



COPY

EXECUTIVE CHAMBERS
HONOLULU

BENJAMIN J. CAYETANO
GOVERNOR

September 6, 1995

TO: Samuel Callejo, Director
Department of Accounting and General Services

SUBJECT: Final Environmental Impact Statement for Nanakuli III Elementary School,
Nanakuli, Oahu

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OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

With this memorandum, I accept the Final Environmental Impact Statement for Nanakuli III Elementary School Site Selection, Waianae, the Island of Oahu, as satisfactory fulfillment of the requirements of Chapter 343, Hawaii Revised Statutes. The economic, social and environmental impacts which will likely occur should this project be built are adequately described in the statement. The analysis, together with the comments made by reviewers, provides useful information to policy makers and the public.

My acceptance of the statement is an affirmation of the adequacy of that statement under the applicable laws but does not constitute an endorsement of the proposed action.

I find that the mitigation measures proposed in the environmental impact statement will minimize the negative impacts of the project. Therefore, if this project is implemented, the Department of Accounting and General Services and/or its agents should perform these or alternatives and at least equally effective mitigation measures at the discretion of the permitting agencies. The mitigation measures identified in the environmental impact statement are listed in the attached document.

BENJAMIN J. CAYETANO

Enclosure

c: Gary Gill ✓

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Nanakuli III Elementary School



NANAKULI III ELEMENTARY SCHOOL
FINAL
ENVIRONMENTAL IMPACT STATEMENT
AND
SITE SELECTION STUDY

Prepared for:

Department of Accounting and General Services
State of Hawaii

Prepared by:

DHM inc.
1975 Ualakaa Street
Honolulu, Hawaii 96822

FEBRUARY 1995

**FINAL
ENVIRONMENTAL IMPACT STATEMENT
and
SITE SELECTION STUDY
for the
NANAKULI III ELEMENTARY SCHOOL**

LOCATION: Nanakuli, Oahu, Hawaii

PROPOSING AGENCY: Department of Accounting and General
Services, State of Hawaii
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DAGS JOB NO. 12-16-6380

ACCEPTING AUTHORITY: Governor
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Eugene S. Imai, Comptroller Date

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SUMMARY

SUMMARY

A. Description of Action

To relieve current and anticipated overcrowding within the Nanakuli School Complex,* the Department of Education (DOE) is proposing to establish a new Nanakuli III Elementary School to serve grades K-6 within a portion of the area currently served by Nanaikapono Elementary. The DOE has determined that a site with at least 12 acres of usable area is required for the new school. The target opening date for the new school is September 1998, and enrollment projected for the school opening is 500. The second and third construction increments in 1999 and 2000 would accommodate 650 and 775 students, respectively. The school's planned design enrollment is 775 students.

This study represents the State's initial planning effort for the school by identifying and evaluating potential school 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 10 "possible sites," six "candidate sites" were selected for detailed evaluation and for environmental assessment. Candidate Site 1 was eliminated from further consideration due to residential development plans on the site by the Department of Hawaiian Home Lands (DHHL). The five remaining candidate sites evaluated and assessed in this document are:

Site 2: Two privately owned parcels at the end of Kaukai Road, off Hakimo Road, totaling 12 acres. The site is adjacent to and mauka of the DHHL Princess Kahanu Estates residential development.

Site 3: Three privately owned parcels along Hakimo Road, between Ulehawa Road and Kapiki Road. Site 3 is 15 acres in size.

Site 4: Three privately owned parcels along Hakimo Road and Paakea Road. Site 4 is 14.74 acres in size.

* The Nanakuli School Complex consists of Nanakuli Elementary School, Nanaikapono Elementary School, and Nanakuli High and Intermediate School.

Site 5: A 12-acre portion of two privately owned parcels along Lualualei Naval Road, southeast of Nanakuli Landfill.

Site 6: A 12-acre portion of one large privately owned parcel along Lualualei Naval Road, directly across from Nanakuli Landfill.

B. Significant Impacts and Mitigation Measures

The significant beneficial impacts of the proposed project will include the establishment of a new elementary school in Nanakuli which will relieve the current overcrowding on the Nanaikapono Elementary School campus, and will accommodate projected enrollment growth in the Nanakuli School Complex. 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 school facility.

There will be some short-term adverse impacts, such as dust and noise, 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. Four sites would involve the displacement of residents and farms. Although the disruption cannot be mitigated, any displaced family or farm would receive financial relocation assistance and moving expense reimbursement in accordance with State law. A school development on two of the candidate sites would preclude the respective private landowners' current development plans for residential and industrial uses. Three sites are within an agricultural area where land use conflicts between an urban-type use (the school) and the surrounding agricultural uses may occur. Mitigation measures must be incorporated into the school design to minimize the potential for nuisance complaints impacting both the normal operations of the school facility and the nearby agricultural or industrial operations.

C. Alternatives Considered

To relieve present overcrowding and accommodate projected growth in enrollment in the Nanakuli School Complex, five alternatives were evaluated by the Department of Education. The alternatives are listed below and described in greater length in Chapter I.

1. No Action - Continue Existing Situation
2. Change Existing Service Area Boundaries
3. Increase the Capacity of Nanakuli Elementary
4. Year-Round Education at Nanakuli Elementary
5. Construct a New Elementary School

All five alternatives are based on the premise of continued use of Nanaikapono Elementary School. If the DOE decides to vacate that campus, the situation worsens, and additional alternatives would be considered.

In summary, the projected enrollment growth for the Nanakuli School Complex cannot be accommodated at the existing elementary schools. A change in service areas would not resolve the problem since Maili and Nanakuli schools are overcrowded. Increasing the capacity at Nanakuli Elementary School would not significantly reduce enrollments at Nanaikapono. The year-round multi-track alternative at Nanakuli Elementary is feasible for the short term, but only by building to a capacity of 775 and overcoming other significant conditions. Therefore, the most appropriate alternative for meeting the service area long-range needs, and allowing for maximum flexibility regarding the decision pertaining to continued use of Nanaikapono, is the establishment of a new Nanakuli III Elementary School.

D. Unresolved Issues

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

There are two unresolved issues related to Candidate Site 2. It is uncertain at this time whether an easement would be obtainable across private lease lots within DHHL's Princess Kahanu Estates subdivision or along the

City's drainage channel to allow pedestrian access from the subdivision to Candidate Site 2. Second, it is unresolved whether Site 2 could connect to an existing sewer line in Laiku Street (within the DHHL subdivision) or in Farrington Highway, or whether an on-site septic system would be required. The establishment of a sewer easement across DHHL land to Site 2 or within the City's drainage channel right-of-way to Farrington Highway is the determining factor.

The land ownership and title claim dispute between the State of Hawaii and the State Department of Hawaiian Home Lands, which involves parcel 77 of Site 5, is an unresolved issue. However, a settlement agreement has been reached, and is currently before the 1995 State Legislature for action. If the agreement is approved as is, or is amended to satisfy all parties involved, the affected lands will be clear of restrictions. If the agreement is rejected, DHHL will pursue settlement in court. Failure to settle this issue soon could adversely impact the project's development schedule.

Specific future land uses on the PVT property mauka of Site 6 are uncertain. The Nanakuli Landfill master plan indicates landfill and recycling center expansion, but the types of materials that may be accepted at the landfill may include hazardous wastes. Presently, the existing landfill is the only state and county approved privately owned and operated solid waste disposal and processing facility on Oahu. It is also the only facility on Oahu accepting asbestos containing materials and one of three sites on Oahu approved by the State of Hawaii to bioremediate petroleum contaminated soil.

Access to Candidate Sites 5 and 6 via Lualualei Naval Road is an unresolved issue due to the federal ownership of the road. Although the Navy is willing to convey ownership to the State or City and County, no agreement was reached during previous discussions with the City and County. It is also unresolved who would be responsible for road improvements (to meet applicable standards) mauka of the school, if Site 5 or 6 was selected. The State (DOE) would only incur roadway improvement costs from Farrington Highway to the selected school site.

E. Compatibility with Land Use Plans and Policies and List of Permits and Approvals

Development of a new public elementary school 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. One of the five candidate sites is within the State Urban District; the remaining four are within the State Agricultural District and a Special Use Permit or District Boundary Amendment would be required for the proposed school use. One candidate sites is currently designated Residential on the Waianae Development Plan Land Use Map, and the other four sites are designated Agriculture. All sites would require a designation change to Public Facility.

Permits and approvals will also depend, to some degree, on the site selected. A list of necessary approvals is included as Chapter XI. Depending on the site and final plans, permits and approvals may be required from:

- Corps of Engineers, Department of the Army
- Department of the Navy
- State of Hawaii, Department of Land and Natural Resources
- State of Hawaii, Department of Hawaiian Home Lands
- 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
- City and County of Honolulu, Planning Department

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CHAPTER I
Purpose and Need for Action

I. PURPOSE AND NEED FOR ACTION

A. EXISTING CONDITIONS

The residents of Nanakuli are serviced by two elementary schools (K-6), Nanakuli Elementary and Nanaikapono Elementary, as well as Nanakuli High and Intermediate School (7-12). These three schools make up the Nanakuli School Complex, and the school service areas are shown on Exhibit I-1. Both elementary schools are operating near capacity and will not be able to accommodate the anticipated enrollment increase with present facilities.

