehicles should not be significant, but may cause some minor inconveniences to residents and businesses in the vicinity. Short-term traffic impacts will be mitigated by coordinating work hours not to conflict with peak traffic times.

Construction-related vehicles will park within the project site and, thus will not affect traffic flow along adjoining roadways except while traveling to and from the site.

5. **Construction Wastes**
At any of the proposed sites there may be short-term environmental impacts caused by construction materials wastes. A permit may be required from the City and County Department of Public Works for grading, grubbing or stockpiling soils, which may require a Temporary Erosion Control Plan, a soils report, and a performance bond.

6. **Public Health and Safety**
The contractor shall be responsible for taking appropriate measures to ensure public health and safety throughout the life of the construction project. Construction areas will be secured with safety signs and devices as required by State and City regulations during non-work hours (night, weekends, and holidays).
7. Economic
The short-term economic impacts resulting from the construction of the library include the provision of construction-related jobs as well as increased business for local material suppliers and retail businesses. Construction of the facility also expends tax dollars for project design and construction.

B. LONG-TERM IMPACTS
Long-term impacts are generally those impacts which are anticipated due to the operation of the public library. These impacts will affect the environment proximate to the site, as well as the infrastructure within the area.

1. Flora and Fauna
The proposed project is not expected to have a significant negative impact on the botanical or biological resources of the site. The vegetation on the candidate sites consists of common, introduced species and there are no known rare or endangered species of flora at any site. The existence of any endangered species is unlikely, based on the alteration of sites by prior agricultural and urban activities.

Any loss of vegetation as a result of clearing and grubbing of the site will be offset by appropriate and attractive landscaping of the library site.

The candidate sites are not known to contain any threatened or endangered animal species; and the relatively dry climate, urban environment, and sparse vegetation in the area does not provide good habitat for such species. Therefore, impacts on rare animals are not expected.

2. Noise
Although activities at the proposed library site will not be generating any significant noise following construction, one stationary source would be the air conditioning system which will operate during library hours only. Noise from stationary equipment, such as air conditioning
systems, must be attenuated to comply with the provisions of DOH Administrative Rules, Title 11, Chapter 43, "Community Noise Control for Oahu."

Increased traffic to and from the selected site may also create increased noise levels on the site, however these would be limited to day and early evening hours only.

Due to the proximity of the candidate sites and neighboring properties to Farrington Highway, the existing ambient noise levels are relatively high. Any increase resulting from the proposed library development is not expected to be significant. Zoning setback requirements will also serve to mitigate potential increased noise levels on the selected site.

3. **Air Quality**
   There could be minor long-term indirect impacts on air quality along the project's roadway route due to project-related traffic. These are expected to be minimal due to the intermittent arrival of users to the library and to the small daily work force needed to operate the library facility.

4. **Water Quality**
   Long-term water quality will not be affected by the project. Since all soil exposed during construction will either be built over or revegetated, the potential for soil runoff will be minimized.

A new library can potentially increase the amount of impervious surface area and associated runoff, including runoff from parking areas. Drainage design for the library should provide for control and reduction of the discharge of pollutants as outlined in the National Pollutant Discharge Elimination System (NPDES) regulations (40 CFR Part 122, Subpart B for municipal storm sewer systems). This should include infiltration of runoff at the rate recommended at the time of permit approval through engineered means, a storage control system, and/or slope stabilization and revegetation. Drainage design for the
new Nanakuli Library should also conform to the Department of Public Works Storm Drainage Standards.

5. **Public Health and Safety**
   
   Increased demand on community services such as police and fire protection and emergency medical services can be expected, but would be minimal.

   Portions of two candidate sites, Sites B and E, are within "special flood hazard areas inundated by 100-year flood," according to the Flood Insurance Rate Maps. (Refer to Exhibit III-1 in Chapter III.) Any structure within the flood hazard area must be designed in accordance with the requirements of Chapter 7.10 of the City and County of Honolulu Land Use Ordinance. This includes, but is not limited to:

   - Submitting studies by a registered professional engineer documenting that the proposed construction will not result in an increase in the flood elevation during an occurrence of the flood.
   - Designing structures to be adequately anchored to resist flotation, collapse or lateral movement.
   - Using construction materials that are resistant to flood damage.
   - Using construction methods that will minimize flood damage.
   - Designing and locating utilities to minimize infiltration and impairment to them or contamination from them during a flood occurrence.

   Building regulations also require that the first floor of a structure within the flood hazard areas be located at the base flood elevation. This would be 12 feet on Site B, and at 11 or 13 feet on Site E. The majority of Site E is in Zone D, however, and the structure could be built at-grade if located entirely within this zone.

   Sites A, C, and D are within Zone D, "areas in which flood hazards are undetermined," and do not require raised structures.
6. **Utilities**

Design and construction of the proposed public library facility will be coordinated with existing and planned infrastructure. Minimal impacts are anticipated due to the connection of on-site utilities to existing off-site infrastructure. The existing capacities of the various systems should be adequate to accommodate the proposed library without major utility expansion work.

According to the Board of Water Supply (BWS), the existing water system along Farrington Highway is presently adequate to accommodate the proposed development at all candidate sites, with the exception of providing adequate fire protection at Site C. The developer will be required to install a fire hydrant within 125 feet of Site C in accordance with BWS Water System Standards. The construction drawings must be submitted for BWS review and approval. The project must obtain water allocation from the State Department of Land and Natural Resources.

According to the City and County Department of Wastewater Management, all five candidate sites may be served by existing sewer lines. Site A may be connected to a 24-inch sewer line; Site B may be connected to an 8-inch line, and Sites C and D to an 18-inch sewer line; all within Farrington Highway right-of-way. Site E has an existing 10-inch sewer line on parcel 11 that connects to the sewer line on Helelua Street. Sewer connection for Sites A, C, and D would be more costly and difficult than that for Sites B and E because the sewer lateral would need to cross Farrington Highway and connect to deeper sewer lines. An "Application for Sewer Connection" must be filed and be approved by the department in order to reserve sewer capacity for project.

Off-site drainage improvements are not proposed at any of the five sites. Runoff from all sites will be accommodated by discharging into adjacent existing drainage systems or channels, or through dissipation into on-site dry wells. The design of the proposed facility will contain the runoff generated by the increased impervious surfaces within the
property boundaries in accordance with County requirements; therefore, the project will not exacerbate drainage problems in the area, nor affect adjacent properties. The drainage design for the new library site will conform to the Department of Public Works Storm Drainage Standards. A Drain Connection Permit is required prior to connection to an existing drainage system or channel.

All sites have adequate overhead power and communication lines available.

7. Traffic

The new public library facility will generate additional traffic in the vicinity of the sites. Chapter V, Evaluation of Candidate Sites, discusses traffic related to the sites in terms of adequacy of roadways serving each site, vehicular accessibility and safety, and pedestrian accessibility and safety. Since the main thoroughfare in the site selection area, Farrington Highway, has adequate capacity, a new library is not expected to require major improvements to this highway. Vehicular access to Site A could be from Kaukama Street rather than from Farrington Highway. However, access to Sites B through E must be from Farrington Highway. Improvements necessary for the safe execution of left turns to and from the library site will be coordinated with State and City transportation officials. Improvements necessary for safe pedestrian access would include sidewalks/bikeways along Farrington Highway for all sites.

Fortunately, use of library facilities is well distributed throughout the day, minimizing impacts during peak traffic hours. Sufficient parking, book drop-off, and turn-around areas will be provided on the site to ensure vehicular and pedestrian safety. Appropriate traffic controls such as signs, crosswalks, and barriers will be incorporated in the design of the library. If it is determined to be necessary once the final site is selected, a traffic impact analysis will be prepared and submitted for State and County review. All plans for construction work within the State highway and county road right-of-way will be
prepared during the library facilities design phase and will also be submitted for State and the County review.

8. **History and Archaeology**
Based on the absence of archaeological findings from previous archaeological investigations, together with the current condition of each site, no significant archaeological remains are expected in any of the candidate site areas. The project archaeologist recommends, however, that an archaeological inventory survey be conducted following the final site selection for the Nanakuli Public Library. The inventory survey would include additional background research regarding traditional Hawaiian settlement in the Waianae District, a more intensive specific documents search, and selective subsurface sampling with backhoe as warranted. Specifically, additional research regarding the history of military occupation is recommended if either Site C or D is selected. If Site A is selected, documentation of the WWII structures is recommended.

9. **Visual Impacts**
On any of the proposed sites, a potential impact would be the visual impact of a new or larger structure. To minimize this potential impact, the design of the Nanakuli Public Library will reflect the regional environmental features as well as convey a response to the physical and social character of the communities it will serve. For example, deep overhangs would shade walls from the intense sun and fairly steeped pitched roofs would provide similar cooling effects, and indigenous rock may be used in construction. The building should also convey a sense of welcome and pride, with a human scale and detailing that sends a message that this is a highly valued public service facility.

The project will have no impact on makai views from Farrington Highway, the coastal road through the area, as all five candidate sites are located along the mauka side of the road. Impact to mauka views from the highway would be brief under normal travel speeds, and would be most noticeable at Sites A, C, and D because they are presently vacant. On Site B, a two-story library building (required
because of the flood zone) would likely be more visually dominant than the existing five houses on one parcel and dense kiawe vegetation on the other. Visual impacts at Site E could be minimized by setting the building back from the highway.

Special care must be taken at Site A to avoid visual conflict between the man-made structure and the natural land form of Puu O Hulu Kai. Careful siting of the library structure and parking area is necessary to avoid infringement upon the visual qualities of the mountain. The City and County Coastal View Study cites The Comprehensive Health Center, which is tucked into the Puu Mailiili land form, as a "positive example... which should serve as a prototype in similar situations."

10. **Social Impacts**

The establishment of a new Nanakuli Public Library will provide educational, cultural, and recreational benefits to the Nanakuli and Maili communities. The larger, more convenient facility will encourage use of State library services by more members of the community, and the inclusion of a Hawaiian cultural feature will provide a unique learning opportunity for the area, which has a large Hawaiian population.

The 60- to 90-acre State-owned land area at Maili Point (TMK 8-7-6: 2 & 5), a portion of which is Site A, has been identified by the Department of Natural Resources' Division of Land Management as a possible site for homeless housing projects in the Waianae Coast area. This situation does not preclude the consideration of other public uses for the site, such as a library.

The two privately owned candidate sites (B and E) will require negotiations and compensation to the landowner(s), unless the landowner(s) is willing to donate the land to the State. Selection of Site E may deprive the owner of a planned commercial redevelopment, for which he has a tentative subdivision approval from the City. Site E is also currently on the market for sale and offers are being considered for development.
The parcels of State-owned Site A and those of privately-owned Site B are the subject of title claim disputes between the State of Hawaii and the Department of Hawaiian Home Lands. The dispute is currently being reviewed by the Governor's Task Force on DHHL Title and Related Claims. This situation could indefinitely delay the project's development schedule.

The 30-acre former Camp Andrews parcel, location of Sites C and D, is State-owned and is clear of DHHL title claims. However, 15 acres of the 30-acre parcel were approved for transfer to the Department of Hawaiian Home Lands on October 28, 1994 as part of the Governor's plan to restore the Hawaiian Home Lands Trust to the number of acres intended by Congress in 1921. In view of the need for public facilities in the Nanakuli community, the remaining 15 acres were reserved for public uses. The Department of Education is interested in 12 acres as a potential elementary school site, and 2.3 acres may be utilized for a library if Site C or D is selected. Selection of the 15 acres for public uses will be done before the remaining 15 acres are transferred to DHHL. To ensure an effective and harmonious relationship between multiple uses, a site master plan must be prepared.

The Camp Andrews Committee of the Nanakuli Hawaiian Homestead Community Association has conducted numerous community meetings, discussions, and public hearings, as well as a community survey, in order to assess the community's priorities for potential uses of the Camp Andrews site. In a memo dated September 27, 1994, the Camp Andrews Committee states, "The committee and community is in support of the State Library System receiving acreage for a Public Library in the Camp Andrews site with the selection of site C being chosen to meet the goals of the committee which is in alignment with the committee's land utilization plan."
11. **Displacement**

One of the main criterion for the selection of sites for the proposed public library was to minimize displacement of families, farms, or businesses. The intent was to minimize disruption of existing living patterns. Impacts to surrounding land uses are also a consideration of displacement, where the project could indirectly cause future displacement of surrounding families or businesses which may be adversely impacted by the development.

Site B would require the displacement of five families and the relocation (on-site) of a private driveway serving nine homes mauka of the site. Any family displaced by the project would receive financial relocation assistance and moving expense reimbursement in accordance with state law, as described in the Cost Considerations section of Chapter V. The residents of the homes mauka of the site would be impacted by possibly having to share a driveway with the library facility and its associated traffic. Mitigation for this impact could include an improved driveway with wider paving and walkways, and a government-maintained driveway to the channel, thereby saving the landowners and/or residents the costs of maintaining the driveway.

The area surrounding Site B is made up of single family homes. To minimize adverse impact to the surrounding residential areas, visual and sound barriers (i.e. walls, landscaping) can be incorporated into the design of the facility.

Development on Site E could require the displacement of approximately ten businesses, depending on the location of the 2.3-acre library site within the 3.5-acre area of the three parcels involved. Any business displaced by the project would also receive relocation assistance and moving expense reimbursement. The existing businesses on the property face displacement whether the site is selected for the library or not because the landowners of the Site E
parcels have received tentative approval from the City Department of Land Utilization (Sept. 2, 1993) for their proposed consolidation and resubdivision plans to create three lots for new commercial development. Exact development plans are uncertain however, as the site is currently for sale.

A library development of Site E should not be an adverse impact to adjacent commercial uses or nearby residential uses.

12. Economic Impacts
Permanent employment opportunities will be available once the library is opened. A typical library, the size of the proposed Nanakuli Public Library, employs approximately seven people. The employment will generate minimal new revenue to the State from income tax associated with employee wages and salaries.

The library project will necessitate expenditures of State and County public resources for construction and operation, maintenance on roadways, public safety, and other public services.

Acquisition of any privately owned site will remove land from the tax base. This will result in the loss of City property tax revenues. The 1994 real property tax rate per $1000 assessed value is based on the land classification (i.e. residential, commercial, etc.) The annual tax revenue of the two privately owned candidate sites is shown below.

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<th>Classification</th>
<th>Tax Rate (Land)</th>
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<td>$3,065</td>
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<tr>
<td>E</td>
<td>Commercial</td>
<td>$8.51</td>
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Relative to the multi-million dollar project cost and the social benefits of a new library, the loss of tax revenue is not considered significant.

Minimal losses in State revenue from general excise tax and income tax associated with employee wages, salaries, and income to proprietors on Site E will be incurred if Site E is selected for the library.
CHAPTER VII

Alternatives to the Proposed Action
VII. ALTERNATIVES TO THE PROPOSED ACTION

A. NO ACTION
The "no action" alternative would mean that the existing limited bookmobile service would remain in operation. For more complete library service, the residents of Maili and Nanakuli would continue using the Waianae or Ewa Beach libraries, both of which have space deficiencies and are inconveniently located in relation to the Maili and Nanakuli communities. The "no action" alternative is unacceptable to the community since the limited bookmobile service and existing library locations are inadequate to serve the needs of the existing population. This alternative is even more unrealistic in view of the projected growth in Maili and Nanakuli.

B. EXPANSION OF BOOKMOBILE SERVICES
Expansion of bookmobile services is considered an unacceptable alternative due to the size and projected growth of the Maili and Nanakuli areas, and the physical limitations associated with the bookmobile.

C. USE OF NEW LIBRARY FACILITY IN KAPOLEI
A new library in Kapolei is currently in the planning stage and is intended to serve all of West Oahu in the same way the Hawaii State Library currently serves Oahu. Use of the Kapolei facility as a branch library for residents of Maili and Nanakuli is an unacceptable alternative due to the distance from the community and due to population projections for the community which warrant a separate branch library.
CHAPTER VIII

The Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity
VIII. THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The relationship between local short-term uses of man's environment and maintenance and enhancement of long-term productivity is established by seeking a balance that accommodates the needs of the community as a whole while maintaining the integrity of the environment.

The development of the proposed Nanakuli Public Library will result in very few environmental impacts, all of which can be mitigated, as described in previous sections. It will result in some social impacts, specifically the displacement of residents and businesses on two of the five candidate sites. However, if approved, the development will result long-term benefits. It will provide a much needed library facility to two rural communities, Nanakuli and Maili.

The short-term effects of the development of the Nanakuli Public Library are expected to be minimal in comparison to the long-term benefits to be gained. Construction activities involved in the development will cause disruptions and short-term impacts on or near the project site, however existing City and County of Honolulu and State of Hawaii regulations are designed to thoroughly mitigate short-term construction related impacts. Furthermore, beneficial short-term economic impacts will arise from construction expenditures and employment.

Long-term benefits to the communities will result from the new and convenient library facility and services. Library services will ensure the continued maintenance and enhancement of public education. The inclusion of a Hawaiian cultural feature will provide a unique learning opportunity for the area.
CHAPTER IX

Irreversible and Irretrievable
Commitments of Resources
IX. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Development of the Nanakuli Public Library involved three general categories in the commitment of resources:

A. LONG-TERM COMMITMENT OF LAND
   This project will involve the long-term commitment of approximately 2.3 acres of land for attaining educational and cultural objectives. For all practical intents and purposes, the construction of the project is expected to preclude other land use options on the 2.3 acre library site in the long term.

B. CONSTRUCTION COMMITMENTS
   A number of resources will be required for completion of the project, including capital, materials, manpower, and energy. These resources will be irretrievably committed to the planning, design, and construction of the improvements.

C. OPERATIONAL COMMITMENTS
   The operation of the completed facility will also require the expenditure of certain irretrievable and irreversible commitments: labor, materials, and resources (water and electricity) which will be required for effective operation and maintenance.
CHAPTER X

Summary of Unresolved Issues
X. SUMMARY OF UNRESOLVED ISSUES

The potential impacts of the proposed action are generally known and appropriate mitigation measures have been developed to address these impacts.

One unresolved issue has the potential for affecting the development of the public library and/or the timeframe within which it is developed on two of the five candidate sites. The issue is the land ownership and title claim dispute between the State of Hawaii and the State Department of Hawaiian Homelands for Sites A and B. This issue is unresolved because the dispute is currently being reviewed by the Governor's Task Force on DHHL Title and Related Claims.

A second unresolved issue was included in the Nanakuli Library Draft EIS because multiple parties were interested in the use and/or ownership of all or part of the 30-acre State-owned parcel affecting library sites C and D (former Camp Andrews). However, on October 28, 1994, the State Board of Land and Natural Resources approved the administrative transfer of +/- 16,000 acres of land to the DHHL to "make their lands whole." Fifteen of the 30 acres at the former Camp Andrews site are among the lands to be transferred. The remaining 15 acres will be retained by the State for a potential new elementary school and for a potential public library. The actual apportionment of the 30-acre site remains unresolved, although the State of Hawaii has first choice for school and/or library sites.
CHAPTER XI

List of Necessary Approvals
XI. LIST OF NECESSARY APPROVALS

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<th>C</th>
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<td>Corps of Engineers, Dept. of Army Permit(^{10})</td>
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| **B. STATE OF HAWAII** |   | x | x | x | x |
| Land Use District Bdy. Amendment | x | x | x | x | x |
| Water Allocation | x | x | x | x | x |
| Wastewater System Approval | x | x | x | x | x |
| Dept. of Health Noise Permit | x | x | x | x | x |
| Stream Channel Alteration Permit\(^{11}\) | x |   |   | x |   |
| Work within State R-O-W | x | x | x | x | x |

| **C. CITY AND COUNTY OF HONOLULU** |   |   |   | x | x |
| Special Management Area Permit | x | x | x | x | x |
| Zoning Change | x |   |   |   |   |
| Subdivision Approval | x | x | x | x | x |
| Building Permit | x | x | x | x | x |
| Grubbing, Grading, Excavation, Stockpiling Permit | x | x | x | x | x |
| Flood Control Ordinance Conformance | x |   |   |   |   |
| Drainage Connection Permit\(^{12}\) | x | x | x | x | x |
| Application for Sewer Connection | x | x | x | x | x |
| Work within County R-O-W | x |   |   |   |   |

---

\(^{10}\) A Department of Army Permit would be required only if there was construction activity below the high water mark of a stream or channel.

\(^{11}\) Stream Channel Alteration Permit would be required only if construction alters the bed or banks of a stream channel.