Nanaikapono Elementary School, which opened in the late 1930s, was the first school in the area. Today, Nanaikapono has 62 classrooms (42 permanent, 20 portable) of which three are used for other purposes, including a computer lab and the Kamehameha Early Education Program. With the large number of portables, it has a capacity of 1,152 students, although the design enrollment is 900. Nanaikapono's peak enrollment is 1,200.¹

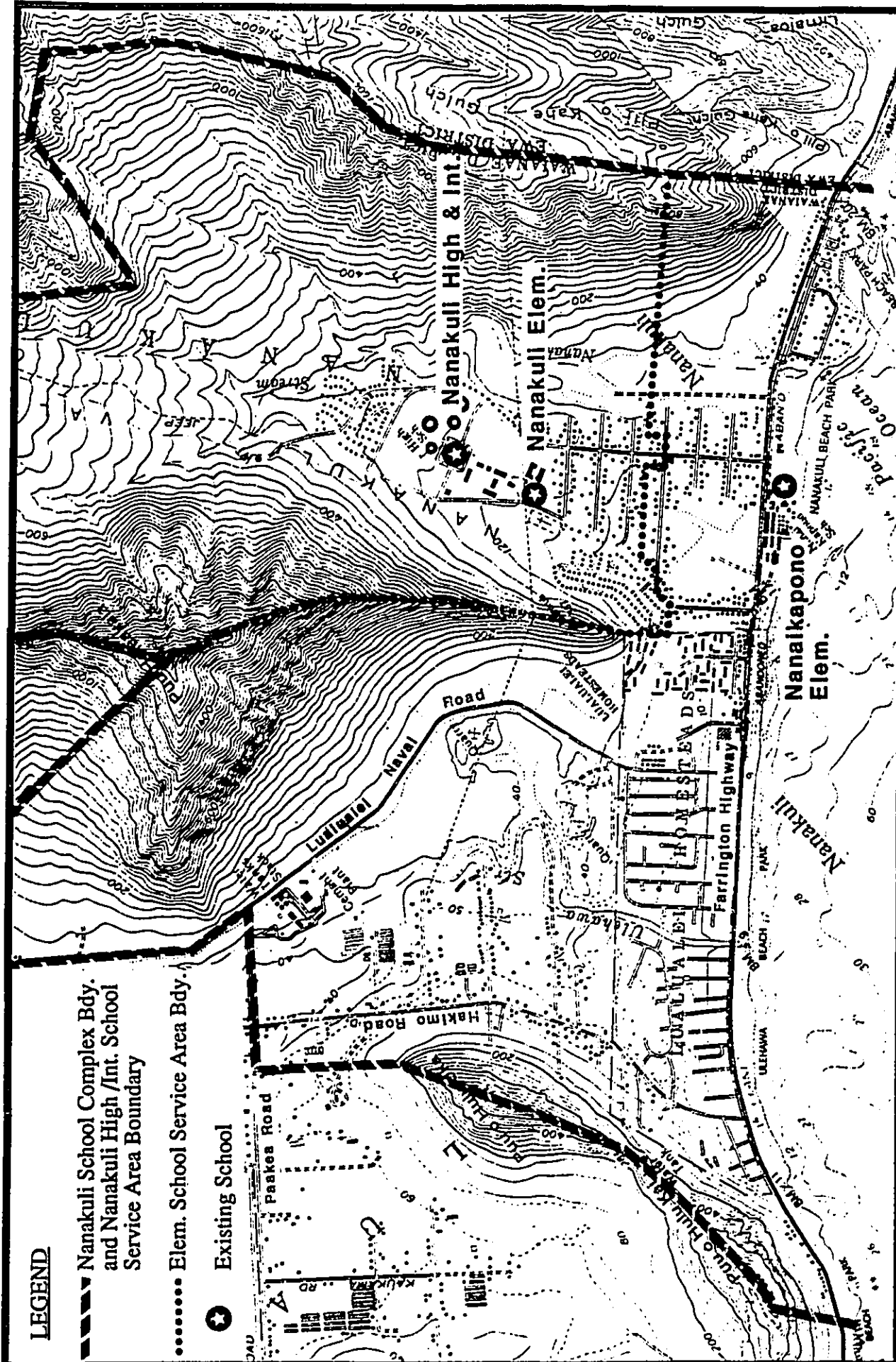
Nanaikapono has an enrollment of 1,044 in 1993 and is considered too large for an elementary school. The DOE has found that students in smaller schools perform better on uniform tests. This is attributed in part to the smaller schools having a more cohesive staff, along with more individual attention given to the students by teachers. Nanaikapono School is also located in a tsunami inundation area and the overcrowded conditions at the school increase the potential for danger and the possible loss of life in the event of an emergency.

Negotiations have been completed between the State of Hawaii and the Department of Hawaiian Home Lands (DHHL) regarding land title claims and proposed rental agreements for continued use of Nanaikapono Elementary. The annual lease rent for use of the existing school site from

¹Capacity is the number of students which can be accommodated on an individual campus with existing permanent and temporary facilities.

Design enrollment is the stabilized number of students to be served by a school, based on existing enrollments, population projections, anticipated future developments, the existing or proposed service area, and grade organization. Design enrollment is normally less than the peak enrollment.

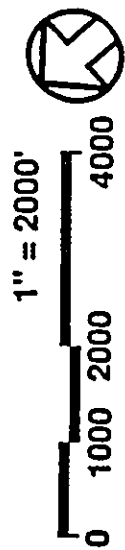
Peak enrollment is a temporary situation when enrollment exceeds the design enrollment.



LEGEND

- Nanakuli School Complex Bdy. and Nanakuli High /Int. School Service Area Boundary
- Elem. School Service Area Bdy.
- Existing School

Exhibit I-1
 Nanakuli School Complex
 Current Service Areas



1992 through 1996 is \$479,204 per year and is scheduled to increase to \$599,005 per year in 1997, and would be renegotiated again five years later. This situation has motivated the Department of Education (DOE) to study whether or not to vacate the Nanaikapono campus. A decision in that regard is a separate issue from this site selection study for a new school.

Nanakuli Elementary School opened in 1977. It has a capacity of 507, a design enrollment of 775, and a peak enrollment of 853. Nanakuli Elementary has 28 classrooms (24 permanent and 4 portable) of which two are used for library purposes and one for administration.

Nanakuli Elementary is operating near capacity with a 1993 enrollment of 460. The school cannot absorb a significant number of additional students to adequately relieve Nanaikapono Elementary because of limited classroom facilities and a lack of land on which to construct additional classrooms.

B. FUTURE PROJECTIONS

Enrollment growth in the Nanakuli School Complex is projected to continually increase through the year 2010 due to increased population growth and continued residential development in the area. Planned residential developments, primarily by DHHL, will significantly impact the schools in the area.

DHHL has three residential developments currently under construction, with a total of 232 units. On the Keystone (former quarry) site, DHHL proposes 272 single family lots, expected to be completed in 1996. Long-range DHHL development is planned in upper Nanakuli Valley for 800 to 1,000 residential units, although at this time funds are not available and drainage problems must be addressed. An additional 200 elementary school students are projected from the initial 500 units. The long-term development plans could result in an additional 400 elementary school students.

Exhibit I-2 compares actual enrollment, enrollment projections, and capacities for the two Nanakuli elementary schools. The 1998 enrollment projection for Nanakuli Elementary School is considerably higher than its

EXHIBIT I-2

1998 & 2010 ENROLLMENT PROJECTIONS COMPARED WITH
THE ACTUAL ENROLLMENTS AND SCHOOL CAPACITIES

SCHOOL	ACTUAL ENROLLMENT		ENROLLMENT PROJECTIONS	CAPACITY	DESIGN ENROLLMENT	PEAK ENROLLMENT
	1991	1992				
	1991	1992	1998	2010		
NANAKULI	458	484	460	622	507	775
NANAIAKAPONO	1,168	1,117	1,044	1,155	1,152	900
Totals	1,504	1,777	2,450	1,659	1,675	

capacity. Although Nanaikapono has the capacity to meet the projected 1998 enrollment, that enrollment figure is 250 students higher than the school's design enrollment.

Increased problems of overcrowding and insufficient facilities at the two existing elementary schools serving Nanakuli are expected.

Based on existing enrollments, population projections, anticipated future developments, and other factors, the DOE has determined that the facilities of the current elementary schools within the Nanakuli School Complex are inadequate.

C. ALTERNATIVES CONSIDERED

To relieve present overcrowding and accommodate projected growth in enrollment in the Nanakuli School Complex, five alternatives were evaluated by the Department of Education. The alternatives are described below, and Exhibit I-3 summarizes how each alternative addresses enrollment projections in the area.

All five alternatives are based on the premise of continued use of Nanaikapono Elementary School. If the DOE decides to vacate that campus, the situation worsens, and additional alternatives would be considered.

1. No Action - Continue Existing Situation

The no-action alternative would involve no changes to the existing school service areas for the foreseeable future. However, it is anticipated that the existing Nanakuli and Nanaikapono schools will continue to increase in enrollment if the existing service areas and campuses and grade structures are maintained. Enrollment is projected to increase from a total of 1,504 students in 1993 to 1,777 in 1998. By continuing the existing conditions and taking no-action, crowded conditions would increase to unacceptably high levels of dysfunction. This action would not be consistent with policies for public education.

EXHIBIT I-3

PROJECTED SCHOOL CAPACITIES COMPARED TO
PROJECTED SCHOOL ENROLLMENTS

SCHOOL	ALTERNATIVES				NEW SCHOOL 1998	NEW SCHOOL 2010
	NO ACTION 1998	CHANGE SERVICE AREA 1998	EXPAND NANAKULI 1998	YR.-ROUND NANAKULI 1998		
NANAKULI	507	507	775*	1,030	507	775*
NANAIKAPONO	1,152	1,152	1,002	747	770	900*
NANAKULI III	-----	-----	-----	-----	500	775*
<hr/>						
Total Students	1,659	1,659	1,777	1,777	1,777	2,450
Projected Enrollment	1,777	1,777	1,777	1,777	1,777	2,450
Alternative Meets Projection	No	No	Yes	Yes	Yes	Yes

* Design Enrollment

2. Change Existing School Service Area Boundaries

Projections indicate that each existing elementary school in Nanakuli will be operating above capacity by 1998, using all suitable classrooms. Therefore, the adjustment of service area boundaries between Nanakuli and Nanaikapono schools will not alleviate overcrowded conditions resulting from projected population growth.

To transport students to the closest school in Maili would be impractical because Maili Elementary School is also operating above capacity. The significant amount of on-going housing development in Maili will also result in increased overcrowding.

3. Increase the Capacity of Nanakuli Elementary

Should the Department choose to increase the capacity of Nanakuli Elementary, preliminary steps must be taken to build a new baseball field at Nanakuli High and Intermediate School, transfer the existing field to the Nanakuli Elementary school campus for use as a playfield. Additional classrooms can then be built on the present elementary school playfield. The capacity of the school could be increased to 775 students. The earliest possible date of completion of all the improvements would be 1997.

The increase in capacity of approximately 275 students would address the projected elementary level enrollment increases in Nanakuli Complex by 1998. However, Nanaikapono would still be large in enrollment at approximately 1,000 students. Hence, the increase in capacity will not be sufficient to decrease enrollment at Nanaikapono to an acceptable level, nor will it be sufficient to handle enrollment increases beyond 1998.

4. Year-Round Education at Nanakuli Elementary

If Nanakuli Elementary School adopted a year-round multi-track enrollment schedule, the effective capacity of the school would increase by approximately 33 percent. This is possible because at least one of three tracks (or groups) of students is scheduled to be out of school at any given time. The increase in capacity without additional buildings would accommodate 674 students rather than the current capacity of 507. Building to a capacity of 775 and adopting year-round multi-track education would increase the effective capacity to 1,030 students.

If the existing Nanakuli Elementary were a year-round multi-track school, the projected 1998 enrollment at Nanaikapono would only be reduced by 52 students, and would have an enrollment of 1,103. As a year-round multi-track school built to 1,030 capacity, however, Nanakuli Elementary could reduce enrollment at Nanaikapono to as low as 750 students by 1998. This alternative would not provide sufficient capacity to handle enrollment projections through 2010.

The year-round multi-track alternative is feasible, but depends on the community and school acceptance of the concept, additional school renovations, the need for air conditioning for classrooms to address summer temperature problems, and the additional operating expenses for personnel salaries.

5. Construct a New Elementary School

The establishment of a new elementary school in the west Nanakuli area would result in more reasonable and manageable enrollments at all three Nanakuli School Complex elementary schools. A new school would relieve the overcrowded conditions at Nanaikapono and it would also accommodate the growth in the Nanakuli area. The smaller, more manageable schools would be educationally and socially beneficial to the students.

In summary, the projected growth for the Nanakuli School Complex cannot be accommodated at the existing elementary schools. A change in service areas would not resolve the problem since Maili and Nanakuli schools are overcrowded. Increasing the capacity at Nanakuli Elementary would not significantly reduce enrollments at Nanaikapono. The year-round multi-track alternative at Nanakuli Elementary is feasible for the short term, but only by building to a capacity of 775 and overcoming other significant conditions. Therefore, the most appropriate alternative for meeting the service area long-range needs, and allowing for maximum flexibility regarding the decision pertaining to continued use of Nanaikapono, is the establishment of a new Nanakuli III Elementary School.

CHAPTER II
Project Description

II. PROJECT DESCRIPTION

A. PROPOSED PROJECT

To relieve current and anticipated overcrowding within the Nanakuli School Complex, the Department of Education is proposing to establish a new Nanakuli III Elementary School to serve grades K-6 within the area currently served by Nanaikapono Elementary. The proposed service areas for the new and affected schools are shown in Exhibit II-1. The target opening date for the new school is September 1998 and enrollment projected for the school opening is 500. The second and third construction increments in 1999 and 2000 would accommodate 650 and 775 additional students, respectively. The school's planned design enrollment is 775 students, with an anticipated peak enrollment of 850.

The proposed new school will include regular classrooms, a permanent special education classroom, an administration building, a library, and a food service building with conventional kitchen and student/staff dining area. Space for additional portable classrooms will also be provided to accommodate peak enrollment. Integrated with the classroom buildings will be a faculty center and possibly a computer resource center. Also provided will be a parking area, playfields, paved playcourts, and facilities recommended in the DOE's "Educational Specifications and Standards for Facilities."

B. USE OF PUBLIC FUNDS OR LAND

The project will be funded by public Capital Improvement Program appropriations from the State Legislature. In an effort to minimize tenant relocation and land acquisitions costs, State lands are typically given first consideration in the selection of sites for State public facilities. However, State-owned lands in the school service area are limited to existing public facilities, with the exception of a 52-acre Department of Hawaiian Home Lands parcel along Hakimo Road. Outside the service area, the State owns a 30-acre vacant site across from Nanaikapono Elementary School, and land at the base of Puu O Hulu Kai near Maili Point.

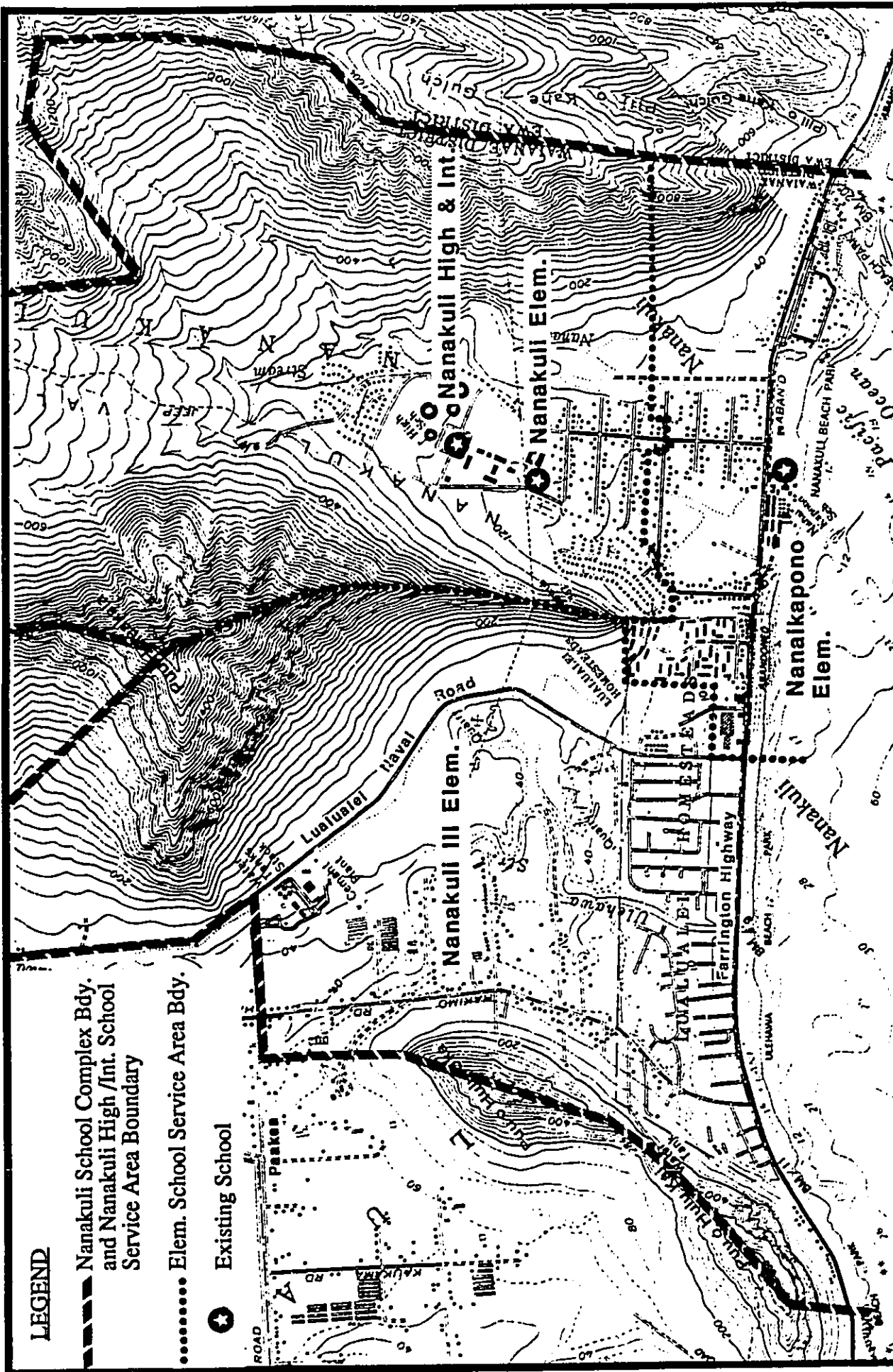


Exhibit II-1
Nanakuli School Complex
Proposed Service Areas

C. PROJECT DEVELOPMENT SCHEDULE

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

February 1995	Complete Site Selection Study and EIS
August 1996	Complete Master Plan and Design
July 1998	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 III