\(^{12}\) Drainage Connection Permit would be required if the project's drainage system connected to an existing County drainage system.
CHAPTER XII

Agencies, Organizations and Individuals Consulted in the Preparation of this Document
XII. AGENCIES, ORGANIZATIONS AND INDIVIDUALS CONSULTED IN THE PREPARATION OF THIS DOCUMENT

A. FEDERAL

Department of the Army, Corps of Engineers

B. STATE

Department of Accounting and General Services
Department of Business, Economic Development and Tourism
Department of Education
Department of Hawaiian Home Lands
Department of Health
Department of Land and Natural Resources
Department of Transportation
Hawaii State Public Library System
Housing Finance and Development Corporation
Office of Environmental Quality Control
Office of Hawaiian Affairs
Office of State Planning
University of Hawaii, Environmental Center

C. COUNTY

Board of Water Supply
Department of General Planning
Department of Land Utilization
Department of Public Works
Department of Transportation Services
Department of Wastewater Management
Police Department

D. OTHER

City Council Member John DeSoto
Hawaii Electric Company
Gasco
GTE Hawaiian Tel
State Representative Henry Peters
State Senator James Aki
Waianae Coast Neighborhood Board #24
Landowners of the Candidate Sites
CHAPTER XIII

List of Preparers of this Document
XIII. LIST OF PREPARERS OF THIS DOCUMENT

DHM inc.
Duk Hee Murabayashi, President: Principal in Charge
Wendie McAllaster: Project Manager
AN ARCHAEOLOGICAL ASSESSMENT
OF FIVE ALTERNATIVE SITE AREAS
FOR THE PROPOSED NANAKULI PUBLIC LIBRARY
(TM-K-7-6-page:2, part:5; K-7-6:11,13,15;
K-7-6:11, 15; K-7-6:2:part:1)

by

Aki Sinoto

and

Jeffrey Paliuao

for

DHM, Inc.

1975 Uulau Street

Honolulu, Hawaii 96822

March 1994

ABSTRACT

This report presents the results of an archaeological surface assessment requested by
DHM, Inc. for five alternative sites for the proposed Nanakuli Public Library. These sites
are all situated immediately mauka of Farrington Highway in the coastal area of Laihaalei
and Nanakuli, Waianae District, Oahu Island. A review of archaeological literature and
historical documents was undertaken to assess the potential for extant archaeological sites
within the alternative sites. This background summary has been presented under separate
cover (Nakamura and Paliuao, 1994). On-site field inspections were conducted to
evaluate the current condition of the area and document archaeological and historical
resources. Information obtained from this research will aid in the selection of the final
library site and to determine the scope of work for further archaeological work.

Results of this assessment revealed that no previously recorded archaeological sites exist
within the alternative sites. Previous archaeological testing conducted in the vicinity
revealed no subsurface cultural remains. Each of the alternative sites have undergone
extensive land clearing or development. Due to these disturbances, no surface
archaeological sites are present and the potential for subsurface remains also appears
minimal.

An archaeological inventory survey is recommended following the selection of the final
Nanakuli Library site.
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INTRODUCTION

At the request of DHM, Inc., Aki Sliote Consulting of Honolulu conducted an archaeological assessment of five alternative sites for the proposed Nanakuli Public Library. This assessment was conducted to evaluate each alternative site for potential cultural resources and to assist in the final selection of the library site. On-site field inspections were conducted on January 4 and March 28, 1994, by Aki Sliote and Jeffrey Pantaleo. A review of historical and archaeological literature has been submitted under separate cover (Nakamura and Pantaleo 1994). The reader is referred to that report for additional information.

PROJECT LOCATION

The Nanakuli Public Library alternative sites are located in the ahupua'a of Lualualei and Nanakuli, Wai'anae District, O'ahu Island (Fig. 1). Specific locations and boundaries of each alternative site are provided in the Survey Results section. Generally, the alternative sites are situated along the coastal area of Lualualei and nestled between two cinder cones, Pu'u o Hula Kai and Pu'u o Hula Uka to the northwest and Pu'i Helaakala to the east. All of the sites occupy locations fronted by Farrington Highway between Kaukama Road to the north and Nanakuli Avenue to the south. The sites are interspersed among commercial and residential areas (Fig. 2). Site A is located at the intersection of Farrington Highway and Kaukama Road at the base of Pu'i Hula Kai (TMK 8-7-6:por. 2, por. 5). Site B is located along Farrington Highway adjacent to BB Supermarket (TMK 8-7-3:111, 12). Sites C and D are located along Farrington Highway across from Nanakuli Elementary School (TMK 8-7-2:por. 1). Site E is located along Farrington Highway southeast of Lualualei Naval Road and next to the Food Giant market (TMK 8-7-8:11, 65, 75).

ENVIRONMENT

Since the alternative sites are situated along the coastal area of Lualualei and Nanakuli within the same locality, only a generalized discussion of the environmental setting is included in this section. Specific environmental characteristics of each alternative site are presented in the Survey Results section.

The terrain in the coastal areas is flat, but all of the sites have been altered by previous land modifications for agricultural, residential, or commercial development. The eastern boundary of Site A slopes steeply at the base of Pu'i o Hula Kai.
Ulehawa Stream traverses through Lualualei Valley, originating in the Wai'anae mountains and extending to the coast. This stream flows directly to the southeast of Alternative Site B.

The climate of the Wai'anae District is characterized as hot and dry with mean annual temperatures at approximately 80 degrees Fahrenheit. Annual rainfall along the coast averages between 10 and 15 inches, with most of the precipitation occurring between November and April. Elevation of the site area ranges from sea level to 10 feet above mean sea level. All of the Alternative Sites are situated within the Tsunami Inundation Zone.

Soil in the general area is classified as Lualualei Fill Land-Ewa Association. This soil consists of well-drained, fine textured and moderately fine textured soils on fans and in drainageways along the southern and western coastal plains of Oahu. These soils are commonly used for pasture, sugar cane, truck crops, and military installations. Specific variations of this association within each site are described in the Survey Results section. These variations include Mamala Stony Clay loam, 0-12% slopes; Makuleia Clay, Lualualei Clay, 2-6% slopes; Lualualei Extremely Stony Clay, 3-35% slopes; and Coral Outcrop.

Mamala Stony Silty Clay loam, 0-12% slopes, is a shallow and well-drained soil occurring on the coastal plains of Oahu. This soil formed in alluvium deposited over coral limestone and consolidated calcareous sand. Coral rock fragments are common in the surface layers and profile, but do not hinder cultivation. Permeability is moderate, runoff is very slow to medium, and erosion hazard is slight to moderate. This soil is commonly used for truck crops, pasture, and sugar cane.

Makuleia Clay occurs in small areas on coastal plains. This soil formed in recent alluvium deposited over coral sand. Permeability is slow in the surface layer and workability is difficult due to its sticky, plastic texture. This soil is commonly used for sugar cane and pasture.

Lualualei Clay, 2-6% slopes, is a well-drained soil occurring on coastal plains, alluvial fans, and talus slopes. Runoff is slow and erosion hazard is slight. This soil is commonly used for truck crops, sugar cane, pasture, urban development, and military installations.

Coral outcrop, or karstic substrate, consists of coral and cemented calcareous sand. These are former reefs that formed in shallow waters during higher stands of the sea in the geologic past. When the sea level subsided, coral outcrops were exposed on the ocean shore, along the coastal plains, and at the foot of the uplands. Coral outcrop, geographically associated with Juncus, Keauh, and Makuleia soils, forms up to 80-90% of the acreage with the remaining 10-20% consisting of a thin layer of friable, red soil material in cracks, crevices, and depressions. This soil is commonly used for military installations, urban development, and quarries.

Due to previous land clearing and construction activities, the five alternative sites are largely vegetated by secondary growth. This vegetation regime includes koa (Ponoipono palustris), koa haole (Leucaena glauca), ki (Acacia farnesiana), and finger grass (Choris inflata). Variation of this regime between site areas is limited to density and level of disturbance. Specific vegetation in each alternative site is included in Survey Results.

**SCOPE OF WORK**

The primary objective of the current study was to assess the archaeological resources in each site area. This assessment included a brief background research of previous archaeological work within or in the vicinity of the alternative sites, historical literature and documents review, and on-site inspections. The tasks for the current project included:

1. Historical literature and documents search,
2. Brief on-site surface assessment,
3. Locational and plan mapping of any surface remains,
4. Synthesis of information and report writing, and
5. Any necessary coordination with the HFD-DLNR.

**METHODS**

The on-site field inspections involved assessing each alternative site for surface and potential subsurface archaeological remains. Standard archaeological procedures were followed, including recording, mapping, and documenting archaeological remains. Black and white 35mm photographs were taken of each site area, showing the overall existing conditions and current use.

A brief historical summary and compilation of archaeological background data of Lualualei and Nanakuli was completed and presented under separate cover (Nakamura and Pastaleo 1994). Historical reference material pertaining to Lualualei and Nanakuli was reviewed at the Bishop Museum archives, Bureau of Conveyances, and DADS Survey Office. Tax map indices were researched to determine land ownership and use. Archaeological reference material pertaining to work conducted within or in the vicinity of the alternative sites was reviewed at the State Historic Preservation Division library, Department of Land and Natural Resources in Honolulu. Information from these resources was used to assess each site area.
SURVEY RESULTS

No surface archaeological remains were identified in the alternative sites during the on-site field inspection or background research. The following is a brief descriptive summary of the five alternative sites, including specific location, boundaries, environment, condition, and survey results.

**ALTERNATIVE SITE A**
Site A, encompassing 2.2 acres, is located at the intersection of Farrington Highway and Kukuma Road (TMK 8-7-6:por. 2, por. 5). This area is bounded by Farrington Highway to the west, Kukuma Road to the north, the northwestern slopes of Pu‘u Hula Kai to the east, and open land to the south. The topography is generally level, but slopes steeply to the east at the base of the ridge (Fig. 3). Soils in the area include Makulae Clay and Lahaina Extremely Stony Clay, 3-35% slopes. Vegetation in the area includes kame, kiawe, kiawe, kalo, and finger grass. No surface archaeological remains were identified during the field inspection; however, three modern military-related structures are situated in the vicinity. A small cement building, presumably housing electrical equipment, is located on the mauka side of a remnant knoll near the southern boundary of the alternative site area (Fig. 4). Another small, cinder block structure is located in the mauka central portion of the site area. A large bunker complex is located further upslope on the western slopes of Pu‘u Hula Kai well beyond the boundaries of the subject parcel.

**ALTERNATIVE SITE B**
Site B, approximately 2.28 acres, is located on the 1700 block along Farrington Highway (TMK 8-7-33:11, 12). This area is bounded by Farrington Highway to the southwest, BK Supermarket to the northwest, existing houses to the southeast, and a channelized segment of Ulehawa stream to the northeast (Fig. 5). Soil in the area includes Mamala Stony Silty Clay loam, 0-12% slopes. Vegetation in the area includes a dense thicket of kiawe and various grasses. This area has been disturbed by modern trash dumping and abandoned vehicles. No surface archaeological remains were identified in this alternative site area.

**ALTERNATIVE SITES C AND D**
Site C, a 2.3 acre portion of a larger 30 acre parcel, is located along the mauka side of Farrington Highway and across from Nanakuli Elementary School (TMK 8-9-2:por.1). This area, situated near the northwest corner of the larger State-owned parcel, is bounded by Farrington Highway to the southwest, open land to the northwest and northeast, and some office modules to the southeast. Site D is another 2.3 acre portion, located southeast of Site C.
of Site C near the central makai area of the larger parcel along Farrington Highway (Fig. 6). Coral outcrop dominates the landscape, which consists of lithified coral or cemented calcareous sand. A military reservation known as Camp Andrews formerly occupied the larger parcel. Vegetation in the area is limited to intermittent stands of alae`a, kiawe, and dry grasses. This area has been previously cleared and graded probably during the military occupation. No surface archaeological remains were identified in either of the two alternative site areas.

SITE E
Site E, approximately 3 acres, is located along Farrington Highway southeast of Lualualei Naval Road (TMK 8-7-8:11, 65, 75). This alternative site area is bounded by a Faststop Convenience Store and the Helelaka apartment/housing complex to the southeast, Farrington Highway to the southwest, Food Giant Supermarket to the northwest, and a concrete canal to the northeast. Coral outcrop is the dominant substrate with pockets of Manala Stony Silty Clay loam in the inland areas. Vegetation in the area is limited to sparse grasses. Several commercial buildings are situated in the site area fronting Farrington Highway. Businesses in Parcel 65 include the Nasaikuli Inn Karaoke Bar and a pawn shop, and in Parcel 75, include an used appliance store and a meeting hall catering facility (Fig. 7). Parcel 11, which includes the area behind the commercial businesses and the Food Giant Supermarket, has been extensively cleared and graded. The area is currently being used primarily as a truck and auto wrecker yard (Fig. 8). Due to the previous disturbances, no surface archaeological remains were identified within this site.

DISCUSSION
The current assessment determined the absence of surface archaeological resources and a minimal potential for subsurface remains through a review of literature and documents. The research confirmed extensive land clearing and development activities in each of the alternative sites.

Alternative Site A is open grassland. Several WWII structures are situated outside the perimeter of the area and will not be impacted if this area is selected for the library.

Alternative Site B has been extensively disturbed by bulldozing and trash dumping activities. This area is currently overgrown with secondary vegetation, including alae`a.

Figure 5. Overview of Alternative Site B. View to Northeast.

Figure 6. Overview of Alternative Sites C and D. View to East.
Alternative Sites C and D are presently open land. These areas are portions of a former military reservation, known as Camp Andrews, which existed between 1917 and 1952. The area has been previously cleared and graded and currently consists of open grass land.

Alternative Site E is currently occupied by commercial businesses, including a truck and auto wrecking yard, a lounge, a pawn shop, an used appliance shop, and a meeting hall.

No surface archaeological sites were identified in the alternative sites during the on-site field inspections. Although only a few archaeological studies have been conducted along the coastal and immediate inland portions of Lualualei, results of the work that have been completed indicate a paucity of traditional Hawaiian remains. The majority of sites that have been recorded are related to cattle ranching or military activities. Previous archaeological work in the vicinity included subsurface testing by Chioginoi and Hammatt (1993). Results from this investigation revealed no subsurface cultural remains. Thus, based on the negative results of previous archaeological investigations, together with the current condition of each site, no significant archaeological remains are expected in any of the alternative site areas.

A review of the literature concerning traditional Hawaiian settlement of Lualualei and Nanakuli indicated a diverse range of interpretations. Following the final selection of the Nanakuli Library site, several of these research topics should be examined. One topic that warrants further investigation is the extent and density of prehistoric settlement in coastal Lualualei. It has been generally accepted that the seaward coast was sparsely occupied, with only small settlements occurring to exploit the marine resources. However, conflicting interpretations concerning the density of settlement along the coast of Lualualei may be indicated. According to Hammatt et al. (1991), "the few traditional Hawaiian sites suggest that most of the project area were sparsely inhabited during prehistory and early history. This would be due primarily to the lack of fresh water resources in the vicinity . . . . Although surface run-off and intermittent drainages would allow some potential for seasonal agriculture, the attraction for settling in the wetter upland valleys surely have been greater." (Ibid:31). Nakamura and Pataleone (1994) argue that the presence of Utehawa Stream suggests that the area may have been agriculturally productive. They further state that "on the dry seaward coast, this area around Utehawa Stream was potentially a significant area for Hawaiian settlement. Even today, much of this area is designated 'agriculture'. The area potentially has adequate fresh water resources within an enclosed and somewhat protected area." (Ibid: 7). Since this stream provided the main water source for the mauka portions of Lualualei Valley, archaeological sites may be located in this area.
Further research should be conducted concerning the stream area, especially since this area has not yet been archaeologically surveyed and is located adjacent to Alternative Site B. This research may help to elucidate whether the lack of archaeological sites along the coastal area of Lualualei is due to limited prehistoric settlement or caused by extensive destruction from historic and modern period development and land clearing activities.

RECOMMENDATIONS

No surface archaeological remains were identified in any of the Alternative Sites. Previous archaeological work in the vicinity established the absence of subsurface remains. Since each of the site areas has undergone previous land clearing or development activities, the potential for subsurface remains is extremely low.

However, following the final site selection for the Nanakuli Public Library, an archaeological inventory survey is recommended. The inventory survey will include additional background research regarding traditional Hawaiian settlement in the Wai'anae District, a more intensive specific documents search, and selective subsurface sampling with backhoe as warranted. Specifically, additional research regarding the history of the military occupation is recommended if either Sites C or D is selected. If Site A is selected, documentation of the WWII structures is recommended.

BIBLIOGRAPHY


APPENDIX B

Aspects of the History of Lualualei and Nanakuli
ASC04-6

ASPECTS OF THE HISTORY OF LIHIALUAEI AND NANAKULI WAIANAЕ DISTRICT, O'AHU

by
Barry S. Nakamura, M.A.
Program Specialist
Interpret Hawai'i Program
Office of Community Services
Kapi'olani Community College

and
Jeffrey Pastuleo, M.A.

for
DHM, Inc.
1975 Uahakai Street
Honolulu, Hawaii 96822

April 1994

Aki Sinoto Consulting
2333 Kapiolani Blvd. #2304
Honolulu, Hawaii 96825

ABSTRACT

This report presents the results of an archaeological and historical literature review for a cultural resource assessment requested for the proposed Nanakuli III Elementary School and Nanakuli Public Library projects. The literature review was completed by Aki Sinoto Consulting of Honolulu under request from DHM, Inc. Due to the location of both proposed developments in the same locality of Wai'anae District in the ahupua'a of Lualiule'i and Nanakuli, the current report was produced to satisfy the background summary requirements for both projects.

The Wai'anae district of the island of O'ahu has been regarded in various and contradictory ways. On the one hand, the general opinion has been that the district is basically hot and dry; on the other, pockets of fertility with adequate fresh water resources exist in valleys such as Makaha and Wai'anae. Another area where such fertile conditions may have existed is in a southern niche of Lualiule'i Valley, in an area watered by Ulehawa Stream.

This portion of Lualiule'i is an enclosed land area, surrounded by Pu'a Hulu Kai and Uka to the north and Pu'a Helelaka, the ridge which divides Lualiule'i from Nanakuli to the south. Flowing through the center of this area is Ulehawa Stream. Much of the area has been agriculturally productive. This area is also where nine of the eleven alternative sites for the proposed library and school are located. Further research regarding traditional Hawaiian settlement is warranted before generalizing that this particular area was hot, dry, and unproductive.

Many changes have taken place in the Wai'anae district. Beginning in the 19th century and continuing into the 1940's, cattle ranching was a major industry there. The grazing of cattle would have disturbed much in the way of agricultural plantings and habitation sites. In the late-19th century, sugar cultivation was expanded into Lualiule'i from Wai'anae. Although this cultivation occurred towards the back (mauka) rather than towards the sea where all of the proposed sites for the library and school are located, the peripheral developments related to sugar cane production, such as roads and railroads, did occur on the ocean side of the district. Also small scale farming occurred in areas such as the subject area. The major current use of the area is still agricultural.

Previous archaeological work in the coastal area is limited to only a few projects. Other than prominent Aelia sites recorded by McAllister in the 1920's, a paucity of prehistoric or traditional sites is indicated from the results of the recent surveys. The majority of recorded sites consist of historic period features associated with cattle ranching, agriculture, or military activities.
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INTRODUCTION

An archaeological inventory survey was requested by DHM, Inc. for two State of Hawaii projects proposed in a localized area of Lualualei and Nanakuli ahupua'a, Wai'anae District, O'ahu Island (Fig. 1). Eleven candidate sites, six for the proposed Nanakuli III Elementary School and five for the Nanakuli Public Library, are included in the study area.

PROJECT AREA

All of the alternative sites for the library, due to the locational criteria for public libraries, have frontage on Farrington Highway and are located along a roughly 2.75 mile segment between Kaaawa Road to the north and Nanakuli Avenue to the south (Fig 2). The school sites are located more inland and grouped into the northern and southern sectors of a small ridge surrounded by ridges in the southeast portion of the mouth of Lualualei Valley Fig. 3). This area is defined by Pu'u Hulikai and Uka to the northwest and Pu'u Heleakala to the east and lies between the elevations of 10 and 40 feet AMSL. The northern group occurs along Hakimo Road and the southern group along Lualualei Naval Road.

SCOPE OF WORK

The current procedures entailed the completion of this summary report with two additional reports regarding the surface assessments conducted for the alternative sites for the library and school. The two reports are presented under separate cover (Pantaleo and Sinoto 1994). Due to the close proximity of the individual alternative sites within a localized area, this report is intended to satisfy the background summary requirements for both projects.