**Identification of
Candidate Sites**

III. IDENTIFICATION OF CANDIDATE SITES

A. SITE SELECTION METHODOLOGY

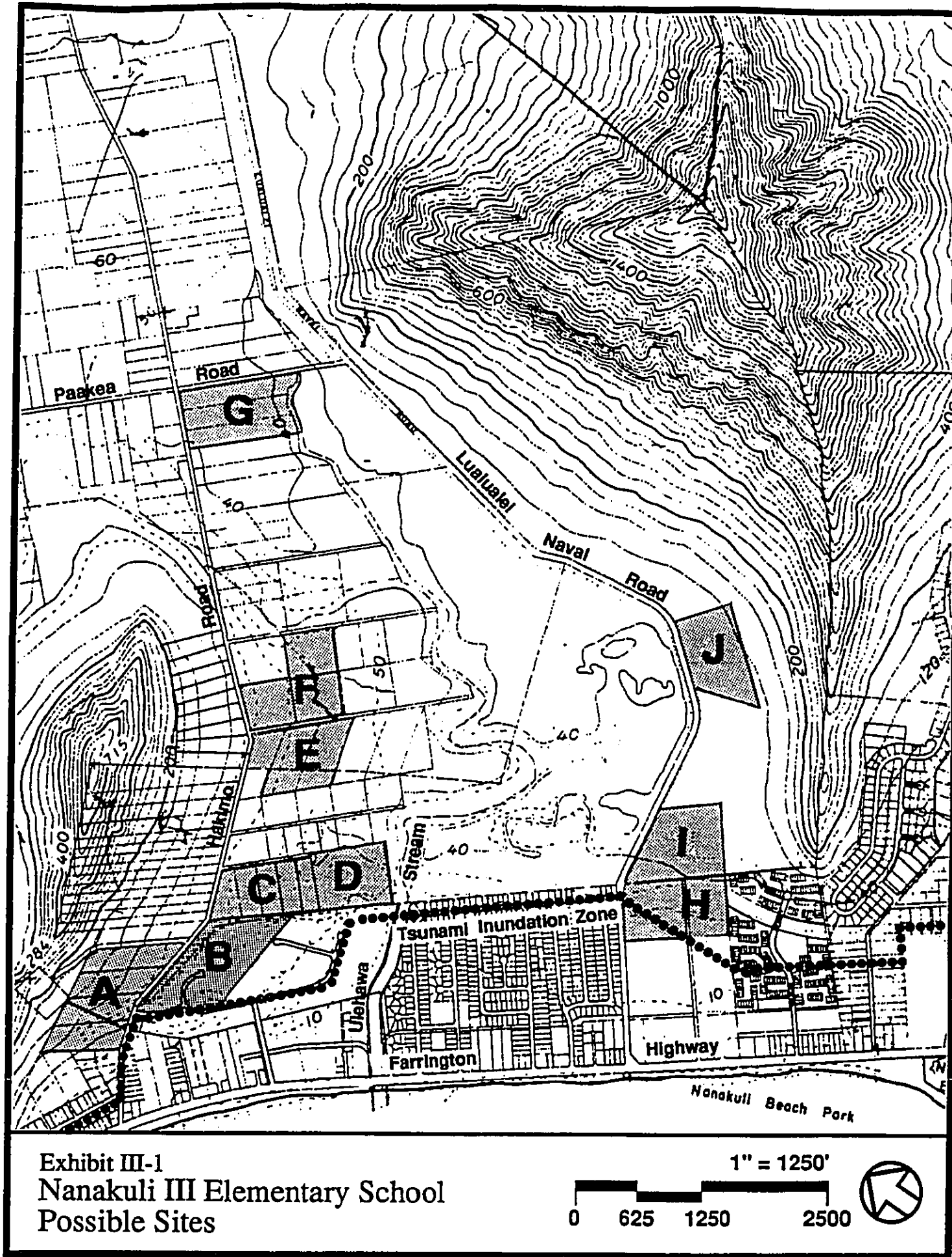
The objective of this site selection report is to identify and evaluate appropriate alternative sites for the proposed Nanakuli III Elementary School within the school service area. This is accomplished through a three-step process. First, "possible sites" in the area are identified for preliminary evaluation. 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

The proposed school service area was first screened for "possible sites" for the new Nanakuli III Elementary School. Through the use of tax key maps, site visits, and input from the community, ten "possible sites" were identified for preliminary evaluation. These sites met the basic criteria of 1) being outside the tsunami inundation/tsunami evacuation zone², and 2) being close to 12 acres in size, and 3) having existing access. The ten possible sites are shown on Exhibit III-1.

A set of minimum criteria was then used to screen the possible sites and identify candidate sites for further evaluation. The Department of Education, in its publication Educational Specifications and Standards for Schools, has defined the minimum criteria which the selected school site must meet. 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/Evacuation Zone maps; State Land Use District maps, and City Development Plan and Zoning maps.

²As recognized by the Oahu Civil Defense Agency. The terms are used interchangeably in this document.



The minimum criteria are identified below.

1. **Acreage**: The usable area of the potential school site must be a minimum of 8 acres and no more than 12 acres. For a new Nanakuli school, the DOE has determined that 12 acres are required.
2. **Shape**: The length to width ratio of the site must not exceed 2.5 to 1.
3. **Tsunami**: The site must not be within a tsunami inundation/evacuation zone.
4. **Flood**: The site must not be in a major flood plain if adequate drainage provisions cannot be made at reasonable cost.
5. **Landslide**: The site must not be located within a known or potential landslide area.
6. **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.
7. **Timing**: The acquisition of the site must be possible early enough to allow construction to meet the DOE's scheduled school opening date. The target opening date for the new Nanakuli III Elementary School is August 1998.
8. **Location**: The site must be within the ultimate service area.
9. **Displacement**: The site must be obtained without mass relocation of families; no more than 10 homes, farms, or businesses should be affected.
10. **Historical**: Development of the site must not result in the destruction of buildings or sites designated as historic and deserving of preservation by the Historic Buildings Task Force or the Bishop Museum.

The Department of Education requested that the following additional minimum criteria be considered:

11. Electrical Power Lines: The site should be located away from high voltage power lines to minimize the effects of electromagnetic fields. A school must be at least 50 feet from lines greater than 45 kilovolt (kV).
12. Hazardous and Toxic Waste Substances: The site should be free from hazardous and toxic waste substances and/or storage containers for the substances.
13. Landowners: Acquisition of the site should not involve more than five landowners.

When the minimum criteria were applied to the ten possible sites, four sites were eliminated from further consideration. Site A contained steep slopes and soils which have landslide potential. Sites C and E had over five landowners, and site E had more than ten homes on it. Since sites I and J were on the same parcel, and in close proximity to each other, it was decided to consider the parcel as one site (at the location of Site I), and the exact school location could be negotiated with the landowner if necessary. Although a portion of Site H is within the tsunami inundation zone, it was retained for further evaluation as a candidate site due to the possibility of raising the low area out of the tsunami zone.

As a result of the minimum criteria phase, six of the ten possible sites remained suitable for the proposed school use, and warranted further evaluation as "candidate sites."

C. CANDIDATE SITES

The six candidate sites initially selected as potential locations for the new Nanakuli III Elementary School are shown on Exhibit III-2. During the site identification process, Site 1 was vacant State-owned (DHHL) land and met the minimum criteria. However, DHHL had plans to develop a single-family residential subdivision, Princess Kahanu Estates, consisting of 272 residential lots, a day-care center, and a community association office. Upon evaluation of DHHL's plans and proposed development schedule, the DOE decided to eliminate Site 1 from consideration for the new school. The Princess Kahanu Estates project is currently under construction with an estimated completion date of October 1995. As a result, five candidate sites are evaluated in this Environmental Impact Statement/Site Selection Study.

<u>Site No.</u>	<u>Site Name</u>	<u>Tax Map Key</u>	<u>Acreage</u>
Site 2	Kaukai	8-7-22:1 & 8-7-9:por.3	12 acres
Site 3	Ulehawa/Kapiki	8-7-21:14, 17, 18	15 acres
Site 4	Paakea	8-7-21:1, 2, 38	14.74 acres
Site 5	Lualualei	8-7-8:por. 76, 77	12 acres
Site 6	PVT	8-7-9: por. 7	12 acres

The boundaries of Sites 1, 2, 5, and 6 are conceptual in nature and could be refined or modified to accommodate the desired school facilities layout or landowner preferences once a final site is selected.

A detailed analysis was undertaken of the remaining five candidate sites. This involved evaluating each candidate site against established criteria and rating each site individually on how it meets the criteria. The Site Evaluation Criteria, outlined below and fully described in Appendix A, are based on standards established by the DOE to assess the relative merits of candidate sites selected as potential locations for a new school. All criteria are not necessarily weighted equally by DOE. The evaluation of each candidate site against the criteria is contained in Chapter VI.

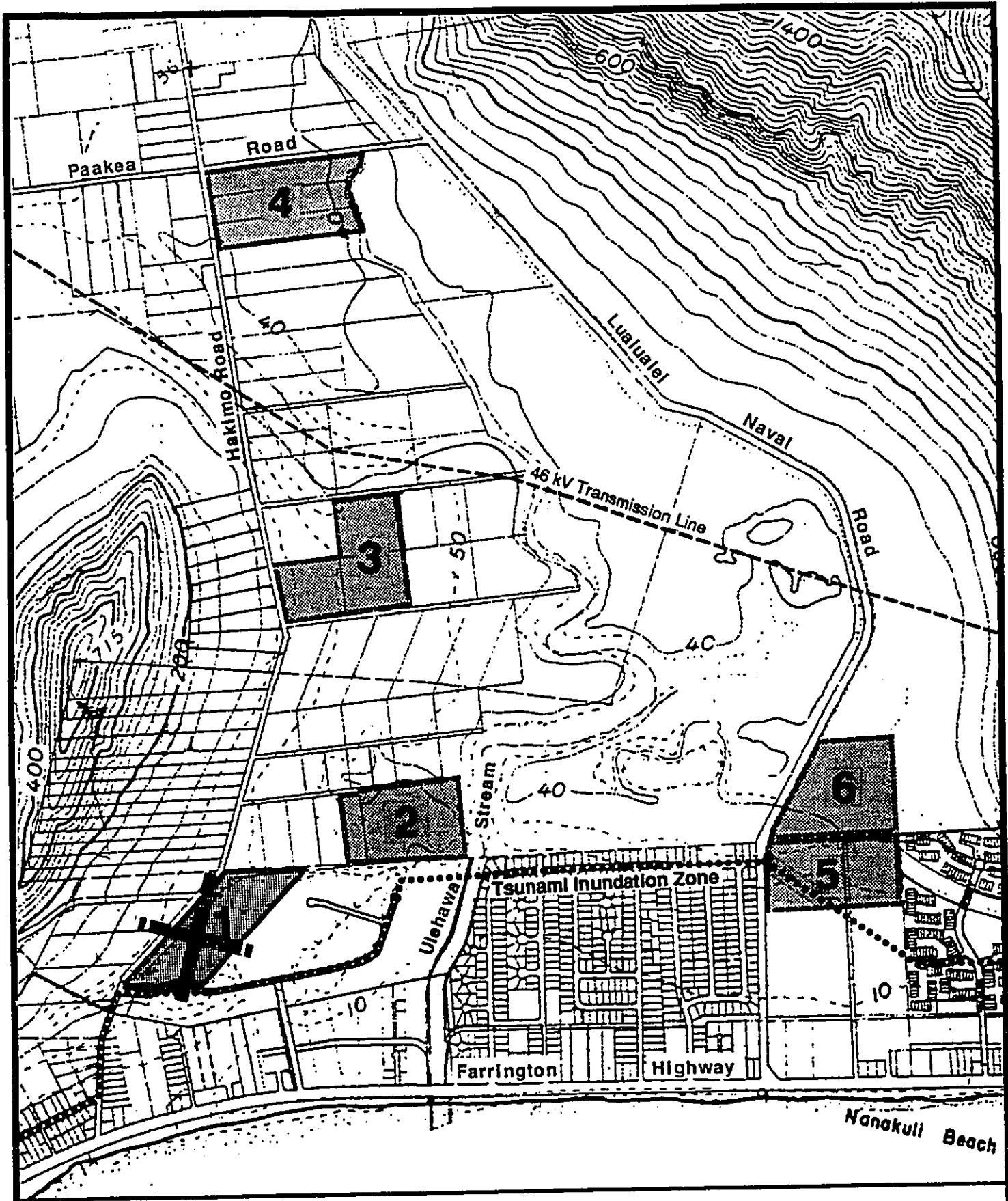
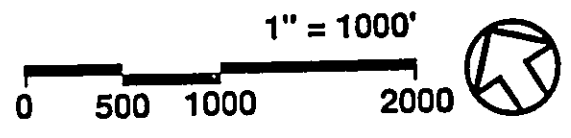


Exhibit III-2
 Nanakuli III Elementary School
 Candidate Sites



SITE EVALUATION CRITERIA

A. PHYSICAL CRITERIA

1. Site Characteristics
Size, Slope, Shape, Soil and Foundation Characteristics, and Aesthetic Qualities
2. Roads and Utilities
Roadways, Water, Sewer, Drainage, Power and Communication
3. Accessibility
Pedestrian Access, Pedestrian Safety, Vehicular Circulation, Vehicular Safety, and Public Bus Service
4. Environment
Rainfall, Highway Noise, Aircraft Noise, Industrial and Agricultural Nuisances, Commercial Attractions, and Wetlands

B. COMMUNITY CRITERIA

1. Government
State Land Use Designation, City and County Development Plan, City and County Zoning, and Special Management Area
2. Community Effects
Land Ownership, Existing Use, Displacement, Agricultural Lands, Location, Interference with Institutions, and Scenic Value

C. COST CONSIDERATIONS

1. Land Acquisition
2. On-site Improvements
3. Off-site Improvements
4. Bus Subsidy

CHAPTER IV

**Environmental Conditions
in the Service Area**

IV. ENVIRONMENTAL CONDITIONS IN THE SERVICE AREA

A. PHYSICAL

1. Land Use and Land Ownership

The Nanakuli/Lualualei Valley 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 Nanaikapono Elementary School and a small residential area. 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 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 Lualualei Naval Reservation. As mentioned earlier, State-owned lands (non-DHHL) in the school service area are limited to existing public facilities.

Nanakuli III Elementary School Candidate Site 2 - "Kaukai" encompasses one 2-acre parcel and a 10-acre portion of a second parcel. (Refer to Exhibit IV-1.) The smaller parcel contains a residence and a pig farm, while the larger parcel is vacant and unused. There are two individual landowners, both of whom have expressed interest in selling their respective land areas to the State for the proposed school use. PVT Land Company, Ltd., the owner of

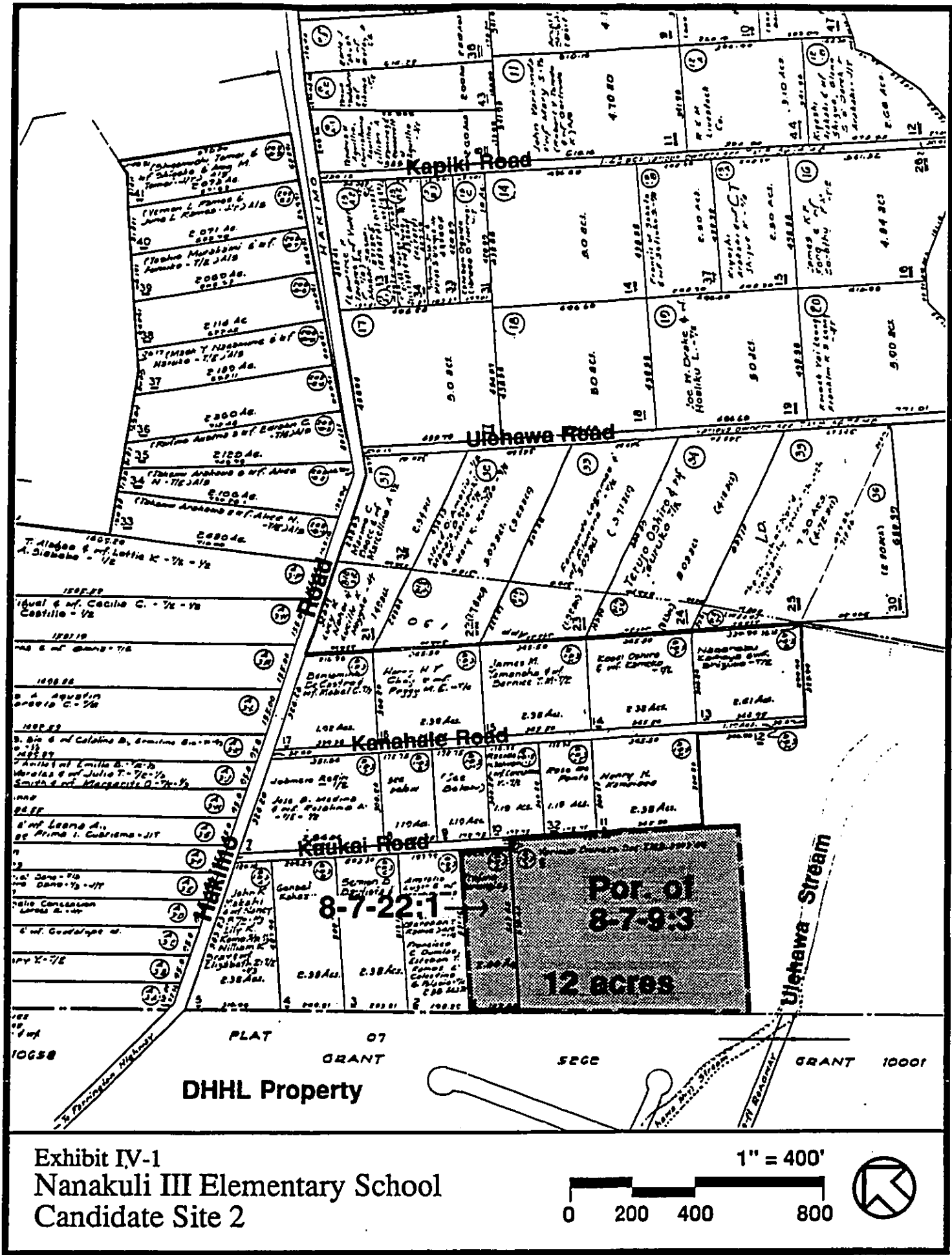


Exhibit IV-1
 Nanakuli III Elementary School
 Candidate Site 2

the major portion of Site 2, is willing to discount the purchase price.³ Site 2 is surrounded by residential/agricultural development to the northeast and northwest, and a 271-unit single family residential development (Princess Kahanu Estates) is under construction to the southwest (makai). Southeast of the site is vacant, vegetated land adjacent to Ulehawa Stream.

Site 3 - "Ulehawa / Kapiki" (Exhibit IV-2) consists of three 5-acre, privately owned parcels, one of which (parcel 17) is currently vacant and unused. The remainder of the site contains eight dwelling units. Site 3 is surrounded by land uses primarily residential in nature, with some agricultural activity in the vicinity.