Subsurface procedures will not be conducted until the final site selection of the library and school is completed. At that time, the most appropriate subsurface procedure, testing or monitoring, will be determined based on an evaluation of the merits of each parcel.

Historical reference material pertaining to the subject area was reviewed at the Bishop Museum archives, State Bureau of Conveyances, State Survey Office (DABS), State Historic Preservation Division library, and the Hawaii/Pacific Collection of the State Library. Tax map indices were researched to determine land ownership and use. Archaeological reference material pertaining to previous work conducted within or in the vicinity of the alternative sites was reviewed at the State Historic Preservation Division library in Honolulu. Information gleaned from these various resources were used to assess the potential cultural significance of each site area.

Figure 1. Location of Study Area on USGS Wai'anae Quadrangle.
HISTORICAL BACKGROUND

O'ahu is one of the eight main islands of the Hawaiian archipelago. Traditionally and by boundaries defined during the Great Mahele of 1848, O'ahu was divided into six districts (Fig. 4): Kona (Honolulu), Ko'olau, Koolau, Wai'anae, and Ewa (King 1935:215). Both of proposed projects, the Nanakuli III Elementary School and the Nanakuli Public Library, are located within the district of Wai'anae, O'ahu.

The present-day Wai'anae District consists only of the area between the Wai'anae Mountains Range (King 1935:221). At the time of the Great Mahele of 1848, an event which legalized the concept of private ownership of property in Hawai'i (see below), the district of Wai'anae also encompassed a large portion of land, known as Wai'anae Uka, which crossed the Waianae Mountain Range into the central plateau of O'ahu. This land area was removed from the Wai'anae District by Act 84 of the Session Laws of 1909, and added to the Waialua District (King 1935:219-220). Subsequently, Wai'anae Uka was removed from the Waialua District and combined with the ahupua'a (a land division defined below) of Wahiawa to form a new and seventh district, Wahiawa, of O'ahu by Act 112 of the Laws of the Territory of Hawai'i in 1913 (King 1935:221). Other than minor adjustments of district boundaries which have occurred since, these seven districts have remained constant for political and taxation purposes since the early 20th century.

Districts like Wai'anae were further divided into traditional land areas known as ahupua'a. This important land division extended from the uplands to the sea (Pukui and Elbert 1986:9) and generally provided the residents within its boundaries with all of the necessary resources of life. Residents were economically self-sufficient and independent, and in control of a wide range of subsistence resources such as "food, fish, firewood, house timbers, thatch, and the like" (Handy and Handy 1972:48).

According to various sources, the district of Wai'anae was divided into nine ahupua'a (Fig. 5). From northwest to southeast, these ahupua'a were: Keawa'ula, Kahana'ai, Mala'a, 'Ohikilolo, Ke'a'au, Makaha, Wai'anae, Lualualei, and Nanakuli (Sterling and Summers 1978: map of Wai'anae district).

There is a question, however, concerning the ahupua'a status of Lualualei and Nanakuli, as both land areas are not listed in the Indices of Awards (Hawai'i Terr. Commissioner of Public Lands). Evidently, both Lualualei and Nanakuli were considered a part of the ahupua'a of Wai'anae in the Mahele. However, Sterling and Summers 1978 (map of

Figure 4. Map of O'ahu Island. Note Wai'anae District (Hawai'i Terr. Commissioner of Public Lands 1939:69).
Wa'iana'e and Marlon Kelly in her report, "Notes on the History of Lualualei" (1991:313, 319-320) specifically and without documentation label Lualualei an ahupua'a. As for Nanakuli, besides the Sterling and Summers (1978:map of Wa'iana'e) attribution of this land area as an ahupua'a, Lokomahi'elekalani Shibusawa, in his article "O'ahu: Pre-Mission Mo'oku and Ahupua'a," (1990:7) in agreement noted, "Nanakuli, the first ahupua'a in the molu [district] of Wa'iana'e" (Figure 6). Further research as to the status of Lualualei and Nanakuli as ahupua'a should be undertaken, particularly with State Land Court and Land Management records.

For the purposes of this report, Lualualei and Nanakuli are assumed to be ahupua'a, as both land areas meet all of the requirements of a typical ahupua'a (as noted below). All of the six candidate sites of the proposed Nanakuli Community Library are located within the ahupua'a of Lualualei; while the five alternative sites of the proposed Nanakuli Public Library occur in Lualualei and Nanakuli ahupua'a.

**MYTHS AND LEGENDS**

Place names, myths, and legends constitute significant aspects of what remains of traditional Hawaiian culture at Lualualei and Nanakuli. Many Hawaiian place names have ancient traditional origins, with much of the original explanation for the names often lost or forgotten.

**Wa'iana'e**

The origin of the district and ahupua'a name, Wa'iana'e, is uncertain. Ethnologists E. S. Croizhîl and Elizabeth Green Handy have posited one possible explanation based on Pu'uhonua:

> To the west of the Wa'iana'e Stream, near the sea, there was a large freshwater fishpond called Pu'uhonua... As this was the type of seawall freshwater pond in which young mullet were enclosed until they completed their growth, it is possible that the entire area acquired its name, Nu'ui (water-shade) Pu'uhonua (seawall), or Water-of-the-mullet, from this pond (Handy and Handy 1972:458).

The district and ahupua'a of Wa'iana'e were mentioned in the epic and poetic legend of the Moiheka. On his return journey from Kahikū, the ali'i nui (high chief) Moiheka allowed his followers to depart at various points of the islands. According to Samuel Mauiaikahenii Kamakahe, while Moiheka eventually ends up at Kaua'i, two of Moiheka's followers, Poka'ī and Mo'eke, depart at Wa'iana'e:

---

**Figure 5.** The Wa'iana'e District, Showing Its ahupua'a. (Sterling and Summers 1978)
Puka'i and Mo'ikea remained on O'ahu in Wal'anae—in Wa'ilanae of the gentle Kalaleu wind, the sweet waters of 'Ekua, the thick poi of Pahau, the stringy poi of Le'aneo and Kunia, the rich poi of Kamale, and the ala fish "lifiih" (ala mamo poi) of Wa'ilanae—in Wa'ilanae, land beloved of the sun [Kamakau 1991:305].

Lualualei

Lualualei was named as suggested in a letter to the Honolulu Advertiser on 5 July 1934. This letter by A. Mouloa in part read:

...Lualualei, the valley of the flexible wreath, is the meaning given in Hawaiian dictionaries. This is a vague definition, the true meaning is a cryptical allusion relating to the clever strategy of the famous Mālie-kūkūhihi, a high chief of O'ahu, whose flexible limbs of warriors surrounded four invading armies from Hawaii and Maui at the great battle of Kīpapa (Kīpapa, pa'au) where the corpses of the slain paved the bottom of this ravine, about A.D. 1410 (quoted in Sterling and Summers 1959:6).

Nanakuli

A number of explanations are offered as to the origin of the name Nanakuli. The frequent reference to Nanakuli as resource-poor may be largely anecdotal with little basis in fact.

Pukui, Elbert and Mo'okuola provide a possible explanation for the name Nanakuli. When translated literally as "lauk (ana) at the knee (hail)," the alapau of Nanakuli is "suggested by the tattooed knee of Koa'olele'opu, a priest whose pi'hi, Ha-hana, turned a deaf (hail) ear to his advice, and, when asked about his knee, told of his relationship with the chief, thus rebuking him" (1986:162).

Another translation of Nanakuli is "look deaf" (ibid.). This is said to refer to how Nanakuli people behaved, due to their lack of food resources when strangers passed, "because people in the area had not enough food to offer hospitality; hence they looked at them and pretended to be deaf" (ibid.). This explanation was collaborated by testimony to Hawaiian cultural specialist, Mary Kawena Pukui. Ms. Pukui was told of the following explanation of the origin of the name Nanakuli by informant Simeona Nawa'a in 1945:

Simeona Nawa'a came to the [Bishop] Museum and sat down to talk to me. In the course of the conversation he told me these things:

Nanakuli—It was Kaulana, a native woman of Wai'anae who told him why this place was so named. In the olden days, this place was sparsely inhabited because of the scarcity of water. The fishing was good but planting very poor. When it rained, some sweet potatoes would be put into the ground, but the crops were always poor and miserable.
There were a few brackish pools from which they obtained their drinking water and it is only when they went to the upland of Waianae that they were able to get fresh water. They carried the water home in large calabashes hung on emasaka or carrying sticks and used their water very carefully after they got it home. They spent most of their time fishing and most of the fish they caught were dried as gifts for friends and relatives in the upland. Sometimes they carried dried and fresh fish to these people in the upland and in exchange received poi and other vegetable foods. And as often as not, it was the people of the upland who came with their products and went home with fish.

Because of the great scarcity of water and vegetable food, they were ashamed to greet passing strangers. They remained out of sight as much as possible. Sometimes they met people before they were able to hide, so they just looked at strangers with expressionless faces and acted as though they were stone deaf and did not hear the greeting. This was so that the strangers would not ask for water which they did not have in that locality.

The strangers would go to other places and mention the peculiar, deaf people who just stared and would be told that the people were not deaf but ashamed of their inability to be hospitable. So the place they lived was called Nana, or look, and null, deaf—that is, Deaf people who just look [Hawaiian Ethnological Notes at the Bishop Museum, 6 March 1945].

This second anecdotal explanation may be questionable. On initial appearance, due primarily to a lack of fresh water, Nana would appear to be a resource-poor area. However, as explained below, adequate food resources are present in the form of sweet potato cultivation, along with the resources of the ocean, would have made Nana a productive habitation area.

Ulehawa

Another locale which is pertinent to the proposed school and library sites is Ulehawa, a part (perhaps an 'a) of Lualualei. Ulehawa is the name of a stream and section of land located in the southern part of Lualualei. Eight of the alternative sites for the school and library are located in the land area of Ulehawa.

The mythology associated with Ulehawa is rich and colorful, especially regarding the Polynesian and Hawaiian demi-god Maui (Maui-a-Kahana). S. M. Kamakau provided the following explanation:

"Akalaka lived with Hinakawa, and Maui-maa, Maui-wana, Maui-ikiki, and Maui-a-Kahana, all boys were born.

At Ulehawa and Kahalii on the south side of Waianae was their birthplace. There are pointed out the things left by Maui. Among other famous things to be seen are the cave in which Hinua made her tapa, the fishhook Manaiakalani, the stone for catching the sun, the places where Maui’s adzes were made, and all his other implements. But Maui-a-Kahana went to Kahiki after the birth of his son in Hawa‘i and the last of his children born of Hinua-a-Kahana was Hina-a-Kahana, and these became the ancestors of all lands in the ocean as far as the country which foreigners call New Zealand. There in the islands of the ocean Maui performed those famous exploits which are ever held in remembrance among this people [Joseph in Stanley and Summers 1978:64].

The area of interest is the makai portion of Ulehawa Stream. This location is surrounded and enclosed by hills; Pu‘u Holo Kai and Uka to the northwest and Pu‘u Heleakala to the southeast. In this small enclave, Ulehawa Stream flows through its center (see Fig. 5).

Ulehawa Stream originates in the Waianae Mountain Range. According to a recent study, Ulehawa Stream may formerly have flowed all year round:

"...Ulehawa Stream, which shows an erosion pattern that indicates a previous year-round flow of water. At present, the stream flows only during periods of rain [Bordier 1977:5]."

On the dry leeward coast, this area around Ulehawa Stream was potentially a significant area for Hawaiian settlement. Even today, much of this area is designated "agriculture" (Fig. 7). The area potentially had adequate fresh water resources within an enclosed and somewhat protected location.

Ulehawa Stream originates in the area of the Waianae Mountain Range where Pohakea Pass and Niiuli Hela are located. Pohakea Pass was noted by I'I in the 19th century (see pp. 9-10 of this report). Niiuli Hela was an important religious structure which McAllister said was "very ancient, belonging to the chief, Kakaihewa" (McAllister 1933:110).

**EARLY DESCRIPTIONS OF WAIANAE**

The earliest written description of the Waianae district dates to the 1790s when Captain George Vancouver led his British expedition along the leeward O'ahu coast. Vancouver was obviously impressed with the conditions along the coast and reported his observations as his expedition sailed from Pu‘uloa at Pearl Harbor to Waianae:

"From the commencement of the high land to the westward of Opoornah [Pouloa] was...one barren rocky water, nearly destitute of vegetation, cultivation or inhabitants, with little variation all the way to the west point of the island. Not far from the south-west point is a small grove of stately cocoanut trees, and along these shores are a few struggling fishermen's huts. Nearly in the middle of this side of the island is the only village we had seen westward of Opoornah. In its neighborhood the bases of the mountains rise further from the seashore, and a narrow valley, presenting a fertile cultivated aspect,
seems to separate some distance through the hills. The shore here forms a small sandy bay. On its southern side, between the two high rocky precipices, in a grove of coconut and other trees, is situated the village, and in the center of the bay, about a mile to the north of the village, a high rock (Mauna Lahilahi) remarkable for its projecting from a sandy beach. At a distance it appears to be detached from the land. ... The few inhabitants who visited us from the village, earnestly entreated our anchoring and told us, that if we should stay until morning, their chief would be on board with a number of bags, and a great quantity of vegetables; but that he could not visit us then because that day was tabo day. The fact of the country did not, however, promise an abundant supply; the situation was exposed [Vancouver, quoted in Sterling and Summers 1959:67-68].

More recently, the Wai'anae district has again been described as a relatively resource-poor area. According to Handy and Handy:

The district named Wai'anae extends from Ka'ena southward along the windward slopes of the Wai'anae range as far as the boundary of the rich district of 'Ewa, which surrounds the spreading lots of Pearl Harbor. In contrast, Wai'anae is a dry coastal strip with poor soil and only four rather insignificant streams reaching the sea from rocky mountain gulches or valleys [1972:457].

Visitors such as George Bowser, who rode on horseback through the Wai'anae district in the late-1800s, offered a different, more positive perspective on this hewward O'ahu district. In addition to commenting on the soil conditions, Bowser also mentioned some of the plants he found:

...The rich soil, therefore, is not confined to the valleys of the windward side of the Island. Here, on the forward side, it is identical in its character with that with which I had made acquaintance during the earlier part of my ride. All the world over there is no such rich soil to be found as results from the decomposition of volcanic rocks.

In this vicinity I found an abundance of cacti, and on the mountains a grass called by the natives pili, celebrated for its durability when used for thatching purposes. Used as soon as it is gathered, it will, nevertheless, stand as a thatch for twenty years before showing any signs of rotting...[1880:491].

**Trails to Wai'anae**

Prior to the 19th century, trails served to integrate the various areas of O'ahu. The districts of Wai'anae and 'Ewa were connected by various trails (Fig. 8), as related by John Papa Pili early in the 19th century:

...there were three trails to Wai'anae, one by way of Puu o Kapolei, another by way of Pohakua, and the third by way of Koelauke [1959:57].
The trails which would most affect the areas we are concerned with in this report are the Puu o Kapolei and Pohakas trails. The Puu o Kapolei trail went through the ohiaua' of Horouliula in the 'Ewa district and stayed close to the shoreline of the Waianae district. The Pohakes trail led through the Pohakes Pass in the Waianae Mountain Range and descended towards the areas of concern. The third trail, the Kokekole trail, descended through the Waianae Mountain Range further to the north.

**RESOURCES OF LUAULUALEI AND NANAKuli**

**Population**

By the time of the Great Mahele in 1848, large-scale changes had taken place in the Hawai'i. Many of these changes can be attributed to the drastic decline of the native Hawaiian population in the 70 years since the arrival of Captain James Cook to the islands. Based on Robert C. Schmitt's estimates and compilations, the figures for the Hawaiian and part-Hawaiian population of the Hawaiian Islands from the years A.D. 1778-1779 to 1896 showed a continual decline (Table 1).

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1778-79</td>
<td>200,000-250,000</td>
</tr>
<tr>
<td>1800</td>
<td>165,000-195,000</td>
</tr>
<tr>
<td>1823</td>
<td>135,000-145,000</td>
</tr>
<tr>
<td>1853</td>
<td>71,019</td>
</tr>
<tr>
<td>1878</td>
<td>47,608</td>
</tr>
<tr>
<td>1896</td>
<td>39,304</td>
</tr>
</tbody>
</table>

The decline in population was apparent also at the Waianae district. In 1863, a missionary stationed on the Waianae coast wrote, "There is little prospect of the population's increasing for years to come..." (quoted in McGrath 1973:37). The population figures for the Waianae district from 1831-32 to 1900 showed a constant decline. Following 1900, however, the population of the Waianae district grew significantly (Table 2).
Table 2.
Population of the Wai'anae District, 1831 to 1970
(From Schmitt 1977:12-14)

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1831-32</td>
<td>1,868</td>
</tr>
<tr>
<td>1835-36</td>
<td>1,654</td>
</tr>
<tr>
<td>1890</td>
<td>903</td>
</tr>
<tr>
<td>1896</td>
<td>1,281</td>
</tr>
<tr>
<td>1900</td>
<td>1,008</td>
</tr>
<tr>
<td>1910</td>
<td>1,846</td>
</tr>
<tr>
<td>1920</td>
<td>1,802</td>
</tr>
<tr>
<td>1930</td>
<td>1,923</td>
</tr>
<tr>
<td>1940</td>
<td>2,948</td>
</tr>
<tr>
<td>1950</td>
<td>7,024</td>
</tr>
<tr>
<td>1960</td>
<td>16,452</td>
</tr>
<tr>
<td>1970</td>
<td>24,077</td>
</tr>
</tbody>
</table>

A number of reasons account for the decline in population of the Wai'anae district to 1900. First, and perhaps foremost, was the introduction of Western diseases which decimated the native Hawaiian and part-Hawaiian population. In addition, settlement patterns on the island of O'ahu, which reflected the importance which Westerners placed on Honolulu harbor as a safe anchorage for their ships, led to a concentration of population at Honolulu. Instead of a population dispersed to rural areas such as Wai'anae, population congregated in areas such as Honolulu where jobs were more available. Some figures for the city of Honolulu show a growth of population through the years (Table 3).

Table 3.
Population of the City of Honolulu, Selected Years from 1831 to 1970
(From Schmitt 1977:12-14)

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1831-32</td>
<td>13,344</td>
</tr>
<tr>
<td>1835-36</td>
<td>12,994</td>
</tr>
<tr>
<td>1890</td>
<td>22,907</td>
</tr>
<tr>
<td>1896</td>
<td>29,920</td>
</tr>
<tr>
<td>1900</td>
<td>39,306</td>
</tr>
<tr>
<td>1910</td>
<td>52,183</td>
</tr>
<tr>
<td>1920</td>
<td>81,820</td>
</tr>
</tbody>
</table>

Food Resources of the Wai'anae District
The cultivation of food resources in the Wai'anae district probably has, in many ways, been underestimated. For example, while taro was not widely cultivated on the leeward coast because of the limited supply of fresh water, the sweet potato ('ula) was cultivated extensively. Rather than taro (kalo) having constituted the main staple food for the residents of much of this area, the sweet potato was the valuable food resource in marginally productive areas such as the leeward coast. Handy has written:

Although taro has a greater adaptability to both sunlight and moisture (too little sun or too much rain quickly spoils the potato), the sweet potato is the more valuable of the two staples in three ways: it can be grown in much less favorable locations, both with respect to sun and soil; it matures in 3 to 6 months (as against 9 to 18 months for taro); and it requires much less labor in planting and care in cultivation [1940:143].

The coastal areas of Lualualei and Nanakuli certainly qualify as "less favorable localities" in terms of a lack of fresh water. Therefore, along this coast, families engaged in fishing activities and cultivated sweet potato gardens. According to Handy, "...The fisher families living near the shore had [sweet] potato patches around their houses...from Nanakuli to Kaena..." [1940:155].

More importantly for agriculture, however, the slopes of the valleys of Lualualei and Nanakuli would have been ideal and productive for the cultivation of sweet potato. According to E. S. C. Handy:

The eastern slopes of the southern end of the Wai'anae Mountains below Puu Puna were famous for sweet potato growing. Although there was a little taro grown in the valleys of Wai'anae-ula, sweet potatoes grown on the kula lands were the main food of the people here. On the other side of the Wai'anae Mountains sweet potatoes were planted on the dry slopes of Nanakuli, Lualualei, Wai'anae-kai, and the other small valleys as far as Makua. With the exception of Wai'anae-kai, the sweet potato was the staple for the inhabitants of this dry section...[Handy 1940:156; emphasis added].

Aquaculture
Fishing was another important economic activity for the residents of the Wai'anae coast, including Lualualei and Nanakuli. Of fishing on the Wai'anae coast, Bowser noted in 1880, "I am informed that, in old times, this used to be a favorite fishing place for the chiefs of Oahu" [1880:498].

The productive fishing grounds off the leeward coast of O'ahu provided the setting for ancient Hawaiian myths and legends. Handy and Handy wrote:
In addition, the following narrative by John Papa I'i noted the existence of a fishpond at Lualualei in the early 1800s, one of the only instances of the Lualualei fishpond being mentioned:

The travelers stopped only one night and spent the following night on the other side of Pohakua. The elders and the children who went with them slept above Kuia, on this side of Pohakua. The coming of the redskins was announced in Waianae; and it was told that the family, elders and children together, would be set on fire for the wrong committed by Kalakaua. Though he alone was thought to have committed the murder, the whole family was held guilty. The company, somewhat in the nature of prisoners, spent a night at Lualualei near the fish pond on the plain. Finally, a proclamation from the king was given by Kalanianaole [sic], stating that there would be no deaths, for Kalakaua had not worn the king's mantis. Thus was the Lualualei family spared a cruel fate. A child born in the family later was named Lualualei [1959:23; emphasis added].

**Hinterland Resources**

The land area of Hawaiian ahupua'a typically ran from the mountains to the sea. This pattern provided the residents with all of the necessary resources of life.

The uplands of the ahupua'a of the Waianae coast supplied residents with a variety of resources such as upland planting zones, timber resources, access to birds and other resources. Handy and Handy reported that "Courts, of the ipu manalo variety, were found growing wild in the uplands in 1935. Lower down, in the dry area, there were sweet-potato plantations and coconut trees" [Handy and Handy 1972:468].

**LAND TENURE CHANGES, 1848-50**

Land tenure changes instituted in the years 1848 to 1850 allowed, for the first time, for the private ownership of property in Hawai'i (see Kuykendall 1938:269-298). Prior to this period which began in 1848 with the initial event which we know of as the "Great Mahele," ownership of all lands was held by the mo'i or king. Under this traditional Hawaiian system therefore, capital investments in land development projects such as sugar plantations were insecure as the simple ownership could not be attained. With the changes in the years 1848 to 1850 to the Western concept of property ownership, investments secured by fee-simple ownership expanded.

The Great Mahele prescribed, as a first step, the division of all of the lands of Hawai'i, consisting of over 4 million acres, between the mo'i (king), on the one hand, and 245 of the most important ali'i (chiefs), on the other (Kuykendall 1938:287). The largest portion of lands awarded, over 1.6 million acres, was given as private property to the 245 ali'i. The mo'i received about 2.5 million acres which he (Kamehameha III) divided into two parts: government lands and crown lands.

Of these two divisions, government lands totalled some 1.5 million acres and crown lands totalled about 1 million acres. The land areas of Lualualei and Nanakuli were both crown lands. Although neither land area is listed in the Index of Awards they appear (and more research needs to be done to resolve this issue) to have been listed as parts of the ahupua'a of Waianae which was also crown lands.

Under the Kuleana Act of 1850, lower ranking chiefs and commoners received some 28,000 acres (from over 4 million acres total) or less than one percent of the lands of Hawai'i. Some Kuleana or Land Commission Awards (L.C.A.) were made in Lualualei, although outside of the area studied by this report (for more information on these L.C.A., see Kelly 1991).

**MODERN DEVELOPMENTS**

**Ranching, 1851-1929**

In the second half of the 19th century, cattle ranching became an important industry throughout the islands. On the Waianae coast, one of the first cattle ranches was located at Lualualei.

This Lualualei ranch was begun by Paul F. Manini, son of Don Francisco de Paula Martin (1774-1837). Martin was the legendary confidant of Kamehameha whose death in 1819 led to major changes in Hawaiian social, political and economic life. Manini was perhaps the earliest of the ranchers on the Waianae coast:

Waianae's potential for grazing livestock attracted the first outside interest since the discovery of sandalwood. In 1851 a hapa-ulae Spanish named Paul F. Manini leased 17,000 acres in Lualualei Valley from Kamehameha III for an annual rental of $700...
Manini must have been one of the men a missionary had in mind when he reported in 1863 that most of the land in the Waiānae District was devoted to grazing and had already been "divided into six or seven divisions; and secured to as many parties or individuals on long lease or for short terms. These six or seven parties may be called forts of the soil." The missionary added with disdain that "there are in Waiānæ generally 10 or 12 white or half-white people who speak the English language. Their influence is far from favorable to religion [McGrath 1973:31]."

With Manini's death in 1869, control of Lualualei passed to James Isaac Dowsett (1829-1898). The role of Dowsett on the Waiānæ coast is described as follows:

Another name that turns up in the old Waiānæ Coast records is that of the Dowsett clan, descendants of a British sea captain. One of the early ranchers in Waiānæ was his eldest son, James Isaac Dowsett, Sr., the first Anglo-Saxon child born in Honolulu.

Dowsett had his finger in all sorts of pies: a whaling fleet, a dairy, a salt works, an extensive trade in awa (a Hawaiian narcotic drink) and numerous land holdings. By 1870 he was paying taxes on a ranch in Waiānæ Uka with an Irish partner, George Galbraith. He also ran cattle at different times in Nanakuli, Makaha and Lualualei. Dowsett, once reputed to be the wealthiest man in the islands, did not live on the Waiānæ Coast. But in 1880 a member of the clan was running a grazing ranch in Waiānæ Valley on 17,200 acres leased from the crown [McGrath 1973:32; emphasis added].

About the year 1880, George Bower visited Lualualei Valley. Bower noted his observations during the period, while Dowsett and his partner George Galbraith controlled the area:

Leaving Waiānæ, a ride of about two miles brought me to the Lualualei Valley, another romantic place opening to the sea and surrounded in every other direction by high mountains. This valley is occupied as a grazing farm by Messrs. Dowsett & Galbraith, who lease some nineteen thousand acres from the Crown. Its dimensions do not differ materially from those of the Waiānæ Valley, except that it is broader—say, two miles in width by a length of six or seven miles. The hills which incline to, however, are not so precipitous as those at Waiānæ, and have, therefore, more grazing land on their lower slopes, a circumstance which adds greatly to the value of the property as a stock farm. Although only occupied for grazing purposes at present, there is nothing in the nature of the soil to prevent the cultivation of the sugar cane, Indian corn, etc. Arrangements for irrigation, however, will be a necessary preliminary to cultivation [Bower 1880:493-94; emphasis added].

Bower's visit preceded the cultivation of sugar cane at Lualualei Valley. Continuing towards Ewa from Lualualei, Bower visited Nanakuli, site of another cattle ranch:

From the Lualualei Valley to the Nanakuli Valley I had a rather dreary ride of three miles. The intervening country towards the sea is barren, with a little pasturage at the base of the mountains. The track, however, is in very good order, much better than I expected to find it, looking to the mountainous and rocky character of the country through which it passes. At Nanakuli and at Hoomaluhia, close adjoining, the Messrs. Robinson have cattle ranches. The pasture here cannot be compared with that in the valleys I had just left behind, but inland among the mountain ranges it is much better. This, indeed, is a characteristic of the ranges throughout the island [Bower 1880:494; emphasis added].

In the late 1800s, ranching continued to be a major force on the leeward coast. Another name connected with ranching there was Link McCandless who entered the business in the 1890s. According to one source:

...Link McCandless... went into ranching [after previously being a well digger]. In 1894, he and a man named Tom King charted the bylgantine Oakhardt in Seattle, filled her hole with cattle and the cabins with feed, and sailed for Hawaii. By the turn of the century, McCandless' ranching empire covered much of the Waiānæ Coast including land at Nanakuli, 4,000 acres at Lualualei, San Andrews' property in Makaha and pastures toward Kaena Point [McGrath 1973:64].

From 1851 to into the 20th century, therefore, ranching was an important industry at the Waiānæ district. The extensive grazing of cattle in the valleys of Lualualei and Nanakuli would have resulted in modification of areas where indications of earlier Hawaiian occupation and cultivation of sweet potato in particular might have been found. The grazing of cattle, particularly in the areas extending to the valley slopes, would have altered many of these earlier features; although signs of early occupation may still remain.

The Waiānæ Sugar Company

Though ranching continued to be an important part of the lifestyle of the Waiānæ district into the 20th century, another important development was the establishment of the Waiānæ Sugar Plantation in 1878. In the early years of the plantation, however, sugar cultivation made but a small impact on the leeward coast:

...Though the Waiānæ plantation gained in power and influence, much of the Waiānæ Coast did not yet feel its push into a new lifestyle. In arid Nanakuli a family of brothers named Robinson ranched an island. On the hot plains of Lualualei the Dowsett and others did the same... [McGrath 1973:34].

Prior to the establishment of the Waiānæ Sugar Plantation, residents of the area were pessimistic as to the chances of sugar cultivation being successful. A missionary who lived in the area had written in 1853, "There is little prospect of the population's increasing for years to come, but the opposite, as no part of the district is suitable for an extensive sugar plantation [quoted in McGrath 1973:37]."
In 1878, however, Honolulu judge Herman A. Widemann, in what can only be considered a major gamble, leased the crown lands of Wai'anae Valley for 25 years and began the Wai'anae Sugar Plantation. According to one source, "...Honolulu's armchair experts shook their heads in 1878 when word got out that a well-known judge was sinking big money into a plantation at Wai'anae, the first on Oahu. ...Herman A. Widemann... obtained a lease on Wai'anae crown lands. In 1879 he leased all of Wai'anae Kai for 25 years" (McGraht 1973:37).

Widemann and his partner, J. L. Richardson, quickly moved to develop their leased acreage. When George Bower visited the area shortly after they had begun the Wai'anae Sugar Plantation, he was impressed with the progress they had made:

...At Wai'anae, there are two good native churches, a school, and a little village of native houses. With a native guide to take him to the various points of interest in its neighborhood, and relate to him all the old stories and legends which belong to them, a visitor may spend a week very enjoyably at Wai'anae. Here is the sugar plantation of Misters. Widemann & Richardson.

I was courteously entertained by Mr. J. L. Richardson, one of the most genial gentlemen I have met with in my travels. He and his partner have a large plantation and a powerful and well-appointed mill. They will turn out 100 tons of sugar from this estate during the present season. They have 250 acres planted with the sugar cane, and have constructed a tramway over which the cane is drawn to the mill by a locomotive engine. Just at the back of the mill is a fine grove of the cocoanut palm. This and the cane fields, and the high mountains all around and the sea in front, give to the place a most romantic appearance. ...There is little rain during a great part of the year, and the successful cultivation of the cane is secured by irrigation. A good landing has been constructed, and the produce of the mill is shipped in sailing vessels direct to Honolulu...[Boyer 1840-45].

Several years later, newspaper writers from Honolulu were invited to an excursion of the sugar plantation. By this time, cultivation had expanded from Wai'anae Valley into Lualualei Valley:

At 11 a.m. time was called for the 'cars,' and away all went for a railway ride. The whole district had turned out and the plantation lands were noticeable for their neat uniform. The trains first went to Lualualei, passing through some magnificent cane, which will yield a good six tons to the acre; this is watered in part from an artesian well. A return was made to Makaha. The length of the track on the plantation is 7 1/2 miles, it is well laid and ballasted [Hawaiian Gazette, January 9, 1884; quoted in McGraht 1973:48].

The expansion of the plantation continued. Besides Wai'anae Valley, the plantation had leased lands in Lualualei and Makaha. According to a recent study:

By 1890, Wai'anae Sugar Company had 600 acres under cultivation with an estimated yield of 1,500 tons of sugar. The plantation was described as a little model of a place with 17 miles of railroad, three locomotives and 350 laborers. Fields were being started in Makaha and Lualualei. A fleet of 70 railroad cars transported the cane to the mill.

...A four-inch pipe from the hydro-electric plant to the village provided a domestic fresh water supply for the plantation camps [by the 1890s]. The rest of the water ran off in open ditches to western brackish irrigation water being pumped from the Kamalei wells. Some pumping lifted the mixture into a network of flumes and ditches which led to canals, known as far away as Lualualei. All this ingenuity continued to earn Wai'anae Plantation a reputation as one of the most efficient in the Islands. And it permitted Dowsett to keep on expanding his acreage into Makaha Valley and Lualualei [McGraht 1973:48, 75].

Further information about the development of the Wai'anae Sugar Plantation is contained in Kelly 1991:334-338. The plantation continued with its operations until 1946 when it finally ended operations.

B. F. Dillingham and the Development of the Oahu Railway and Land Company (OR&L) 1882 to 1899

Improved transportation arrived on the leeward coast of Oahu in 1885 in the form of the Oahu Railway and Land Company (OR&L). The OR&L resulted in people and products being moved to and from areas in a consistent and moderately efficient manner.

OR&L was begun by Benjamin Franklin (B. F.) Dillingham (1844-1918), who moved to Hawai'i from Massachusetts in 1864 (Day 1934:34). By 1889, B. F. Dillingham had decided to construct a railroad line, the Oahu Railway and Land Company, Limited (OR&L), on the island of Oahu. Dillingham planned to relate this railroad with the large-scale development of sugar plantations on the lands leased from James Campbell and others.

Chartered by the Hawaiian government in 1889 (Kuykendall 1907:68), the OR&L opened to sugar cane cultivation the vast acreage of the western and northern areas of Oahu island. By early 1890, the railroad had been constructed to Pearl City, about eight miles to the west of Honolulu. For the next five years, construction continued in a westerly and north-westerly direction, and through the uppu'a of Hoolehua and the 'Ewa coral plains. The railroad reached Wai'anae in July of 1895. From Wai'anae, extension of the railroad line involved difficult construction around Kaena point. By June of 1898, the OR&L was extended to Wai'alea. And by January of 1899, the railroad line reached Kahuku (Yardley 1981:100, 194-95).
The promoters of OR&L, particularly Dillingham, played an active role in the development of sugar plantations along the route of the railroad. They sub-leased parts of the leased Campbell lands to the developers of the Ewa Plantation Company and the Kahului Plantation Company, both of which were incorporated in 1890, and to the Oahu Sugar Company which was incorporated in 1897 (Kuykendall 1967:68-69).

The OR&L continued to service the Waianae coast until 1946 when it went out of business. Along with the OR&L, the Waianae Sugar Plantation also decided to close its operations.

Additional Developments in Lualualei and Nanakuli
In the 20th century, Lualualei and Nanakuli were the sites of various developments. Government homesteads were offered for sale at Lualualei, and Nanakuli was designated as an area for Hawaiian homesteads. Then, the U.S. government condemned a major portion of Lualualei for a naval ammunition depot, and later a radio transmitting station. For more information on the above, see McGraw 1973:83-88, 111-118, and Kelly 1991:328-334, 339-341.

Camp Andrew
A 31.6 acre parcel located immediately inland of the current Nanakuli Elementary School (Fig. 9) was condemned by the United States Government for military use in 1917 by Executive Order No. 2564 (March 28, 1917). The initial acreage was amended to 30.05 acres in 1926 by Executive Order No. 4504 (September 4, 1926) when 1.31 acres were conveyed back to the Territory of Hawaii for the purposes of widening Farrington Highway. This military reservation, known as Camp Andrew, was utilized as a recreation area for military personnel before and during WWII. Temporary woodframe buildings and quonset huts occurred on this parcel.

On March 20, 1952, this parcel was transferred to the Department of the Navy for proposed use as a housing area for personnel assigned to the Lualualei Naval Ammunition Depot. However, this plan was subsequently cancelled when the State developed such housing elsewhere.

The Federal Government quitclaimed this Naval Reservation in 1962 through a deed (S-1982), March 21, 1962 [ Liber 4427 / p.279]) and conveyed the parcel back to the State of Hawaii, the current landowner. The Nanakuli Public Library Alternative Sites C and D are located on portions of this parcel fronting on Farrington Highway (see Fig. 2).

Figure 9. Camp Andrew, Military Reservation, on a 1929 Territorial Map (Reg. 2533).
ARCHAEOLOGICAL BACKGROUND

A review of previously completed archaeological investigations in the general vicinity of the project area was conducted at the State Historic Preservation Division library of the Department of Land and Natural Resources in Honolulu. The objectives of this undertaking were to obtain the necessary data to assess potential cultural resources in the area and to predict the nature and extent of potential subsurface remains.

PREVIOUS ARCHAEOLOGY

Although no previous archaeological work have been conducted specifically within the eleven alternative parcels, several studies have been completed in the general vicinity (Fig. 10). These include work conducted by Barrera (1975), Beidler (1977), Chieng (1993), Cordy (1975, 1976), Hammatt et al. (1991), Haun (1991), Kennedy (1983), Mayberry and Rosendahl (1988), Pak and Cordy (1990), Panaulelo and Sinoto (1990), Cleghorn (1991), and Cleghorn and Andersen (1992).

The earliest archaeological work conducted in the general area was during an island-wide inventory of archaeological sites in the 1920's by J. Gilbert McAllister. Site 148 is described as a large rock said to be named Maui, located approximately 1.1 miles from Makakilo station (railroad) toward Pu'u o Huluhulu. According to McAllister:

Northeast of the road on the property of E.P. Foggarty is a rock said to be named after the Hawaiian hero, Maui, who is said to have landed here when he first came to the Hawaiian islands from the south. This stone at the time was surrounded by water, and it was here that Maui rested and sunned himself. In the bluff just northeast of the rock is a shelter in which he lived, and in the vicinity was a spring where he obtained water. The large rock is now split in half and adorned with many small, oddly shaped rocks. It is said to be bad fortune to build one's house across a line drawn directly from the rock to the shore. J.J. Mathews is said to have collected detailed information in regard to this site (Sterling and Simmons 1978:64).

Barrera (1975) conducted an archaeological survey of approximately 80 acres in Makiki. Six sites were identified, including five rock configurations and a midden scatter. One site, CH-Oa-1, was interpreted as a probable ancient religious structure. The remaining rock structures were interpreted as modern.
Bordner (1977) conducted an archaeological reconnaissance survey for the proposed Nanakuli Landfill site. No archaeological sites were found during this investigation. Bordner noted that the project area was extensively disturbed by previous quarrying and ranching activities.

Chiogoji and Hammatt (1993) conducted an archaeological investigation of a 5-acre parcel in Lualualei, representing the most recent archaeological study in the general proximity to the current project area. No surface archaeological remains were found during this survey. Four subsurface trenches were excavated throughout the project area in order to determine presence or absence of buried cultural remains, and to examine stratigraphy. No subsurface archaeological remains were identified during these test excavations.

Cordy (1975) conducted an archaeological excavation at Site CH-02-1, a possible religious structure previously identified by Barrera. Cordy excavated two trenches and four test pits in order to determine function and chronology of the platform. Since no subsurface cultural deposits were found during these excavations, Cordy concluded that this site was not an ancient religious structure, but a recent structure of unknown function.

Cordy (1976) also conducted an archaeological survey of the Kaiser Pacific Properties in Ma'ili Kai. Nineteen sites were recorded during this survey, the majority of which are historic sites. The sites found include: enclosures, platforms, walls, C-shapes, U-shapes, L-shapes, mounds, and a trail.

Hammatt, Robins, and Strode (1991) conducted an archaeological inventory survey for the proposed Lualualei golf course. Eight sites (4264-4367, 4370-4373) were recorded during this survey. Six of these sites (4364, 4365, 4370-4373) were interpreted as historic features related to ranching and military activities, including walls, wells, a concrete retaining wall, a metal tank, and a historic horse box with associated cesspool and garden area. Site 4366, a habitation complex consisting of an enclosure, terraces, and a modified outcrop, and Site 4367, a wall segment, were interpreted as prehistoric.

Hammatt (1991) conducted an archaeological survey of the Naval Magazine and Naval communications area transmission facilities. These two facilities comprise an area over 9000 acres in the upland areas of Lualualei. A total of 131 archaeological sites, comprised of 1004 features, were identified during the survey. Types of features recorded included alignments, C-shapes, L-shapes, U-shapes, walls, terraces, enclosures, mounds, platforms, walled terraces, and paved terraces. These types of features indicate activities related to habitation, rituals, ceremonies, agriculture, the procurement of lithic raw material, and manufacture of stone tools. Features related to cattle ranching and military activities were also identified. Radiocarbon dating analyses suggest that the interior area of Lualualei Valley was initially occupied by A.D. 1400, and continued into the mid to late 1700's to early 1800's. Haun concluded that the density of permanent habitation and agricultural sites in the inland areas of Lualualei may be due to the availability of fresh water resources.