Candidate Site 4 - "Paakea" also consists of three large privately owned lots. (Refer to Exhibit IV-3.) Existing uses on the site are residential and agricultural. The site is actively being cultivated with truck crops. Site 4 is surrounded by residential and agricultural land uses in all directions except to the east, across Ulehawa Stream, where there is an existing, but *non-operating* cement plant. Immediately south of the site are two pig farms.

Site 5 - "Lualualei" (Exhibit IV-4) is located on portions of two large privately owned parcels along Lualualei Naval Road. Parcel 77 contains numerous dwelling units, ten of which are within the school site area. The title to parcel 77 has been in dispute. A settlement agreement was approved December 1, 1994 by the Task Force on Department of Hawaiian Home Lands Land Title and Related Claims and the Hawaiian Homes Commission. The agreement proposal will be presented to the 1995 State Legislature for action. Action by the Legislature will determine whether the title claim dispute would affect a school development on Site 5 and the timetable for the development.

³Refer to consultation phase and public review phase letters from Ching, Yuen & Morikawa in Appendices D and E.

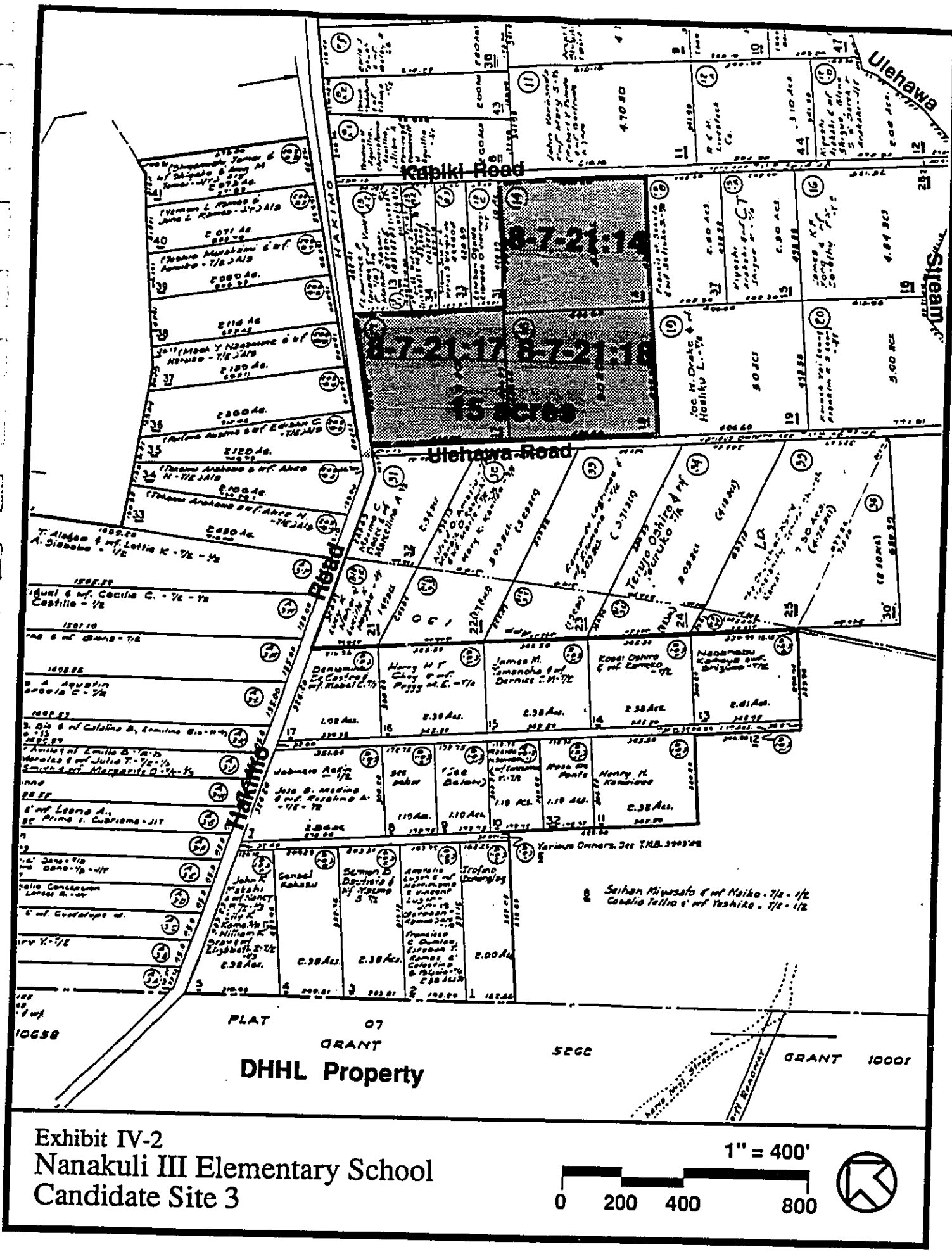


Exhibit IV-2
 Nanakuli III Elementary School
 Candidate Site 3

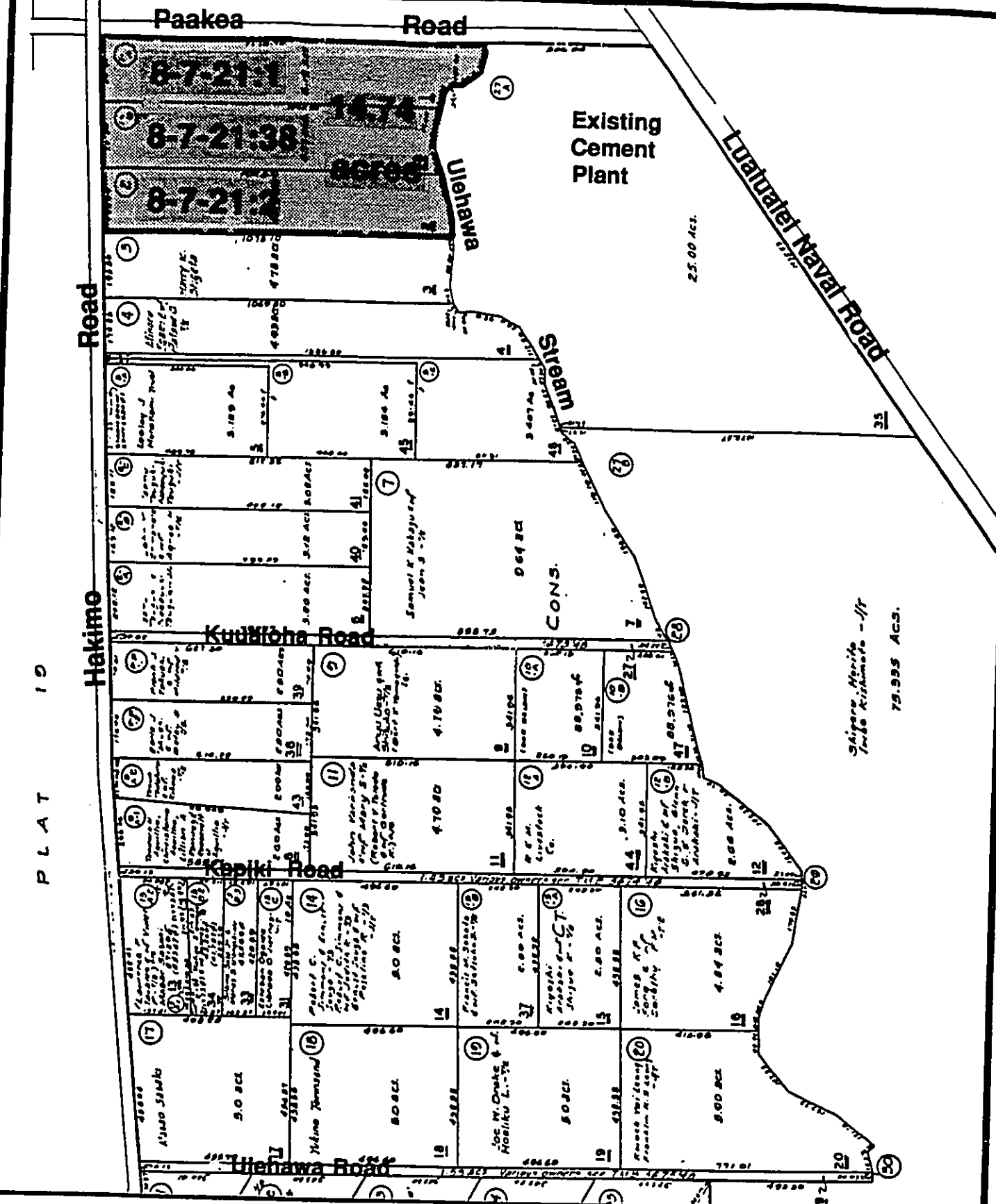
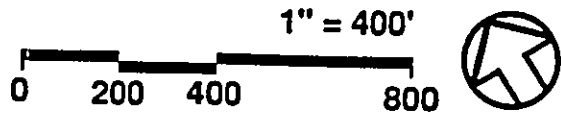