Kennedy (1983) conducted a walk-through surface survey of the proposed Waianae corporation yard at Lualualei. No archaeological sites were identified during this survey.

Mayberry and Rosenfeld (1988) conducted an archaeological reconnaissance survey for the Ma'ili Kai property in Lualualei. This project assessed previous work conducted by Barrera and Cordy. A total of 26 archaeological sites were identified, including 14 previously documented sites (Site CH-07-1, 8, 9, 12, 13, 16, 19-24, 28, and 29) and 12 new sites (Temporary Site T-2, 4, 9, 12, 17, 18, 20, 21). Twenty-four of these sites date to the twelfth century, while the remaining two sites may pre-date the twelfth century, based on feature morphology and lack of associated historic artifacts. Types of sites identified include terraces, walls, C-shapes, U-shapes, a pavement, a trail, enclosures, rock mounds, and platforms.

Pak and Cordy (1990) provided a status report for the DHH-LDLNR project in Nanakuli. Currently, seven archaeological sites (4216, 4217, 4218, 4233, 4234, 4235, 4236) have been identified during the survey. Sites 4216, 4217, 4218, and 4233, located in Survey Area II, are related to temporary habitation and agricultural activities. Types of features include walls, platforms, terraces, mounds, clearings, and water channels/diversion walls. Sites 4234, 4235, and 4236, located in Survey Area VI, include a surface scatter of lithic debris and midden, historic trash, and concrete structures and eistemas.

Parslalen and Sinoto (1990) conducted an archaeological surface assessment for the proposed Village Park's Bay Subdivision in Lualualei. No archaeological sites were identified during this survey.

Cleghorn (1991) conducted a reconnaissance survey in the central portions of the project area on both sides of Lualualei Naval Road. No surface remains were located in the area between the quarry and the cement plant nor the boulder-strewn, western slope of Pu'u Heleakula. Cleghorn and Anderson (1992) continued with an inventory survey in the same area, but no subsurface remains were encountered during testing. Extensive previous
disturbance from sugar cultivation, ranching, and military activities were noted.

SETTLEMENT PATTERN

Although limited archaeological research has been conducted in coastal Lualualei, a generalized settlement pattern for the area can be postulated. Settlement of Lualualei appears to have been largely influenced by the availability of fresh water resources. Permanent and seasonal habitation occurred along the shoreline areas in order to exploit the available marine resources. The main focus of agricultural activities occurred in the inland areas where rainfall provided an adequate supply of water. Ulehau Stream was probably the primary source of fresh water for the current projection area in the upper portions of southeast Lualualei. Unfortunately, no archaeological studies have been conducted in the vicinity of Ulehau Stream. Thus, the paucity of prehistoric archaeological sites in the subject projection area may be attributed to a number of factors including, the limited supply of fresh water resources, impact from historic activities, or sampling bias due to limited research.

SITE EXPECTABILITY

Based on the results of previous archaeological investigations, historic research, and literature searches, the potential for extant prehistoric or traditional Hawaiian sites is minimal. Surface remains expected in the subject projection area may include historic features related to agriculture, ranching, associated permanent and temporary habitation sites, and military activities. Feature types that may be encountered include boundary walls, corrals, irrigation systems, remnants of railroad, house foundations, roads, and concrete structures. Agricultural features may occur along Ulehau Stream. Although surface remains appear unlikely, types of features that may be encountered include terraces, 'auwai, water diversion/retention features, and round.

DISCUSSION

The Wainanae District possesses a rich and diverse background of legendary and mythological traditions as well as an interesting and complex history. The many references to important mythological and legendary personages are testament to the importance attributed to this area by the indigenous populace of Oahu. Historical period ranching and large scale agricultural development brought about significant changes in the daily lives of the inhabitants of the project area. This was compounded by the commodification of large land areas and associated activities by the military during the early years of the 20th century to the present. Currently, the majority of the survey area is comprised of agricultural and residential uses.

An interesting premise that emerged from the current research was that the popularized perception of the subject area of Lualualei and Nanakuli as dry, destitute, and unproductive may have been exaggerated or over-emphasized beyond reality. The historic documentation confirms the practice of viable sweet potato cultivation and the abundance of marine resources. The current use of large portions of the study area for agriculture attests to the suitability of the environment for such use. Perhaps the importance of Ainalo wet-land agriculture which flourished in the neighboring 'ahu'au of Makaha and Waianae contributed to the perception of drier areas devoid of kalo as agriculturally, as well as socially, marginal. Also, the eyewitness accounts given by early, transient visitors, such as Vancouver, may not be as reliably as previously assumed; since a one-time, short-term visit could not have taken into account the seasonality and climatic variations in a locality such as the current study area in Nanakuli and Lualualei.

Unfortunately, the compounding of extensive disturbance over the years as well as the small number of archaeological investigations in the subject area have resulted in a paucity of data to confirm or negate the marginal nature of the area. Further research of both archaeological and historical resources to elucidate the traditional Hawaiian settlement of the area is warranted before such generalizations regarding the nature of the area can be made again.

The general historical and archaeological backgrounds common to the localized area pertaining to both the Nanakuli Elementary School and Nanakuli Public Library projects have been summarized in this report. For more detailed and site specific information, the reader is referred to the archaeological assessment report for each of the projects produced under separate cover (Pasteneo and Sinoto, 1994).
REFERENCES

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Sahara, T., et al.
1972 Detailed Land Classification--Island of Oahu. Land Study Bureau, Bulletin No. 11, University of Hawai‘i.

Schmit, Robert C.

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Sinoto, Aki and Jeffrey Pantaleo

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1990 "O‘ahu Pre-Māhele Moku and Ahupua‘a." In Historic Hawai‘i (Vol. 16, No. 6, June 1990, pp. 4-9).

Spaulding, Thomas Marshall
APPENDIX C

EIS Consultation Phase, Comments and Responses
APPENDIX C. EIS CONSULTATION PHASE, COMMENTS AND RESPONSES

Written responses to the EIS Preparation Notice during the consultation phase were received from the following agencies, organizations, and individuals. These response letters and DAGS’ replies are included on the following pages. An asterisk (*) indicates no substantive comments and no response from DAGS.

A. FEDERAL
   Department of the Army, Corps of Engineers

B. STATE
   Department of Business, Economic Development and Tourism
   Department of Education
   Department of Hawaiian Home Lands
   Department of Health
   Department of Land and Natural Resources
   Department of Transportation

C. COUNTY
   Board of Water Supply
   Department of Land Utilization
   Department of Public Works
   Department of Wastewater Management
   Planning Department
   Police Department*

D. OTHER
   Monroe & Friedlander, Inc.
   Nanakuli Investment Co. Ltd.
The following agencies, organizations, and individuals were provided copies of the EIS Preparation Notice during the Consultation Phase, but sent no response.

**STATE**

Office of Hawaiian Affairs
Office of State Planning
University of Hawaii, Environmental Center

**COUNTY**

Department of Transportation Services

**OTHER**

Councilmember John DeSoto
Representative Henry Peters
Senator James Aki
Waianae Coast Neighborhood Board
Landowners of the Candidate Sites (except for Site E)
Mr. Robert P. Takushi  
State Comptroller  
State of Hawaii  
Department of Accounting and General Services  
P.O. Box 139  
Honolulu, Hawaii 96810

Dear Mr. Takushi:

Thank you for the opportunity to review and comment on the Environmental Impact Statement (EIS) Consultation Phase for the New Manakuli Public Library, Oahu. The following comments are provided pursuant to Corps of Engineers authorities to disseminate flood hazard information under the Flood Control Act of 1968 and to issue Department of the Army (DA) permits under the Clean Water Act, the Rivers and Harbors Act of 1899, and the Marine Protection, Research and Sanctuaries Act.

a. Provided that development of candidate sites does not involve work in adjacent drainage canals or streams, a DA permit will be not be required (file NP4-035).

b. The flood hazard information presented on page 16 of the EIS is correct.

Sincerely,

Kiaul Cheung, P.E.  
Director of Engineering

Mr. Kiaul Cheung  
Director of Engineering  
State Public Works Engineer

Mr. Kiaul Cheung  
Director of Engineering  
State of Hawaii  
Department of Accounting and General Services  
P.O. Box 139  
Honolulu, Hawaii 96810

Dear Mr. Cheung:

Subject: Manakuli Public Library  
EIS Consultation Phase  
DASG Job No. 92-30-0964

Thank you for your January 21, 1994 comments on the subject of the candidate library sites not expected to involve work in adjacent canals or streams, thereby not requiring a Department of Army permit. We appreciate your verification of the accuracy of the flood hazard information presented in the preparation notice document. This information will also be included in the draft EIS.

Thank you for your input on this project. If you have any further questions, please have your staff contact Mr. Ralph Morita at 586-0446 or Mr. Gary Chong at 586-0487 of the Planning Branch.

Very truly yours,

Gordon Matsumoto  
State Public Works Engineer

cc: Mr. Clyde Okinaga  
DBG, Inc.
January 26, 1994

The Honorable Robert P. Takushi
State Comptroller
Department of Accounting and General Services
P.O. Box 119
Honolulu, Hawaii 96810

Dear Mr. Takushi:

The Department of Business, Economic Development & Tourism is pleased to submit the enclosed comments on the Environmental Impact Statement Preparation Notice for the New Nanakuli Public Library.

The comments were provided by the Land Use Commission. Questions regarding these comments may be directed to Esther Ueda, LUC Executive Officer, at 687-3826.

Thank you for the opportunity to comment.

Sincerely,

[Signature]
Muri Hagemann

Enclosure
MAY 4 1994

Honorable Nufi Hannemann
Director
Department of Business, Economic Development, and Tourism
State of Hawaii
Honolulu, Hawaii

Dear Mr. Hannemann:

Subject: Nanakuli Public Library
EIS Consultation Phase
DAGE Job No. 12-36-5964

Thank you for your January 26, 1994 letter forwarding comments from the State Land Use Commission on the subject project. Our responses to the comments are as follows:

1. Confirmation of the location of sites 1 through 5 with respect to the State Land Use Districts is appreciated.

2. The draft EIS will include a map showing the location of all candidate sites to the State Land Use Districts.

Thank you for your input on this project. If you have any further questions, please have your staff contact Mr. Ralph Morita at 586-0466 or Mr. Gary Chung at 586-0487 of the Public Works Division.

Very truly yours,

[Signature]

ROBERT P. TAKUSHI
State Comptroller
MEMO TO: Honorable Robert P. Takushi, Comptroller
Department of Accounting and General Services

FROM: Herman H. Aliza, Ph.D., Acting Superintendent
Department of Education

SUBJECT: EIS Consultation Phase
New Nanakuli Public Library

After review of the subject document the Department of Education (DOE) has the following comments:

1) The DOE opposes the use of Site 5 for the Nanakuli Public Library because it represents a potential site for the relocation of Nanakuleo Elementary School in the event the Board of Education (BOE) determines it is unfeasible to continue leasing the present school site.

Although no site has been selected for a new school, Site 5 represents the only land not owned by the Department of Hawaiian Home Lands (DHHL) in the Nanakuli valley.

2) All of the schools in the Nanakuli area are overcrowded and operating at or above capacity. Projected DHHL developments in the valley will produce the need for three school sites. Two sites, not including Nanakapono Elementary School, would exist upon completion of the third elementary school in west Nanakuli.

Hon. Robert P. Takushi
March 4, 1994

March 4, 1994

3) We feel that the location of a 1.2-acre library site will be more easily determined than a new elementary school site which requires 12 acres. Hence, if the Camp Andrews site is chosen, the location of the library should be determined after the school site is fixed.

The DOE hopes to make a determination regarding the future of Nanakapono Elementary prior to the date when a library site is selected. We ask that there be discussions between the Hawaii State Public Library System and the DOE prior to the site selection for the library.

Should there be any questions, please call the Facilities Branch at 737-4763.

HMH:IChsy

cc: M. Okada, BOE
D. Hartman, BOE
A. Suga, BOE
L. Uda, BOE
B. Kame, HSLS
Honorble Herman Aizawa  
Acting Superintendent  
Department of Education  
State of Hawaii  
Honolulu, Hawaii  

Dear Dr. Aizawa:

Subject: Nanakuli Public Library  
EIS Consultation Phase  
DACS Job No. 12-96-5964

Thank you for your March 4, 1994 comments on the subject project. We acknowledge your opposition to the use of Site 5 for the proposed library since the Camp Andrews' property is the only non-DHHL State-owned land in Nanakuli. For that reason, it is imperative that both Sites 4 and 5 remain as candidate sites for the new library and are thoroughly evaluated during the site selection process and EIS process.

We agree that communication between the Hawaii State Public Library System and the DOE is important throughout these processes. DOE will also have the opportunity to comment on the library project during the draft EIS phase.

Please inform us promptly once the DOE makes a determination regarding the future of Nanakulelo Elementary School.

Thank you for your input for this project. If there are any further questions, please have your staff call Mr. Ralph Morita at 586-0486 or Mr. Gary Chong at 586-0487 of the Public Works Division.

Very truly yours,

ROBERT P. TAKUSHI  
State Comptroller

cc: Mr. Clyde Okinaga, REPLB  
DHM, Inc.
MEMORANDUM

TO: The Honorable Robert P. Takushi, Comptroller  
Department of Accounting and General Services

FROM: Hoiliku L. Drake, Chairman  
Hawaiian Homes Commission

SUBJECT: New Nanakuli Public Library  
KES Consultation Phase

January 24, 1994

Thank you for the opportunity to review the Preparation Notice report of December 1993 for the proposed Nanakuli Public Library.

The proposed facility would provide important and much needed library services to the Nanakuli-Maili area. The Department of Hawaiian Home Lands (DHHL) supports its development. We favor a location on state land in proximity to our native Hawaiian community at Nanakuli; possibly co-located with a new elementary school.

Following is a summary of how each of the five alternative sites relate to the plans and programs of this department.

<table>
<thead>
<tr>
<th>Site No.</th>
<th>TRK &amp; Acreage</th>
<th>Owner</th>
<th>DHHL Relationship/Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site 1</td>
<td>8-7-6:por 255</td>
<td>State</td>
<td>The site is in a parcel which is the subject of a land ownership dispute between the State and the DHHL. It is currently being reviewed by the Governor's Task Force on DHHL Title and Related Claims.</td>
</tr>
<tr>
<td>Site 2</td>
<td>8-7-33:121(1.26)</td>
<td>Private</td>
<td>Same comment as Site 1. The parcel is former government lands converted to private ownership.</td>
</tr>
<tr>
<td>Site 3</td>
<td>8-7-33:11(1.26)</td>
<td>Private</td>
<td>Same comment as Site 2.</td>
</tr>
<tr>
<td>Site 4</td>
<td>8-9-2:por. 1(2.3)</td>
<td>State</td>
<td>DHHL is interested in acquiring all or portions of this parcel for development of new projects to serve the adjoining Nanakuli Homesteads.</td>
</tr>
<tr>
<td>Site 5</td>
<td>8-9-2:por. 1(2.3)</td>
<td>State</td>
<td>Same comment as Site 4.</td>
</tr>
</tbody>
</table>

To coordinate further on this matter, please feel free to contact Ben Henderson at 586-3838 or Darrell Yegodich at 586-3848.

HBD:10/1/copy/3131L
Honorable Hoaliku Drake  
Director and Chairperson  
Department of Hawaiian Home Lands  
State of Hawaii  
Honolulu, Hawaii  

Dear Ms. Drake:  

Subject: Nanakuli Public Library  
EIS Consultation Phase  
DNOS Job No. 12-36-5964  

Thank you for your January 24, 1994 comments on the subject project. The information you provided regarding the relationship of the candidate sites to the plans and programs of DHHL will be included in the draft EIS and will be taken into account in the site selection study.  

Thank you for your input on this project. If you have any further questions, please have your staff contact Mr. Ralph Morita at 586-0486 or Mr. Gary Chong at 586-0487 of the Public Works Division.  

Very truly yours,  

Robert P. Takushi  
State Comptroller
To: The Honorable Robert F. Takushi, State Controller  
Department of Accounting & General Services

From: John C. Lewin, M.D.  
Director of Health

Subject: Environmental Impact Statement Preparation Notice  
Oahu's Job No. 12-36-5960  
New Kailua Public Library  
Kailua, Oahu

February 25, 1994
94-002/900

Thank you for allowing us to review and comment on the subject project.  
We have the following comments to offer:

Wastewater

The subject project is located within the county sewer service system. As the  
area is served, we have no objections to the proposed new public library,  
provided that the project is connected to the public sewer.

The developer should work closely with the County to assure the availability  
of additional treatment capacity and adequacy for the project.  
Non-availability of treatment capacity will not be an acceptable justification  
for use of any private treatment works or individual wastewater system.

If you should have any questions on this matter, please contact  
Ms. Lori Kajiwara of the Wastewater Branch at 566-4290.

Noise

1. Noise from stationary equipment such as air conditioning systems,  
must be attenuated to comply with the provisions of  
Administrative Rules, Title 11, Chapter 43, "Community Noise Control for  
Oahu."

2. Construction activities must also comply with the provisions of  
Chapter 11-42.

   a. The contractor must obtain a noise permit if the noise levels from  
construction activities are expected to exceed the allowable  
levels of the rules.

The Honorable Robert F. Takushi  
February 25, 1994  
Page 2

b. Construction equipment and on-site vehicles requiring an exhaust  
of gas or air must be equipped with mufflers.

c. The contractor must comply with the requirements pertaining to  
construction activities as specified in the rules and conditions  
issued with the permit.

3. Heavy vehicles traveling to and from the project site should be  
minimized within residential areas and must comply with the provisions  
of Administrative Rules, Title 11, Chapter 42, "Vehicular Noise Control  
for Oahu."

These comments apply to all sites listed as proposed locations for the  
New Kailua Public Library. Sites 1, 3, & 4, would be the least favorable  
locations due to the proximity of residences.

If you have any questions on this matter, please call Jerry Haruna,  
Environmental Health Program Manager, Noise and Radiation Branch at 566-4701.

c. Wastewater Branch  
Noise & Radiation Branch
Honorable John Lewin  
Director  
Department of Health  
State of Hawaii  
Honolulu, Hawaii  

Dear Dr. Lewin:

Subject: Nanakuli Public Library  
EIS Consultation Phase  
DNS Job No. 12-36-5764  

Thank you for your February 25, 1994 comments on the subject project. Our responses to your comments are as follows:

1. **Water**: The proposed library will be connected to the public sewer and the developer will work closely with the County to assure system adequacy and capacity.

2. **Noise**: All noise control regulations will be complied with.

3. **Siting**: We acknowledge your preference towards Sites 2 and 5.

Thank you for your input for this project. If there are any further questions, please have your staff call Mr. Ralph Morita at 586-0486 or Mr. Cary Chong at 586-0487 of the Public Works Division.

Very truly yours,

ROBERT P. TAKUSHI  
State Comptroller

cc: Mr. Clyde Okinaga, HSPLS  
DIM, Inc.
The Commission on Water Resource Management's (CWRM) staff comments that:

1. Candidate Site 1 is not proximate to streams, therefore, would not be subject to Stream Channel Alteration Permit (SCAP).

2. Candidate Sites 2 and 3 are located adjacent to the Waikane Drainage Channel. Therefore, should construction work for the proposed library alter the bed or banks of the stream channel, a SCAP approved by CWRM would be required.

3. Candidate Sites 4 and 5 appear to be located adjacent to a watercourse (page 14). However, a review of site conditions for this watercourse indicates that it is permanently dry and does not "provide sufficient water for the aeration of aquatic life." Therefore, this watercourse is not characteristic of a "stream" as defined in section 13-169-2, Hawaii Administrative Rules and a SCAP would not be required for these sites.

Division of Land Management

The Division of Land Management (DLR) comments that they have no objections to DOE's development of the new Nanakuli Public Library.

Should the site selected be State-owned land under the control and jurisdiction of the DOE, then the lands must be set aside to the Department of Education by Governor's Executive Order subject to the Board's approval and concurrence by the Governor.

Division of Water and Land Development

The Division of Water and Land Development (DWLD) comments that if new or increased water use is required from the Nanakuli Board of Water Supply for this facility, these water requirements should be coordinated with DWLD.

Division of Forestry and Wildlife

The Division of Forestry and Wildlife (DOFW) comments that inasmuch as the five sites are in an urban setting and affects no trails or threatened or endangered species, DOFW has no objections to the construction of a new library in Nanakuli.
We have no other comments to offer at this time. Thank you for the opportunity to comment on this matter.

Please feel free to call Steve Yama at our Office of Conservation and Environmental Affairs, at 587-0377, should you have any questions.

Enclosure

cc: Oak Hee Murakayashi, IBM Planners, Inc.

Honorable Keith Hae
Chairperson
Department of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

Dear Mr. Hae:

Subject: Nanakuli Public Library
EIS Consultation Phase
DAMS Job No. 12-36-3984

Thank you for your February 3, 1994 comments on the subject project. Our responses to your comments are as follows:

1. Office of Conservation and Environmental Affairs

The State Land Use Commission has verified that Candidate Site 1 is located within the State Conservation District. We acknowledge OCEA's comment that the site is within the General "C" subzone. The requirement for a Conservation District Use Application prior to development of Site 1 will be discussed in the draft EIS.

2. Historic Preservation Division

The project archaeologist has been in contact with the Historic Preservation Division regarding the archaeological work underway to ensure that the analysis conforms to minimum standards for an archaeological inventory survey.


The information provided regarding Stream Channel Alteration Permits will be included in the draft EIS.
4. **Division of Land Management, Division of Water and Land Development, Division of Forestry and Wildlife**

The information provided by these divisions is noted.

Thank you for your input on this project. If you have any further questions, please have your staff contact Mr. Ralph Morita at 586-0486 or Mr. Gary Chong at 586-0487 of the Public Works Division.

Very truly yours,

ROBERT F. TAKUSHI
State Controller
TO: The Honorable Robert P. Takushi, State Comptroller
Department of Accounting and General Services

FROM: Rex D. Johnson
Director of Transportation

SUBJECT: Environmental Impact Statement Preparation Notice
New Nanakuli Public Library, Nanakuli, Oahu
TMR: 8-7-86: pars. 2 & 3, 8-7-87: 11 & 12, and
8-9-82: par. 1

February 8, 1994

We have the following comments on the proposed new Nanakuli Public Library:

1. A Traffic Impact Analysis Report based on the selected site should be prepared and submitted for our review and approval.
2. Construction plans for improvements within the State highway right-of-way must be submitted for our review and approval.
3. Additional surface water runoff from the project site will not be allowed to discharge onto Farrington Highway.

We appreciate the opportunity to provide comments.

Rex D. Johnson

Honorable Rex Johnson
Director
Department of Transportation
State of Hawaii
Honolulu, Hawaii

Dear Mr. Johnson:

Subject: Nanakuli Public Library
EIS Consultation Phase
DNSS Job No. 12-38-5964

Thank you for your February 8, 1994 comments on the subject project. Our responses to your comments are as follows:

1. A discussion of potential traffic impacts for each candidate site will be included in the draft EIS. Once a site is selected, we will consult with your office regarding the preparation of a Traffic Impact Analysis Report.
2. Construction plans for improvements within the State highway right-of-way will be submitted for your review and approval.
3. Development of the selected library site will include an on-site drainage system which will assure that additional surface water runoff from the site will not discharge onto Farrington Highway.

Thank you for your input on this project. If you have any further questions, please have your staff contact Mr. Ralph Morita at 586-0444 or Mr. Gary Chong at 586-0487 of the Public Works Division.

Very truly yours,

Rex D. Johnson
State Comptroller
Mr. Robert P. Takushi, State Comptroller  
Department of Accounting and General Services  
State of Hawaii  
P.O. Box 119  
Honolulu, Hawaii 96810

Attention: Mr. Ralph Morita

Dear Mr. Takushi:


Thank you for the opportunity to review and comment on the EISP for the proposed Nanakuli Public Library.

We have the following comments to offer:

1. There is an existing 2-inch water meter serving TMK: B-9-G2: 01 (Sites 4 and 5). There are no services for Sites 1, 2, and 3.

2. The existing off-site water system is presently adequate to accommodate the proposed development at Sites 1, 2, 3, and 5.

3. The existing off-site water system cannot provide adequate fire protection as required by our Water System Standards (WSS) at Site 4. Our WSS require a fire hydrant to be located within 125 linear feet of the site. The nearest fire hydrant is located approximately 300 linear feet away. The developer will therefore be required to install a fire hydrant in accordance with our WSS. The construction drawings should be submitted for our review and approval.

4. The developer should obtain a water allocation from the State Department of Land and Natural Resources (DLNR). The allocation may be either from a source the DLNR has constructed or an approved source which the State plans to install.

5. The availability of water will be determined when the Building Permit Application is submitted for our review and approval. If water is made available, the applicant will be required to pay our Water System Facilities Charges for transmission and daily storage.

6. The on-site fire protection requirements should be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department.

7. If a three-inch or larger meter is required, the construction drawings showing the installation of the meter should be submitted for our review and approval.

8. The proposed project is subject to Board of Water Supply cross-connection control requirements prior to the issuance of the building permit application.

If you have any questions, please contact Barry Usagawa at 527-5235.

Very truly yours,

KAZU HAYASHIDA  
Manager and Chief Engineer
APR. 9 1994

Mr. Kazu Hayashida  
Manager and Chief Engineer  
Board of Water Supply  
City and County of Honolulu  
610 South Beretania Street  
Honolulu, Hawaii 96813  

Dear Mr. Hayashida:

Subject: Hanakuli Public Library  
E15 Consultation Phase

Thank you for your March 10, 1994 comments on the subject project. The information you provided regarding the existing water system in the project area will be included in the project site selection study and draft EIS. The water-related development requirements you referred to will be compiled with prior to project construction.

Thank you for your input for this project. If there are any further questions, please have your staff call Mr. Ralph Horii at 586-0466 or Mr. Gary Chong at 586-0489 of the Planning Branch.

Very truly yours,

[Signature]

KOHEI MINOGA  
State Public Works Engineer

RM: jk  
CC: Mr. Clyde Okinaga, NSPLS  
DM, Inc.
The Honorable Robert P. Takushi, Comptroller
Department of Accounting and
General Services
State of Hawaii
Kalanikukou Building
1131 Punchbowl Street
Honolulu, Hawaii 96813

Dear Mr. Takushi:

Environmental Impact Statement
Preparation Notice (EISPN) for the
New Nanakuli Public Library

We have reviewed the Site Selection Report and EISPN for the New Nanakuli Public Library, and have the following comments:

1. The Draft Environmental Impact Statement (DEIS) should discuss the impacts of the project to makai and mauka views;

2. The impacts of construction activities and the proposed development on stream and/or ocean water quality should be included in the DEIS; and

3. The DEIS should include a description of erosion control measures.

Thank you for the opportunity to comment on this matter. We look forward to receiving the DEIS. Should you have any questions, please contact Joan Takano of our staff at 527-5036.

Very truly yours,

DONALD A. CLEGG
Director of Land Utilization

February 3, 1994

Mr. Donald A. Clegg
Director
Department of Land Utilization
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Clegg:

Subject: Nanakuli Public Library
EIS Consultation Phase
DMGS Job No. 12-36-5964

Thank you for your February 3, 1994 comments on the subject project. The draft EIS will discuss visual impacts, construction impacts on stream and/or water quality, and erosion control measures, as recommended in your letter.

Thank you for your input on this project. If you have any further questions, please call our staff or Mr. Ralph Morita at 586-0466.

Very truly yours,

GORDON MARSHALL
State Public Works Engineer

EM: jk
cc: Mr. Clyde Okinaga
DM, Inc.
Mr. Ralph Morita  
Project Coordinator  
Public Works Division  
Department of Accounting and General Services  
State of Hawaii  
1151 Punchbowl Street  
Honolulu, HI 96813

Dear Mr. Morita:

Subject: Environmental Impact Statement Preparation Notice (EISPW), Nanakuli Public Library  
TMDI: 8-7-94; EISD: 8-9-94; Pub. 1  

We have reviewed the subject EISPW and have the following comments:

1. Frontage improvements should be constructed in accordance with the City standards and in compliance with the American with Disabilities Act provisions.

2. Best Management Practices (BMP) should be employed during and after the construction to reduce and control the discharge of pollutants into the Municipal Separate Storm Sewer System and the State waterways.

3. Flow rates incurred from construction activities should be minimized.

Should you have any questions, please contact Mr. Alex No, Environmental Engineer, at 523-4150.

Sincerely,

KENNETH E. SPRAGUE  
Acting Director and Chief Engineer

Mr. Kenneth E. Sprague  
Director and Chief Engineer  
Department of Public Works  
City and County of Honolulu  
636 South King Street  
Honolulu, Hawaii 96813

Dear Mr. Sprague:

Subject: Nanakuli Public Library  
EIS Consultation Phase  
DACE Job No. 12-36-5963  

Thank you for your January 19, 1994 letter regarding the subject project. Your comments on frontage improvements, control of pollutant discharge, and minimizing flow rates during construction will be addressed in the draft EIS.

Thank you for your input on this project. If you have any further questions, please have your staff contact Mr. Ralph Morita at 586-0486 or Mr. Gary Chong at 586-0467 of the Planning Branch.

Very truly yours,

GORDON HATASUKA  
State Public Works Engineer

BMW: 1k  
cc: Clyde Okinaga  
DMG, Inc.
Mr. Robert P. Takushi

Department of Accounting and General Services
State of Hawaii
P.O. Box 119
Honolulu, Hawaii 96810

Dear Mr. Takushi,

Subject: New Nanakuli Public Library
Environmental Impact Statement Preparation Notice

We have reviewed the subject environmental impact statement preparation notice and offer the following comments with respect to the existing municipal wastewater facilities available to service the proposed project:

- All five candidate sites may be served by existing sewer lines located within the Farrington Highway right-of-way.
- Site 1 may be connected to a 24-inch sewer line.
- Sites 4 and 5 may be connected to an 18-inch sewer line.
- Sites 2 and 3 may be connected to a 6-inch sewer line located in the mala (mauka) side of Farrington Highway.
- The sewer connection for Sites 1, 4, and 5 would be more costly and difficult than that for either Site 2 or Site 3 because the sewer lateral would need to cross Farrington Highway and connect to deeper sewer lines.

An "Application for Sewer Connection" must be filed and be approved by our department in order to reserve sewer capacity for this proposed project.

Thank you for giving us the opportunity to review the subject document. Should you have any questions, please call Thomas Takanaka at 523-4672.

Very truly yours,

Kenneth F. Rapoza
Director

February 2, 1994
MAY 4, 1994

Mr. Kenneth M. Rappolt
Director
Department of Wastewater Management
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Rappolt:

Subject: Nanakuli Public Library
EIS Consultation Phase
DANB Job No. 12-36-5964

Thank you for your February 2, 1994 comments on the subject project. The information you provided with respect to connections to the existing municipal wastewater facilities will be included in the draft EIS and site selection study.

An "Application for Sewer Connection" will be filed with your department once a specific library site is selected.

Thank you for your input on this project. If you have any further questions, please have your staff contact Mr. Ralph Morita at 586-0486 or Mr. Gary Chong at 586-0487 of the Planning Branch.

Very truly yours,

GORDON MATSUDA
State Public Works Engineer

RM:jk
cc: Mr. Clyde Okinaga
DUN, Inc.
Honorable Robert P. Takushi  
State Comptroller  
Department of Accounting and General Services  
February 4, 1994  

Dear Mr. Takushi:

Environmental Impact Statement Preparation Notice  
(EISP/N) for the New Kailua Public Library  

In response to your request of January 4, 1994, we have reviewed the subject EISP/N and offer the following comments:

1. The Draft Environmental Impact Statement (DEIS) should indicate that: Candidate Site 1 is designated for Park and Recreational use, Candidate Sites 2 and 3 are designated for Residential use, and Candidate Sites 4 and 5 are designated for public facility (Public and Quasi-Public) use on the Waianae Development Plan Land Use Map.

2. The DEIS should also indicate that the Waianae Development Plan Public Facilities Map (DPFPF) shows a symbol for publicly funded improvements to Farrington Highway in the "Within 6 years" category. This planned improvement is adjacent to all five candidate sites. Additionally, the Waianae DPPFM shows a symbol for a publicly funded sewer improvement district, site determined, within six years, adjacent to Candidate Site 4, and a symbol for a publicly funded park, site undetermined, within six years in the general vicinity of Candidate Sites 4 and 5.

Thank you for the opportunity to comment. Should you have any questions, please contact Matthew Hipshida of our staff at 527-6056.

Sincerely,

[Signature]
Chief Planning Officer

cc: DBM Planners, Inc.  
Office of Environmental Quality Control
MAY 4 1994

Mr. Robin Foster
Chief Planning Officer
Planning Department
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Foster:

Subject: Nanakuli Public Library
EIS Consultation Phase
DAS Job No. 12-36-5964

Thank you for your February 4, 1994 comments on the subject project. The information you provided regarding site designations on the Waimanoe Development Plan Land Use Map and planned improvements shown on the Public Facilities Map will be included in the draft EIS.

Thank you for your input on this project. If you have any further questions, please have your staff contact Mr. Ralph Morita at 586-0486 or Mr. Gary Chong at 586-0487 of the Planning Branch.

Sincerely yours,

GORDON MATSUBARA
State Public Works Engineer

RM:jk
CC: Mr. Clyde Okinaga
DFW, Inc.
January 24, 1994

Mr. Robert P. Takushi
State Comptroller
Department of Accounting
and General Services
State of Hawaii
P. O. Box 119
Honolulu, Hawaii 96810

Dear Mr. Takushi:

This is in response to your request for comments on an EIS Preparation Notice for the new Nanakuli Public Library.

This project is expected to have no significant impact on police services. We have no additional comments to make at this time.

Thank you for the opportunity to review this document.

Sincerely,

MICHAEL S. HAYAMURA
Chief of Police

By

EUGENE IDEHARA
Assistant Chief of Police
Administrative Bureau
Ms. Wendy McAllaster  
Project Manager  
DHM, INC.  
1975 Uilikau Street  
Honolulu, Hawaii 96822-2079

RE:  87-696 Farrington Highway/TMK (1) 8-7-036-016  
87-710 Farrington Highway/TMK (1) 8-7-022-057  
Erskine Trust Property - The "Property"

Dear Ms. McAllaster:

As listing agent for the above property, we are writing in regards to your request for information on possible sites for the new Nanakuli Library.

The "property" is comprised of two lots, both with frontage on Farrington Highway. The smaller lot is 55,000 square feet and is listed at $385,000. The second and contiguous lot has 39,470 square feet and is listed at $888,000. Both lots are available.

We believe the location, size and other amenities meet the criteria for the proposed library project. There is an offer on the table for the smaller lot (55,000 square feet) but it is not very attractive. A counter has been submitted. We are fairly certain this offer will not be successfully consummated. However, the second lot of 39,470 square feet would most likely meet your requirements by itself.

Please advise as to the qualifications of this "property" and further requirements to be considered.

Very truly yours,

MONROE & FRIEDLANDER, INC.

Ms. Rita Jo Shouldt (ms)
Rita Jo Shouldt (B), GRI, CCIM

RJS/kg

Ms. Rita Jo Shouldt  
Monroe & Friedlander, Inc.  
220 South King Street, Suite 1800  
Honolulu, Hawaii 96813

Dear Ms. Shouldt:

Subject: Nanakuli Public Library  
EIS Consultation Phase

Thank you for your April 26, 1994 letter informing our consultant, DHM Inc., about a possible site in Maili for the proposed library. The two parcels are within the Nanakuli Public Library service area and have good visibility along Farrington Highway.

Initially, the land requirement for the library was 1.2 acres, which is met by the parcels you identified. However, it has since been determined that a 2.3-acre site is needed due to zoning setback requirements and to provide space for future expansion. As a result, the Erskine Trust property in Maili does not meet the land area criteria for the proposed library.

We appreciate your input for this project.

Very truly yours,

GORDON MATUSUKA  
State Public Works Engineer  

GC:jk  
cc: Mr. Clyde Okinaga  
DHM, Inc.
March 29, 1994

Dept. of Accounting and General Services
P.O. Box 113
Honolulu, Hawaii 96810

SUBJECT: Nanakuli Library

TO WHOM IT MAY CONCERN:

I appreciate this opportunity to provide comment on this issue. The Nanakuli community will benefit tremendously with the addition of a library.

The sites proposed are excellent. I wish to point out by way of this letter that the last site, site number 6, which was included later, may not be available.

Site number 6, which belongs to Nanakuli Investment Company, Ltd., is on the market for sale, and presently offers are being considered for development.

Therefore the site may not be available in the future.

Sincerely,

James Aki
President
Nanakuli Investment Co. Ltd

cc: Bart Kane
State Librarian

MAY 25 1994

Mr. James Aki
President
Nanakuli Investment Company, Ltd.
84-339 Ikuone Place
Waianae, Hawaii 96792

Dear Mr. Aki:

Subject: Nanakuli Public Library
EIS Consultation Phase

Thank you for your March 28, 1994 comments on the subject project. We will include in the draft EIS the fact that the property is presently on the market for sale.

As a matter of clarification, the property owned by Nanakuli Investment Company, Ltd. is identified as Candidate Site E in the draft EIS, as opposed to your reference to 'site number E.'

We appreciate your input for this project.

Very truly yours,

Gordon Matsushita
State Public Works Engineer

cc: Mr. Clyde Okinaga
DHB, Inc.
APPENDIX D

EIS Public Review Phase, Comments and Responses
APPENDIX D.  EIS PUBLIC REVIEW PHASE,
COMMENTS AND RESPONSES

Written responses to the Draft EIS during the public review phase were received
from the following agencies, organizations, and individuals. These response
letters and DAGS' replies are included on the following pages.

FEDERAL

Department of the Army, Corps of Engineers
Department of Agriculture, Soil Conservation Service

STATE

Department of Budget and Finance, Housing Finance and Development
Corporation
Department of Business, Economic Development and Tourism
Department of Education
Department of Hawaiian Home Lands
Department of Health
Department of Land and Natural Resources
Department of Transportation
Office of Environmental Quality Control
Office of State Planning
University of Hawaii at Manoa, Environmental Center

COUNTY

Board of Water Supply
Department of Housing and Community Development
Department of Land Utilization
Department of Parks and Recreation
Department of Public Works
Department of Transportation Services
Department of Wastewater Management
Fire Department
Planning Department

OTHER

American Lung Association
Hawaiian Electric Company
The following agencies, organizations, and individuals were provided copies of the Draft EIS during the Public Review Phase, but sent no response.

FEDERAL

Environmental Protection Agency

STATE

Department of Agriculture
Office of Hawaiian Affairs

COUNTY

Building Department
Police Department

OTHER

Councilmember John DeSoto
Nanakuli Homestead Association
Representative Henry Peters
Senator James Aki
Waianae Coast Neighborhood Board
Landowners of the Candidate Sites
July 15, 1994

State of Hawaii
Office of Environmental Quality Control
220 South King Street, 4th Floor
Honolulu, Hawaii 96813

Dear Sir/Madam:

Thank you for the opportunity to review and comment on the Draft Environmental Impact Statement for the New Nanakuli Public Library, Waimanalo, Oahu. We do not have any additional comments to offer beyond those offered in our previous letter dated January 21, 1994.

Sincerely,

Ray H. Jyo, P.E.
Director of Engineering

Copies Furnished:
Mr. Ralph Morita
Department of Accounting and General Services
1151 Punchbowl Street, Room 430
Honolulu, Hawaii 96813

Ms. Duk Hee Murabayashi
DMH, Inc.
1975 Dolehao Street
Honolulu, Hawaii 96822

Mr. Ray H. Jyo
Director of Engineering
U. S. Army Engineer District, Honolulu
Department of the Army
Fort Shafter, Hawaii 96850-5440

Dear Mr. Jyo:

Subject: New Nanakuli Public Library
EIS Public Review Phase

Thank you for reviewing the draft EIS for the subject project. We acknowledge your letter of July 15, 1994 which indicates you have no additional comments to offer beyond those offered in your January 21, 1994 letter.

This response letter and your July 15, 1994 letter will be included in the final EIS. If there are any questions, please have your staff contact Mr. Gary Chong of the Planning Branch at 586-0487.

Very truly yours,

Gordon Matsunaka
State Public Works Engineer

GC:jk
cc: DMH, Inc.
Dear Sir:

Subject: DRAFT ENVIRONMENTAL IMPACT STATEMENT & SITE SELECTION
New Nanakuli Public Library

We have completed our review of the Draft Environmental Impact Statement and Site Selection of the New Nanakuli Public Library. We have no major resource concerns at this time. The selected site (site A) appears to be the best site for the public library. Given the proper precautions and the installation of appropriate best management practices during construction, no major natural resource problems are anticipated.