Exhibit IV-3
 Nanakuli III Elementary School
 Candidate Site 4



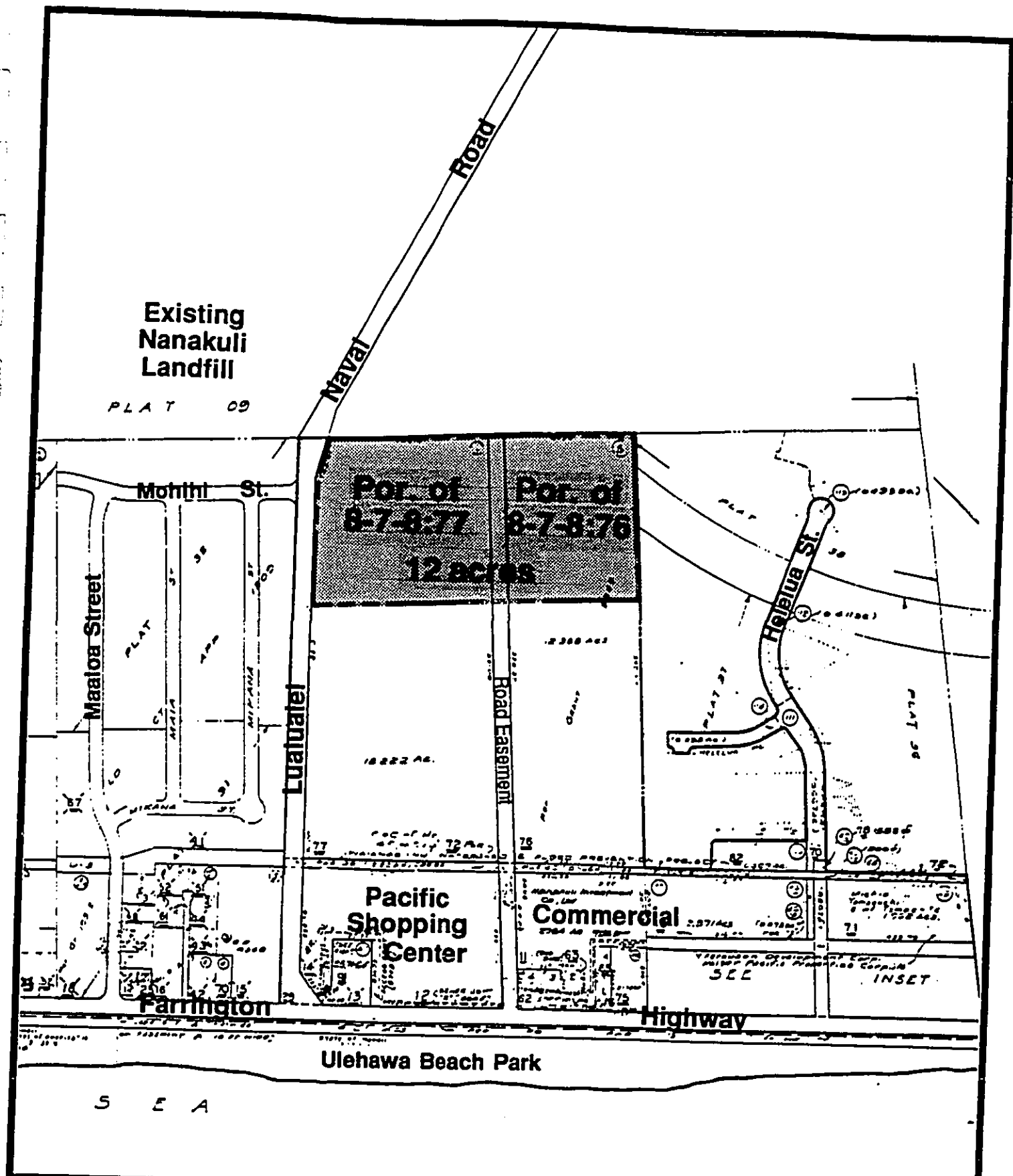
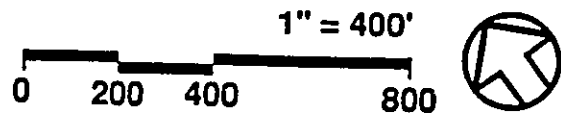


Exhibit IV-4
 Nanakuli III Elementary School
 Candidate Site 5



Parcel 76 is presently vacant and unused, however the landowner has plans for a cluster development with about 144 townhouse units. The developer submitted an application for rezoning (from Ag-2 to R-5) in July 1994. The director of the Department of Land Utilization is currently reviewing the staff's recommendation for "approval with conditions." The application also goes before the Planning Commission and City Council. The landowner must file for a Cluster Permit, contingent upon approval of the zoning change.

Site 5 is surrounded by single family housing across Lualualei Naval Road to the northwest and makai on parcel 77, and multi-family housing to the east. North of the site, also across Lualualei Naval Road, is the existing Nanakuli Landfill. Vacant lands are east (mauka) of the site, however the landowner has plans to expand its landfill operations and construct and operate a recycling center, as described below.

Site 6 - "PVT" (Exhibit IV-5) is located adjacent to and mauka of Site 5. The 12-acre school site is a portion of a large, 179-acre parcel owned by PVT Land Company, Ltd. The landowner also owns the existing Nanakuli Landfill located directly across Lualualei Naval Road from the site. Presently, the landfill only accepts construction and demolition debris, concrete, rock, dirt and grub. There are also rock crushing operations on the site. PVT has plans to expand the landfill and construct and operate a recycling center in the location of Site 6. The proposed recycling center will process recyclable construction and demolition materials, wood, glass, aluminum and other recyclable materials for sale and shipment to industrial users. PVT is required to apply for a special use permit and other permits to operate the recycling center. Mauka of Site 6, the landfill master plan indicates a landfill/recycling center expansion area. Residential land uses are located west and south of the site.

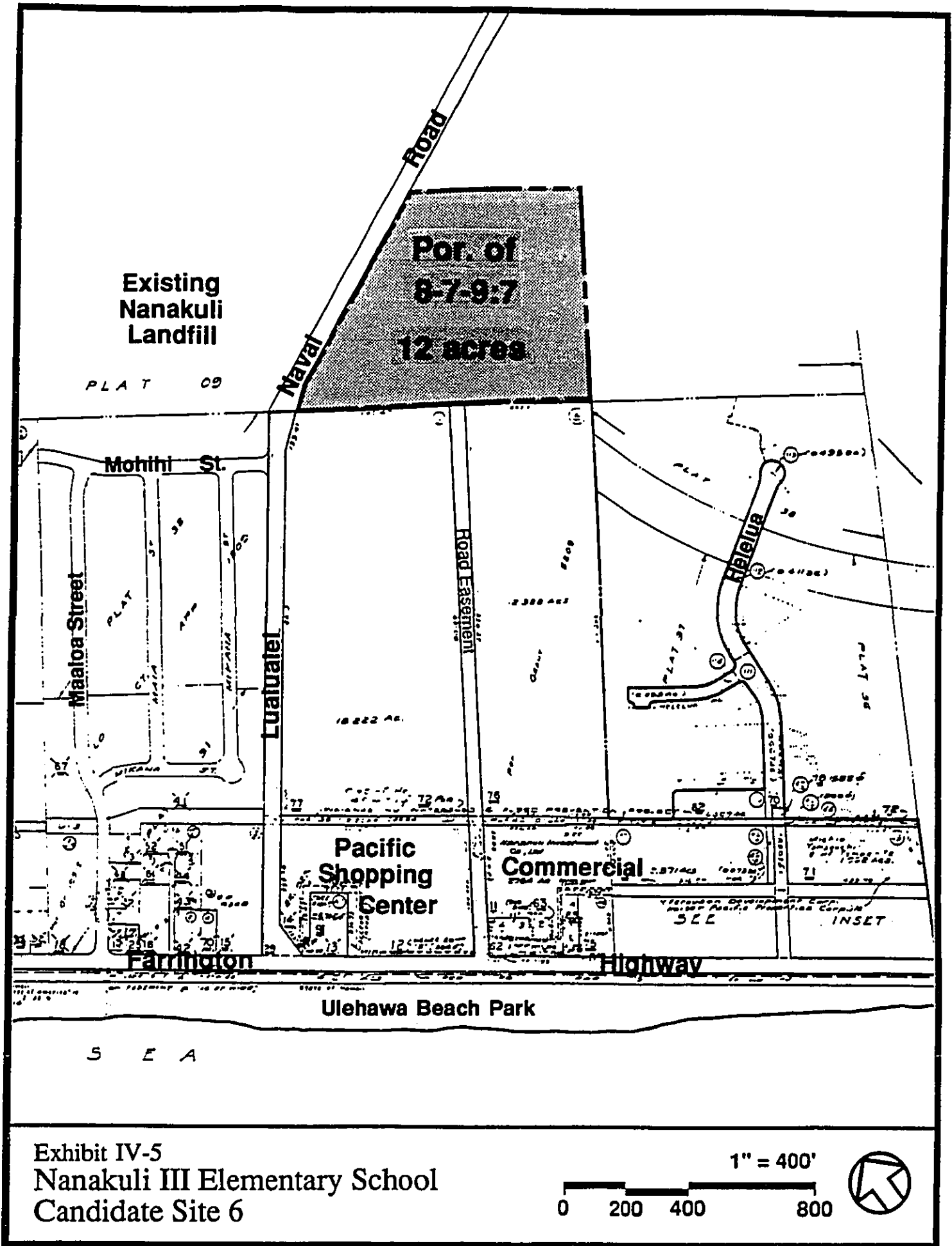
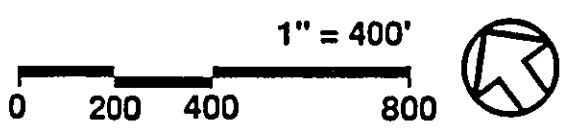


Exhibit IV-5
 Nanakuli III Elementary School
 Candidate Site 6



2. Climatic Characteristics

The Waianae coast is one of Hawaii's driest localities. The average annual rainfall along the coast is between 10 and 15 inches, with most of the precipitation occurring during the winter months between November and April. 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 have a very gentle slope between 10 and 40 feet above mean sea level. The gentle slope throughout the valley accounts for the poorly defined surface drainage pattern.