Should any questions arise, please do not hesitate to contact Mr. Michael C. Tulang at (808) 541-3400 or Mr. Michael Saefke at (808) 634-8590. Thank you for the opportunity to provide comment.

Sincerely,

KENNETH H. KAMASHIHO
Acting State Conservationist

cc: Mr. Michael Saefke, District Conservationist, Honolulu Field Office. Mr. Peter Gibson, Chairman, West Oahu WACD, 1041 Kamehameha Hwy., Kapolei, Hawaii 96707.

Mr. Kenneth H. Kaneshiro
Acting State Conservationist
Soil Conservation Service
U. S. Department of Agriculture
P. O. Box 50004
Honolulu, Hawaii 96850-0001

Dear Mr. Kaneshiro:

Subject: New Nanakuli Public Library
EIS Public Review Phase

Thank you for reviewing the draft EIS for the subject project. We acknowledge your letter of July 13, 1994 which indicates that:

1. You have no major resource concerns at this time.
2. Site A appears to be the best site for the public library.
3. No major natural resource problems are anticipated.

This response letter and your July 13, 1994 letter will be included in the final EIS. If there are any questions, please have your staff contact Mr. Gary Chong of the Planning Branch at 586-0487.

Very truly yours,

GORDON MATSUOKA
State Public Works Engineer

CC: HM, Inc.
TO: The Honorable John Waihee  
Governor, State of Hawaii  
c/o Environmental Quality Control  

FROM: Joseph K. Conant  
Executive Director  

SUBJECT: Draft EIS for the New Nanakuli Public Library  

We have reviewed the subject EIS and have no comments to offer.  
Thank you for the opportunity to comment.  

c: ORGC  
DAGS  
DHN, Inc.  

Mr. Joseph K. Conant  
Executive Director  
Housing Finance and Development Corporation  
Department of Budget and Finance  
State of Hawaii  
Honolulu, Hawaii  

Dear Mr. Conant:  

Subject: New Nanakuli Public Library  
EIS Public Review Phase  

Thank you for reviewing the draft EIS for the subject project. We acknowledge your letter of July 21, 1994 which indicates you have no comments to offer.  

This response letter and your July 22, 1994 letter will be included in the final EIS. If there are any questions, please have your staff contact Mr. Gary Chong of the Planning Branch at 585-0487.  

Very truly yours,  

GORDON MATSUOKA  
State Public Works Engineer  
cc: DHN, Inc.
June 22, 1994

Mr. Brian J.J. Choy
Director
Office of Environmental Quality Control
220 South King Street, Fourth Floor
Honolulu, Hawaii 96813

Dear Mr. Choy:

The Department of Business, Economic Development & Tourism is pleased to submit the enclosed comments on the Draft Environmental Impact Statement and Site Selection for the New Nanakuli Public Library.

The comments were provided by the Land Use Commission. Questions regarding these comments may be directed to Esther Ueda, LUC Executive Officer, at 587-3826.

Thank you for the opportunity to comment.

Sincerely,

Mufi Hannemann

Enclosure

cc: Mr. Ralph Morita
    Ms. Duk Ikee Murabayashi
OCT 27 1994

Honorable Jeanne Schultz
Acting Director
Department of Business,
Economic Development, and Tourism
State of Hawaii
Honolulu, Hawaii

Dear Ms. Schultz:

Subject: New Nanakuli Public Library
EIS Public Review Phase

Thank you for reviewing the draft EIS for the subject project. We acknowledge the June 27, 1994 letter from your department which indicates the Land Use Commission has confirmed Sites B, C, D and E are in the State Land Use Urban District.

This response letter and your June 27, 1994 letter will be included in the final EIS. If there are any questions, please have your staff contact Mr. Gary Chong of the Public Works Division at 586-0487.

Very truly yours,

ROBERT P. TAKUSHI
State Comptroller
July 8, 1994

Honorables Herman Alizawa
Superintendent
Department of Education
State of Hawaii
Honolulu, Hawaii

Dear Dr. Alizawa:

Subject: New Nanakuli Public Library
EIS Public Review Phase

Thank you for your July 8, 1994 comments on the draft EIS for the subject project.

We have stated in the draft EIS that the former Camp Andrews site is being considered by the DOE as a possible replacement site for Nanakopono Elementary School. Since the entire site is nearly 30 acres and a school site would require approximately 12 acres, there should be adequate acreage for a combination of uses on the property, including about 2.3 acres for the proposed library.

It is noted the DOE's and Department of Hawaiian Home Lands' interest in the Camp Andrews site will be a consideration affecting both Sites C and D (not only Site D as mentioned in your letter) during the final site selection process for the proposed library because assignment of available space on the former Camp Andrews site will need to be negotiated between all interested parties by the Department of Land and Natural Resources.

This response letter and your July 8, 1994 letter will be included in the final EIS. If there are any questions, please have your staff contact Mr. Gary Chong of the Public Works Division at 586-9487.

Very truly yours,

ROBERT P. TAKUSHI
State Controller
MEMORANDUM

TO: The Honorable John Waihee, Governor
    State of Hawaii
    c/o Office of Environmental Quality Control

FROM: Hoaliku L. Drake, Chairman
      Hawaiian Homes Commission

SUBJECT: New Nanakuli Public Library, Draft Environmental Impact Statement and Site Selection Report

The subject document dated June 1994 contains adequate information for evaluating the impacts of the proposed project and alternative sites being considered. We have no further comments to offer.

If you have any questions or wish to coordinate further on this matter, please call Darrell Yapodich at 586-3838.

HLD:DR:JC:cssy/31311L9
co: VACGS (Ralph Morita)
    DHM, Inc. (Duk Hee Murabayashi)

OCT 27 1994

Honorable Hoaliku Drake
Chairman
Department of Hawaii Home Lands
State of Hawaii
Honolulu, Hawaii

Dear Ms. Drake:

Subject: New Nanakuli Public Library
EIS Public Review Phase

Thank you for reviewing the draft EIS for the subject project. We acknowledge your letter of July 6, 1994 which indicates you have no further comments to offer.

This response letter and your July 6, 1994 letter will be included in the final EIS. If there are any questions, please have your staff contact Mr. Gary Chong of the Public Works Division at 586-0487.

Very truly yours,

ROBERT P. TARUSHI
State Comptroller
Mr. Anderson

We have no other comments to offer at this time. Thank you for the opportunity to comment on this matter.

Please feel free to call Steve Toyama at our Office of Conservation and Environmental Affairs, at 587-0377, should you have any questions.

cc: Ralph Morita, DEC
D.H. Harabayashi, IHI, Inc.

To: Mr. Hyun Anderson, Interim Director
   Office of Environmental Quality Control (EQC)

From: Keith W. Ake, Chairperson
   Board of Land and Natural Resources

Subject: Draft Environmental Impact Statement (EIS): New Hanalei Public Library, Waimea, Kauai
   TMK: 6-7-06; por. 2; 5; 6-7-06: por. 11, 15, and 17; 6-7-13: por. 11, 12; 6-9-03: por. 1 (see previous file no. 94-312)

We have reviewed the EIS information received on June 23, 1994 for the proposed library project, and have the following comments:

Division of Land Management

The Division of Land Management (DLM) comments that they have no objection to the proposed New Hanalei Public Library. However, regarding:

1. TMK: 6-9-03; por. 2 is scheduled to be transferred to the Department of Hawaiian Home Lands (DHHL).

2. TMK: 6-7-07; por. 2 and 5; DLM needs this area for possible homeless housing projects in the Waimea Coast Area.

Historic Preservation Division

The Historic Preservation Division (HPD) comments that the EIS correctly incorporated the findings of an archaeological reconnaissance survey and an historical literature search that there are no known historic sites at any of the proposed library locations. Each of the proposed locations has been cleared and/or developed, so the reconnaissance survey is sufficient to determine that no significant surface sites remain. The potential for significant subsurface remains is extremely low.

Based on this information, HPD believes that construction of a public library at any of the five proposed locations will have "no effect" on historic sites.
Honoroble Keith Aune
Chairperson
Department of Land and
Natural Resources
State of Hawaii
Honolulu, Hawaii

Dear Mr. Aune:

Subject: New Nanakuli Public Library
EIS Public Review Phase

Thank you for your August 11, 1994 comments on the draft
EIS for the subject project. We offer the following response
to your comments:

Division of Land Management

The TMK in Item 1 should read "9-3-02:por. 1" rather
than por. 2.

We discussed the land ownership and land use status
of candidate library sites A, C and D with the land
agent for Oahu and the final EIS will reflect the
information provided in your August 11, 1994 comment
letter.

If you have any questions, please have your staff contact
Mr. Gary Chong of the Public Works Division at 686-0485.

Very truly yours,

ROBERT P. TAKUSHI
State Comptroller
TO: The Honorable John Waihee, Governor
via Office of Environmental Quality Control

FROM: Rex D. Johnson
Director of Transportation

SUBJECT: Draft Environmental Impact Statement
New Nanakuli Public Library, Wai'anae, Oahu
TMI: 8-7-06: por. 2 and 5; 8-7-98: por. 11, 65, and 75;
8-7-33: 11 and 12; 8-9-02: por. 1

From a traffic and safety standpoint, we prefer Site A since access can be provided from Kukana Street. For all sites requiring access from Farrington Highway, the parking area and circulation pattern should be designed to minimize or prevent vehicles from backing up onto the highway.

A traffic study of the selected site to identify the roadway improvements necessary to mitigate traffic impacts must be submitted for our review. Required roadway improvements must be provided at no cost to the State. All plans for work within the State highway right-of-way must be submitted for our review and approval.

We appreciate the opportunity to provide comments.

c: Ms. Duk Hee Murabayashi, DHM, Inc.
Mr. Ralph Morita, DAGS

Honororable Rex Johnson
Director
Department of Transportation
State of Hawaii
Honolulu, Hawaii

Dear Mr. Johnson:

Subject: New Nanakuli Public Library
EIS Public Review Phase

Thank you for your September 15, 1994 comments on the draft EIS for the subject project. We offer the following responses to your comments:

1. If the selected site requires access from Farrington Highway, the parking area and circulation pattern will be designed to minimize or prevent vehicles from backing up onto the highway, as you suggest.

2. Once a final site is selected, the need for a traffic impact analysis will be determined. If such a study is necessary, it will be submitted for State and County review.

3. Since the subject library project will be funded by the State and Farrington Highway is a State roadway, required roadway improvements will involve State expenditures. Any plans for work within the State highway right-of-way will be submitted for your review and approval.

This response letter and your September 15, 1994 letter will be included in the final EIS. If there are any questions, please have your staff contact Mr. Gary Chong of the Public Works Division at 586-6487.

Very truly yours,

Robert P. Takushi
State Comptroller
TO: Mr. Gordon Matsuoka
State Public Works Engineer
Department of Accounting & General Services

FROM: Bruce S. Anderson, Ph.D.
Interim Director

SUBJECT: New Nanakuli Public Library Draft EIS, OAGS Job No. 12-36-5962

July 6, 1994

Thank you for allowing us to review and comment on the subject document.

We do not have any comments to offer on the draft EIS.

BSA/LS/MB/kek

c: Mr. Ralph Morita, Planning Branch

Dr. Bruce Anderson
Interim Director
Office of Environmental Quality Control
Central Pacific Plaza
228 South King Street, 4th Floor
Honolulu, Hawaii 96813

Dear Dr. Anderson:

Subject: New Nanakuli Public Library EIS Public Review Phase

Thank you for reviewing the draft EIS for the subject project. We acknowledge your letter of July 6, 1994 which indicates you do not have any comments to offer on the draft EIS.

This response letter and your July 6, 1994 letter will be included in the final EIS. If there are any questions, please have your staff contact Mr. Gary Chong of the Planning Branch at 586-0486.

Very truly yours,

Gordon Matsuoka
State Public Works Engineer

GC:jk
cc: DHM, Inc.
MEMORANDUM

TO: The Honorable Robert P. Takushi
   Department of Accounting and General Services

FROM: Norma Wong
   Director

SUBJECT: New Nanakuli State Library — EIS

November 15, 1994

In response to your request for comments on the EIS and the Site Selection Study,
the Office of State Planning offers the following comments:

Sites C and D are located on the former Camp Andrews property on Farrington
Highway in Nanakuli. Fifteen of the 30 acres which comprises Camp Andrews were transferred
to the Department of Hawaiian Home Lands on October 28, 1994, as part of the Governor’s plan to
restore the Hawaiian Home Lands Trust to the number of acres intended by Congress in 1921.

In view of the need for public facilities in the Nanakuli community, the remaining 15
acres were reserved for public use. It is anticipated that the DOE will utilize 12 acres for a
replacement campus for Nanakuli Elementary School which is currently on Hawaiian home
lands and must be moved to provide the period of time for which the State must pay fair market
rent for the use of Hawaiian home lands.

The Hawaii State Public Library System has indicated a need for 2.3 acres for a
new community library in Nanakuli. This need has been included in the Department of Land and
Natural Resources’ future plans for the site.

Selection of the 15 acres for public use will be done before the remaining 15 acres
are transferred to DHHL. It is recommended that DOE have first choice because it is more difficult
to site a school. Then the Library System may make a selection.

We have no other comments to offer at this time. If you have any questions please
call Mary Alice Evans of my staff at 587-3840.

cc: Ms. Wendy McAlister, DHM, Inc.
   Mr. Ralph Morita, DGIS
   Mr. Dean Uchida, DLNR
   Mr. Lester Chuck, DOE

Robert P. Takushi

Director

Office of State Planning

State of Hawaii

Honolulu, Hawaii

Dear Ms. Wong:

Subject: New Nanakuli Public Library

EIS Public Review Phase

Thank you for your November 15, 1994 comments on the
draft EIS for the subject project. We appreciate the information you provided regarding the Camp Andrews property which affects Sites C and D. The fact that space for a potential library on the property has been included in DLNR’s planning for the site is commendable. We recognize that, should Site C or D be selected for the proposed Nanakuli Public Library, the Hawaii State Public Library System would be able to select a site following DOE’s selection of a school site on the property.

If you have any questions, please have your staff contact Mr. Gary Chong of the Planning Branch at 586-0487.

Very truly yours,

Robert P. Takushi

State Comptroller
August 8, 1994
RE:0650

Governor John Waihee
C/O Office of Environmental Quality Control
State of Hawaii
220 South King Street, Suite 400
Honolulu, Hawaii 96813

Dear Governor Waihee:

Draft Environmental Impact Statement (DEIS)
Nanakuli New Public Library
Nanakuli, Oahu

The referenced document describes the site selection process for a new public library in Nanakuli. The proposed library would serve the Maili-Nanakuli communities. The size of the proposed library, at 15,000 gross square feet, would meet the projected demand for the population of the Maili-Nanakuli area into the year 2010. The DEIS evaluates 5 candidate sites that have been found most suitable for the proposed project.

Our review was prepared with the assistance of Peter Rappa, Sea Grant; Jean Elshbora, Library Information Studies; and Chris Welch, Environmental Center.

The referenced DEIS was found to be generally adequate in describing the impacts of the proposed project on the candidate sites. Several items, however, need further clarification. They are outlined as follows:

SUMMARY
C. Alternatives Considered
D. Use of New Library Facility in Kapolei

The DEIS notes that a new library is currently planned for the Kapolei area. It further states that this is an unacceptable alternative to the desired construction of a Nanakuli Library due to the distance. However, no library service area maps are cited for

An Equal Opportunity/Affirmative Action Institution

Honorable John Waihee
August 8, 1994
Page 2

reference. What constitutes the Kapolei library service area? What constitutes the Maili-Nanakuli service area? Maps delineating the area extent of the service provided by these library facilities should be included in the DEIS.

D. Unresolved Issues

The DEIS states, in this section, that both sites A and B are under dispute for land ownership and title claims between the Department of Hawaiian Home Lands and the State of Hawaii. In section III A.1. (Land Use and Land Ownership) of the DEIS the site is described as a two private parcels. This inconsistency needs resolution.

I. Project Description
C. Project Need

This section cites the demographics that will require the construction of a library in the Maili-Nanakuli region. The section concludes by stating “[t]he Hawaii State Public Library System proposes a facility in Nanakuli-Maili of the year 2010 population projection of 21,204 persons, which provides the basis of establishing building size and site area.” Our reviewers found this statement ambiguous and wordy. This concluding sentence should be rewritten to convey the intention that the DEIS proposes building a library in the near future to satisfy the requirements of the projected population in 2010.

III. ENVIRONMENTAL CONDITIONS IN THE SERVICE AREA
A. Physical
4. Flood and Tsunami Hazards

This section of the DEIS states that sites B and E are in "special hazard areas inundated by 100-year flood[ing]." Exhibit HI-1 is a map of sites B and E giving representation of the areas within the designated 100 year flood zone. The map contains several designations (AE10, AE11, AE12, AE13, VE13 and VE13) that signify various attributes associated with flooding hazard (it is presumed). However, the designations are not contained in a legend anywhere, and thus it is hard to identify where the 100 year flood zones begin and end. The DEIS should contain a legend to clarify this confusion.

5. Scenic Characteristics

This section of the document describes significant aesthetic views and features that form scenic panoramas for the proposed library. For site A it is indicated that the "parks at Maili are important coastal land forms." Since the word "parks" is not in common usage for the production of EIS's and has a specialized geological character, it should be defined in the context in which it is used.
IV. RELATIONSHIP TO PLANS, POLICIES, AND CONTROLS

This section discusses, inter alia, the relevance of the proposed library to the Hawaii State and Honolulu City and County plans. The referenced document cites policies that the proposed library will "implement through its services and special programs." The policies cited, for the State Plan, focus on physical environment and socio-cultural issues. For example, according to the document the proposed library will complement the following Hawaii State Plan policies:

Physical Environment-Land, Air, and Water Quality

(a)(2) Greater public awareness and appreciation of Hawaii's environmental resources.

(b)(1) Foster educational activities that promote a better understanding of Hawaii's limited environmental resources.

Socio-Cultural Advancement-Leisure

(b)(1) Foster and preserve Hawaii's multi-cultural heritage through supportive cultural, artistic, recreational, and humanities-oriented programs and activities.

(b)(2) Provide a wide range of activities and facilities to fulfill the cultural, artistic, recreational needs of all diverse and special groups effectively and efficiently.

Socio-Cultural Advancement-Culture

(b)(1) Foster increased knowledge and understanding of Hawaii's ethnic and cultural heritages and the history of Hawaii.

(b)(2) Support activities and conditions that promote cultural values, customs, and arts that enrich the lifestyles of Hawaii's people and which are sensitive and responsive to family and community needs.

(b)(3) Encourage increased awareness of the effects of proposed public and private actions on the integrity and quality of cultural and community lifestyle in Hawaii.

Through what projects and programs will these policies be implemented? How will the proposed library "(foster educational activities that promote better understanding of Hawaii's limited environmental resources)"? Each one of these policies is a highly desirable goal. Since the DEIS aims to help implement this large array of policy objectives, it should provide concrete examples of policy implementation. If the proposed library will be a focal point for environmental and cultural education, then those special and unique activities that will serve to educate the public should be made explicit along side the claims to enhance both State and City and County Planning policies. This is especially true with reference to socio-cultural activities, since the Ma'ili-Nanakuli region has a relatively high population of Native Hawaiians.

Thank you for the opportunity to comment on this document.

Sincerely,

[Signature]

John T. Harrison, Ph.D.
Environmental Coordinator

cc: OEOC
DAOIS, Accounting Branch
DHUD
Roger Fujikusa
Peter Rappa
Chris Welch
Dr. John T. Harrison
Environmental Coordinator
University of Hawaii at Manoa
2550 Campus road, Crawfurd 117
Honolulu, Hawaii 96822

Subject: New Nanakuli Public Library
EIS Public Review Phase

Dear Dr. Harrison:

Thank you for your August 8, 1994 comments on the draft EIS for the subject project. We offer the following responses to your comments:

1. **SUMMARY**

   C.2. Use of a New Library Facility in Kapolei - The service area for the proposed Nanakuli Public Library extends from Kane Point to Maili Island Channel and is shown on Exhibit 1 of the EIS. The proposed Kapolei library is intended to serve the islands of Oahu and Maui. The Hawaii State Library currently serves Oahu. Once the Kapolei library is completed, the Hawaii State Library will primarily serve East Oahu. Clarification of the library service areas will be made in the final EIS.

   D. Unresolved Issues - Although both parcels of Site B are privately owned, the draft EIS correctly states that they are under dispute for land ownership and title claims between the Department of Hawaiian Home Lands and the State. The parcels were formerly owned by the State and sold to private individuals. However, the Department of Hawaiian Home Lands disputes the legality of the State's ownership of the lands and desires to be compensated for the property.

2. **PROJECT DESCRIPTION**

   C. Project Need - Thank you for bringing this sentence to our attention. It will be rewritten for clarity as you suggest.

Dr. John T. Harrison
Page 2

3. **ENVIRONMENTAL CONDITIONS**

   A.4. Flood and Tsunami Hazards - Your point is well taken. The text and Exhibit III-1 of the final EIS will be revised to clarify the location of the 100-year flood zone and the meaning of the flood hazard designations.

   A.5. Scenic Characteristics - The word pua will be defined in the final EIS.

4. **RELATIONSHIP TO PLANS, POLICIES AND DIRECTIVES**

   It is premature during the site selection and planning stages of the proposed library to identify specific library programs which will implement the various plans and policies discussed in Chapter IV of the draft EIS. Such programs will be developed in the final EIS.

   Statewide Program Plans for 1994-1995 give an indication of the variety of library programs offered at the statewide level which support environmental and socioeconomic policies of the State and local governments. The programs include Fall Music Festival, Security Week, Deaf Awareness Program, Literature in Performance, Children's Book Week, National Library Week, Summer Reading Program. The programs are multifaceted, featuring local and national storytelling, music, dance, literature, oral readings, posters and materials. Many programs are presented in cooperation with other organizations such as the Musicians Association of Hawaii, local community colleges, Statewide Cultural Extension Program, and the Children's Book Council.

   Individual libraries in the State library system offer programs such as preschool and toddler story times, parent workshops on reading in the home and reading aloud, teacher workshops on books and reading aloud in the classroom, professional enrichment workshops, storytelling and book talks for school classes and the community, craft workshops and other informational and recreational programs for the community and many more.
Each branch library has its own Hawaiian collection of books and resources, as will Nanakuli Public Library. The Hawaii State Public Library System recognizes the area's large Hawaiian population and intends to emphasize Hawaiian in the library's resource and program development as well as architectural and landscape design. As described in the draft EIS, unique to Nanakuli library will be a Hawaiian cultural feature which may involve the display of Hawaiian artifacts.

If you have any questions, please have your staff contact Mr. Gary Chong of the Planning Branch at 586-0486.

Very truly yours,

GORDON HATSUBAKA
State Public Works Engineer

GC:jk
cc: ESM, Inc.
August 3, 1994

The Honorable John Waihee, Governor
State of Hawaii
c/o Office of Environmental Quality Control
220 South King Street, 4th Floor
Honolulu, Hawaii 96813

Dear Governor Waihee:

Subject: Draft Environmental Impact Statement (DEIS) for the New Nanakuli Public Library, Nanakuli, Oahu, TMQ: Various

Thank you for the opportunity to review and comment on the DEIS for the proposed Nanakuli Public Library.

We have the following comments to offer:

1. Our previous concerns on Sites A through D (formerly Sites 1 through 5), as stated in our letter of March 10, 1994 on the EISP for the project, have been adequately addressed.

2. Site E (TMQ: 8-7-08: parcel 11, 65 and 75), which is an addition in this DEIS submittal, has three (3) existing water services. There is a 1-inch meter serving parcel 11, a 5/8-inch meter serving parcel 65, and another 5/8-inch meter serving parcel 75.

If you have any questions, please contact Barry Urakawa at 527-5235.

Very truly yours,

Kazu Hayashida
Manager and Chief Engineer

cc: Mr. Robert P. Takashii, State Comptroller, DAMS
Attention: Mr. Ralph Morita
Mr. Duk Hee Murayashii, President, DHM Planners, Inc.
June 29, 1994

The Honorable John Waihee
Governor of the State of Hawaii
c/o Office of Environmental Quality Control
210 South King Street, 4th Floor
Honolulu, Hawaii 96813

Dear Governor Waihee:

Subject: New Nanakuli Public Library
       Draft Environmental Impact Statement and Site Selection

The Department of Housing and Community Development has no comments to offer on
the Draft Environmental Impact Statement and Site Selection for the New Nanakuli
Public Library.

Should you have any questions, please contact Charlotte Yoshida of our Planning
and Analysis Division at 527-3090.

Thank you for the opportunity to comment.

Sincerely,

RONALD S. LIM
Acting Director

cc: Mr. Ralph Morita, DAS
    Ms. Duk Hee Murabayashi

Mr. Ronald S. Lim
Acting Director
Department of Housing and
Community Development
City and County of Honolulu
650 South King Street, 5th Floor
Honolulu, Hawaii 96813

Dear Mr. Lim:

Subject: New Nanakuli Public Library
       EIS Public Review Phase

Thank you for reviewing the draft EIS for the subject
project. We acknowledge your June 29, 1994 letter which
indicates you have no comments to offer on the draft EIS.

This response letter and your June 29, 1994 letter will
be included in the Final EIS. If there are any questions,
please have your staff contact Mr. Gary Chong of the Planning
Branch at 586-3487.

Very truly yours,

GORDON MATSUKA
State Public Works Engineer

cc: DHH, Inc.
The Honorable John Waihee
Governor
c/o Office of Environmental Quality Control
220 South King Street, 4th Floor
Honolulu, Hawaii 96813

Dear Governor Waihee:

We have reviewed the draft environmental impact statement (EIS) and site selection study for the new Manakuli Public Library and have the following comments:

1. Development of the new library at any of the alternate sites will not have any impact on existing recreation facilities in the study area.

2. For the record, the Department of Parks and Recreation did have an interest in developing a community park at the former Camp Andrews site. However, because of the unresolved land ownership issue between the State of Hawaii and the State Department of Hawaiian Home Lands, this project has not been pursued.

Thank you for the opportunity to review the draft EIS.

Sincerely,

WALTER M. OZAWA, Director

抄: Mr. Ralph Morita, Department of Accounting & General Services
Ms. Duk Hee Murabayashi, DDM, Inc.

cc: jk
cc: DDM, Inc.

We Add Quality to Life.
July 20, 1994

The Honorable John D. Waihee
Governor
State of Hawaii
e/o Office of Environmental
Quality Control
220 South King Street, 4th Floor
Honolulu, Hawaii 96813

Dear Governor Waihee:

Subject: New Nanakuli Public Library
Draft Environmental Impact Statement (DEIS)
TMK: 8-7-6; Par. 2 and 5; 8-7-3; 11 and 12;
8-9-2; Par. 11A-7-8A; Par. 11, 45, and 75

This is in response to the DEIS submitted to us for review by the
Office of Environmental Quality Control.

Based on our review, we have no objections or specific comments
to offer at this time. However, we may have concerns upon review
of the traffic impact analysis, which we understand will be
prepared once a preferred site is selected.

Should you have any questions, please contact Lance Watanabe of
my staff at 523-4199.

Sincerely,

JOSEPH M. MAGALDI, JR.
Director

cc: Department of Accounting and General Services
DHM, Inc.
July 10, 1994

The Honorable John Waihee
Governor, State of Hawaii
c/o Office of Environmental Quality Control
250 South King Street, 4th Floor
Honolulu, Hawaii 96813

Dear Governor Waihee:

Subject: New Nanakuli Public Library—Draft Environmental Impact Statement and Site Selection Study

We have reviewed the draft environmental impact statement and site selection in regard to the existing municipal wastewater facilities. This document accurately describes our existing wastewater system serving the Nanakuli area and the current availability and adequacy of sewer lines located in the vicinity of the various proposed library sites. We do not have any comments to offer at this time.

Thank you for the opportunity to review the draft environmental impact statement and site selection study. Should you have any questions, please contact me at 527-6664.

Very truly yours,

FELIX B. LISTIACO
Acting Director

CG/DAGS
DOM, INC.

Mr. Felix B. Listiacu
Acting Director
Department of Wastewater Management
City and County of Honolulu
656 South King Street
Honolulu, Hawaii 96813

Dear Mr. Listiacu:

Subject: New Nanakuli Public Library
EIS Public Review Phase

Thank you for reviewing the draft EIS for the subject project. We acknowledge your letter of July 10, 1994 which indicates you do not have any comments to offer at this time.

This response letter and your July 10, 1994 letter will be included in the final EIS. If there are any questions, please have your staff contact Mr. Gary Chong of the Planning Branch at 586-0487.

Very truly yours,

GORDON MATUSUDA
State Public Works Engineer

CC: jk
cc: DOM, INC.
June 24, 1994

Mr. Richard Seto-Mook
Fire Chief
City and County of Honolulu
3375 Kamehameha Avenue, Suite 9425
Honolulu, Hawaii 96819-1869

Dear Mr. Seto-Mook:

Subject: New Nanakuli Public Library
EIS Public Review Phase

Thank you for reviewing the draft EIS for the subject project. We acknowledge your letter of June 24, 1994 which indicates you foresee no adverse impact in Fire Department facilities or services.

This response letter and your June 24, 1994 letter will be included in the final EIS. If there are any questions, please have your staff contact Mr. Gary Chong of the Planning Branch at 566-0487.

Very truly yours,

Gordon Matsuda
State Public Works Engineer

cc: jk
cc: EHM, Inc.

AKLny
DEIS Report attached

cc: Dept. of Accounting & General Services (Ralph Morita)
DHM, Inc. (Ms. Duk Hee Murabayashi)
July 25, 1994

The Honorable John D. Waihe'e, III
Governor, State of Hawaii
July 25, 1994

The Honorable John D. Waihe'e, III
Governor, State of Hawaii

Dear Governor Waihe'e:

Draft Environmental Impact Statement (DEIS) and Site Selection for the New Nanakuli Public Library

Thank you for the opportunity to review the subject DEIS. We have the following comments:

1. The proposed project requires an amendment to the Waimanalo Development Plan Public Facilities (DPFF) Map.

2. The EIS should state the minimum service population and service area for a new library.

3. We would encourage the inclusion of a meeting room in the library space program.

4. The Waimanalo DPFF Map shows a symbol for the Nanakuli Community Park proposed by the Department of Parks and Recreation (DP&R) for sites C and D. The EIS should discuss the plans of the DP&R for the Nanakuli Community Park.

5. Traffic impacts should be more fully addressed in the Final EIS. Vehicle access and the safety of patrons of the library executing left turns on Farrington Highway are potential problems that should be discussed in the EIS.

6. Alternative Size E may not be available in the future. Another potential site may be the makai portion of land identified as UDK 8-7-0-79. This property has easy access to Farrington Highway from Lualualei Haul Road and is one parcel rather than multiple parcels.

Although it has no frontage along Farrington Highway, the signalized intersection at Lualualei Haul Road may facilitate easier and safer access.

7. We recommend that the proposed library be located near other commercial or public facilities to provide a center for community activity.

Should you have any questions, please contact Randy Hara at 523-4487.

Sincerely,

Robin Foster
Chief Planning Officer

cc: Vrc. Ralph Morita, DACS
Ms. Duk Hee Murabayashi, DMM Planners, Inc.
Mr. Robin Foster  
Chief Planning Officer  
Planning Department  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

Dear Mr. Foster:

Subject: New Nanakuli Public Library  
RIS Public Review Phase

Thank you for your July 25, 1994 comments on the draft EIS for the subject project. We offer the following responses to your comments:

1. Chapter IV of the final EIS will be revised to clarify that an amendment to the Waianae Development Plan Public Facilities Map is required for the subject library project.

2. According to the Master Plan for Public Libraries, Volume II: Hawaii State Public Library System Master Plan Technical Appendix, 1991-2000, the minimum size library should be approximately 5,000 gross square feet (not including library program room) to justify the expense of its core requirements. Using the master plan's proposed guideline of 0.6 gross square feet per capita, the minimum service population that warrants a 5,000 gross square feet separate branch library is 8,350 people.

A library's service area must be large enough to include the minimum service population, as well as meet the master plan's proposed that facilities be within a reasonable mid-day driving time from most people and from the nearest other public library facility. Branch libraries outside the urban Honolulu area should be within 20 minutes from each other.

This information regarding the minimum service population and service area for a new library will be incorporated into the final EIS.

3. It is a policy of the Hawaii State Public Library System (HSPLS) not to include public meeting rooms in the space programs for new libraries for a number of reasons. Historically, the use of meeting rooms at public libraries often has not been related to use of the library itself. Scheduling and coordinating the use of meeting rooms is a time-consuming process with inherent logistical problems. Because the use of meeting rooms does not always coincide with library hours, library staff is not available for key distribution and security. If meetings do occur during library hours, parking shortages occur. The need for community meeting spaces is recognized. However, the HSPLS does not consider them a compatible use with the operations of busy public library facilities under present operating hours and personnel constraints.

4. According to the City and County Department of Parks and Recreation, there are no plans for a Nanakuli Community Park. The Department of Parks and Recreation indicated that at one time they had expressed an interest in the site but have no particular plans at this time.

5. Chapter V of the draft EIS, "Evaluation of Candidate Sites," discusses traffic related to the candidate library sites in terms of adequacy of roadways serving each site, vehicular accessibility and safety, and pedestrian accessibility and safety. Per your recommendation, the final EIS will more fully discuss access and safety issues related to Farrington Highway. A traffic impact analysis will be prepared once the final site is selected if such an analysis is determined to be necessary.

6. Per your recommendation, HSPLS has considered TMK 6-7-8-77 as a potential library site. HSPLS has decided to uphold the set of minimum criteria for the proposed library which includes "Central and Visible Location." (Refer to Chapter II, Section B. 2.1.) Since 6-7-8-77 is not located on or visible from the main thoroughfare in the area, Farrington Highway, it did not meet the minimum criteria.

7. The HSPLS concurs with your statement recommending that the proposed library be located near other commercial or public facilities to provide a center for community activity. Such a location also
increases a library's visibility and encourages use of
the facility by making access to it convenient from
other frequently used establishments. For these
reasons, the Site Evaluation Criteria used to rate
each candidate library site for the Manahuli Public
Library include "Surrounding Land Use" and "Proximity
to Commercial Center" as described in Chapter II of
the draft RIS.

If you have any questions, please have your staff contact
Mr. Gary Chong of the Planning Branch at 586-0486.

Very truly yours,

[Signature]

GORDON MATSUOKA
State Public Works Engineer

GC: jk
cc: DMR, Inc.
MEMORANDUM

TO: Governor John Waihele  
State of Hawaii  
C/O Office of Environmental Quality Control  
220 South King Street, 4th Floor  
Honolulu, Hawaii 96813  

FROM: Shirley Robinson, Director of Environmental Health and Advocacy  

RE: REVIEW COMMENTS TO THE DRAFT EIS FOR THE PROPOSED NEW HANAKI PUBLIC LIBRARY

1. CHAPTER III, ENVIRONMENTAL CONDITIONS IN THE SERVICE AREA.  
   Need discussion on existing air quality in region.

2. CHAPTER VI, POTENTIAL IMPACTS AND MITIGATION MEASURES.

   VI.A.2. Without the above, you would not be able to state short term emissions are not significant and no long range impact expected.

   Moreover, VI.B.6 stated new facility will generate additional traffic. Need to address impact to ambient air quality from increased traffic.
Ms. Shirley Robinson  
Director of Environmental Health and Advocacy  
American Lung Association of Hawaii  
245 North Kuakini Street  
Honolulu, Hawaii  96817-3951  

Dear Ms. Robinson:

Subject: New Nanakuli Public Library  
EIS Public Review Phase

Thank you for your July 21, 1994 comments on the draft EIS for the subject project. We offer the following responses to your comments:

1. A section entitled "Air Quality" will be added to Chapter III of the final EIS to address ambient air quality in the region. The air quality in Nanakuli is generally considered good because of the low development in the area and the absence of on-site air pollution sources. Ambient air quality is sometimes affected by the nearby agricultural animal industries located in Lualualei Valley and occasional dust from these activities can be detected downwind. The Nanakuli Landfill on Lualualei Naval Road is also a source of dust and exhaust emissions.

2. Chapter VI, Potential Impacts and Mitigation Measures, will be revised and Mitigation Measures will be added to reflect the findings on existing air quality and to address impacts from project-related traffic.

If you have any questions, please have your staff contact Mr. Gary Chang of the Planning Branch at 586-8486.

Very truly yours,

GORDON MITSUDA  
Public Works Engineer

GC:jk  
cc: DHM, Inc.
DECEMBER 20, 1994

Honorable Peter Sybinsky
Director
Department of Health
State of Hawaii
Honolulu, Hawaii

Dear Dr. Sybinsky:

Subject: New Nanakuli Public Library
EIS Public Review Phase

Thank you for reviewing the draft EIS for the subject project. We acknowledge your letter of July 22, 1994 which indicates you do not have any comments to offer at this time.

This response letter and your July 22, 1994 letter will be included in the final EIS. If there are any questions, please have your staff contact Mr. Gary Chong of the Public Works Division at 586-0486.

Very truly yours,

[Signature]

ROBERT P. TAKUSHI
State Comptroller
Mr. Kenneth E. Sprague  
Director and Chief Engineer  
Department of Public Works  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813  

Dear Mr. Sprague:  

Subject: New Nanakuli Public Library  
EIS Public Review Phase  

Thank you for reviewing the draft EIS for the subject project. We acknowledge your letter of July 5, 1994 which indicates you do not have any comments to offer at this time.  

This response letter and your July 5, 1994 letter will be included in the final EIS. If there are any questions, please have your staff contact Mr. Gary Chong of the Planning Branch at 586-0486.  

Very truly yours,  

GORDON MATSUOKA  
State Public Works Engineer  

GC:jk  
cc: DHM, Inc.
Mr. William A. Bonnet  
Manager  
Environmental Department  
Hawaiian Electric Company  
820 Ward Avenue  
Honolulu, Hawaii 96814

Dear Mr. Bonnet:

Subject: New Nanakuli Public Library  
EIS Public Review Phase

Thank you for reviewing the draft EIS for the subject project. We acknowledge your letter of July 25, 1994 which indicates you do not have any comments to offer at this time. Once construction plans are finalized for the selected site, we recognize that you will review the plans pertaining to the protection of existing power lines bordering and serving the selected site.

This response letter and your July 25, 1994 letter will be included in the final EIS. If there are any questions, please have your staff contact Mr. Gary Chong of the Planning Branch at 586-0486.

Very truly yours,

GORDON MATSUOKA  
State Public Works Engineer

GC:jk  
cc: Dhm, Inc.
Mr. Donald A. Clegg  
Director  
Department of Land Utilization  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813  

Dear Mr. Clegg:  

Subject: New Nanakuli Public Library  
EIS Public Review Phase  

Thank you for your August 22, 1994 comments on the draft EIS for the subject project. We offer the following responses to your comments:  

1. The landowner of Tax Map Keys 8-7-8:11, 65 and 75, Nanakuli Investment Company, Ltd., commented during the EIS Consultation Phase that the parcels were on the market for sale and that offers were being considered for development. A copy of this comment letter is included in Appendix C of the draft EIS and final EIS.  

2. Exhibit III-1 of the draft EIS and final EIS shows the flood zone boundaries on Sites B and E. We acknowledge that if Site B or E is selected for the public library, the requirements of Section 7.10-10 of the LUO must be complied with.  

3. In a comment letter during the EIS Consultation Phase, the Board of Water Supply indicated that the availability of water will be determined when the Building Permit Application is submitted for review and approval. A copy of the Board of Water Supply's comment letter is in Appendix C of the draft EIS and final EIS.  

4. The Department of Wastewater Management commented during the EIS Consultation Phase that "an 'Application for Sewer Connection' must be filed and approved
by our department in order to reserve sewer capacity for the proposed project." Their letter is in Appendix C of the draft EIS and final EIS.

A private collection service will provide regularly scheduled collection of refuge from the new library.

5. Without a selected site for the new library, it is premature to include a site plan and elevation drawings in the final EIS.

6. An SMP application will be submitted for the proposed project at any of the candidate sites.

The final EIS and site selection study does not attempt to identify a preferred site or to rank the sites in any order. The EIS and site selection study contains as much information as possible about the proposed project and each of the sites and surrounding environment to enable the Hawaii State Public Library System to select the most appropriate site.

Your letter of August 22, 1994 and this response letter will be included in the final EIS. If you have any questions, please have your staff contact Mr. Gary Chong of the Planning Branch at 586-0486.

Very truly yours,

GORDON MATSUOKA
State Public Works Engineer

GC: jk
cc: DHM, Inc.