The predominant soils within the coastal area of Nanakuli belong to the Lualualei and Mamala series, and Coral Outcrop. Lualualei clay soils are a sticky plastic clay with slow permeability and high shrink-swell potential. Mamala silty clay loam is shallow and stony, and the areas of Coral Outcrop consist of 80 to 90 percent coral with minimal soil. The Lualualei and Mamala soils impose sever limitations for septic tank filter fields and make it difficult to establish plants. Site-specific slopes and soil-types are described in Chapter VI.

The University of Hawaii Land Study Bureau (LSB) classifications and the Agricultural Lands of Importance to the State of Hawaii (ALISH) designations are used to show the agricultural viability of the land considering its soils and slopes. LSB productivity ratings range from A through E, with A being the most productive and E the least. Sites 2, 3, 5, and 6 have an urban designation and/or a very poor productivity rating (E). One-half of Site 4 has a good productivity rating (B) with irrigation, and very poor (E) without irrigation. The remainder of Site 4 is rated E. According to ALISH, Sites 3 and 4 are designated "Prime Agricultural Land," while Sites 2 and 6 are designated "Other Important Agricultural Land."

4. Hydrology

The gentle slope throughout the valley accounts for the poorly defined surface drainage pattern. Ulehawa Stream, an intermittent stream, flows through the study area. Ulehawa Stream has been channelized near its outlet at the ocean. Mauka of Farrington Highway, the improved section is fed by two branch channels (U2 and U3) located on opposite sides of the main Ulehawa drainage channel. U2 drains lands to the northwest of the channel, including Site 1, and U3 drains lands to the southeast. Sites 2 and 4 are located adjacent to Ulehawa Stream within its natural streambed.

The Nanakuli/Lualualei area consists of two independent aquifers: the limestone aquifer in the valley, and one composed of basalt underlying the valley fill and talus slopes.⁴ The limestone stratum extends throughout Lualualei Valley below the approximately 100-foot elevation contour, while basalt constitutes the basement of the entire Waianae district and is exposed as slopes and ridges above the level valley floor. The five candidate sites are underlain by the limestone aquifer.

Groundwater in the limestone aquifer occurs as a lens of brackish water floating on sea water. It is not suitable for drinking, and in most places it is unusable for irrigating all but drought tolerant plants. The salinity of this groundwater is too high for optimal crop irrigation. As a result, local farmers have shifted over the years to water from the Board of Water Supply, although some limestone aquifer wells may still be in use in Lualualei Valley.

5. Flood and Tsunami Hazards

A 1.53-acre portion of Site 4 is within the Ulehawa Stream floodway and flood zone according to the Federal Emergency Management Agency's Flood Insurance Rate Maps.

⁴Groundwater information is based on a study by John F. Mink, October 1988, as contained in the Final Environmental Impact Statement for the Lualualei Golf Course, Prepared by Hida, Okamoto & Associates, April 1991.

The tsunami inundation/evacuation zone is delineated by Oahu Civil Defense Agency. Approximately 3.8 acres of Site 5 are within the tsunami inundation/evacuation zone. The remaining four sites are not within the tsunami zone.

6. Flora and Fauna

Due to previous land clearing and construction activities, the five candidate sites are largely vegetated by secondary growth. This vegetation regime includes, kiawe, koa haole, klu, and finger grass. Site 4 is actively being cultivated with truck crops. There are no known endangered species of flora within the developed study area.

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.

7. Historic and Archaeological Resources

An archaeological assessment (included as Appendix B) and a historical and archaeological literature search (Appendix C) 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 remains were identified in any of the candidate sites during the on-site field inspections. Extensive land clearing and development activities were found to have occurred in each of the candidate site areas. Although only a few archaeological studies have been conducted along the coastal and immediate inland portions of Lualualei, the resulting data indicate a paucity of traditional Hawaiian remains. The majority of the sites are related to cattle ranching or military activities. Previous subsurface testing

in portions of Site 3 revealed no subsurface cultural remains. Based on the negative results of previous archaeology, together with the current condition of each site area, no significant archaeological remains are expected in any of the candidate school sites.

8. Hazardous and Toxic Waste Substances

There are no indications of the existence of hazardous and toxic waste substances on the candidate school sites, and the existing and former land uses of the sites (residential, agricultural, or vacant) do not give cause for concern. Nevertheless, the selected site will be inspected for hazardous or toxic substances prior to development.

The Nanakuli Landfill is located across Lualualei Naval Road from Candidate Sites 5 and 6. The landfill is permitted to bioremediate petroleum contaminated soil, i.e. to treat the soil with bacteria which consume the petroleum. The landfill is also permitted to dispose of asbestos-containing material. The material must be delivered to the landfill in packaging which meets applicable safety regulations. It is then buried in a special asbestos handling area within the landfill.

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.

The project area is within the Nanakuli Viewshed according to the City and County Coastal View Study.⁵ Farrington Highway, the coastal road through the region, provides "continuous" or "intermittent coastal views" in some areas, while makai views along other portions of the highway are blocked by sand dunes. The view study did not identify any "significant stationary viewpoints" along

⁵City and County of Honolulu, Department of Land Utilization, Coastal View Study, 1987.

the Nanakuli coastline. However, the puus at Maili Point, northwest of Hakimo Road, are labeled "important coastal land forms."

B. PUBLIC FACILITIES AND SERVICES

1. Water

The Nanakuli 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 eight-inch water mains also exist along Farrington Highway through Nanakuli. Water mains extend mauka from Farrington Highway to serve the urban and agricultural land uses in the region.

Existing water mains and fire hydrants currently service Sites 2, 3, and 4, as described in the Site Evaluation, Chapter VI. There are no existing water lines within the Lualualei Naval Road right-of-way, along which Sites 5 and 6 are located.

2. Wastewater

The City and County Department of Wastewater Management operates the Waianae Sewage Treatment Plant (STP) and sewer system in the area. Existing 24-inch and 30-inch interceptor sewer lines are located within the Farrington Highway right-of-way, and are connected to the Lualualei Wastewater Pump Station, with branch mains extending mauka to serve some existing subdivisions. 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. None of the candidate sites is currently serviced by the county system.

An existing 8-inch sewer main extends approximately 750 feet mauka along Hakimo Road from its intersection with Farrington Highway. Eight-inch sewer mains are also located along Waiolu and Laiku Streets within the Hawaiian Home Lands parcel along Hakimo Road (former Candidate Site 1). There are no existing sewer lines along Lualualei Naval Road.

3. Solid Waste

The Refuse Division of the City and County of Honolulu Department of Public Works currently provides refuse disposal services for residential developments in the project area. Private refuse companies provide disposal services for non-residential and some private residential developments. Trucks from the City and County collection routes primarily transport the solid waste to the H-Power cogeneration facility near Campbell Industrial Park. Private operators also transport to H-Power.

Nanakuli Landfill, located on Lualualei Naval Road across from Candidate Sites 5 and 6, is the only privately-owned landfill on Oahu which accepts construction and demolition refuse from private companies. It process over 2000 tons per day. The Nanakuli Landfill is one of two (along with the City's Waimanalo landfill) presently operating on Oahu. Expansion plans for Nanakuli Landfill are described in Section A.1. of this chapter.

4. Drainage

Drainage within the Nanakuli area generally sheet flows from the mauka areas into the 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.

None of the candidate sites has, or is adjacent to, an existing underground drainage system. Sites 2 and 4 are adjacent to Ulehawa Stream.

5. Power and Communication

Electric power within the school 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.

An existing 46 kV transmission line traverses Nanakuli, from Puu Nanakuli to Hakimo Road, and beyond. (Refer to Exhibit III-2 in Chapter III.) The transmission line is 200 feet from one corner of Site 3, with an increasing separation up to 1000 feet. The remaining sites are over 1000 feet from the transmission line.

6. 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 school 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 private 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 roads serving the candidate sites, there are traffic signals at Hakimo Road, Lualualei Naval Road, and Helelua Street. None of the traffic signal-controlled intersections mentioned has designated turn lanes. Farrington Highway is slated for some intersection improvements, primarily involving the addition of turning lanes.

Based on traffic count data obtained from the State Department of Transportation (1990), peak traffic periods on Farrington Highway generally occur between 5:30 to 7:30 am and 3:00 to 5:00 pm daily.

Sites 2, 3, and 4 are accessed via Hakimo Road, a two-lane collector street with a 15 to 10-foot wide paved surface within a 40-foot wide right-of-way. Shoulders are unpaved and vary between 5 and 10 feet wide. The posted speed limit is 20 miles per hour.

As part of the EIS for the proposed Lualualei Golf Course project, manual counts were taken by a traffic consultant at the intersection of Farrington Highway and Hakimo Road in September 1990 during the peak periods. Counts were taken of passenger cars, trucks and buses by turning movements and approaches. The following observations were noted at the intersection during the field survey:⁶

1. Traffic at the intersection of Farrington Highway and Hakimo Road operated very well during the morning and afternoon peak hours with little delays or congestion.
2. School buses and trucks attempting right-turns from Farrington Highway onto Hakimo Road were observed having difficulty due to the small turning radius provided at the intersection. Buses and trucks were observed encroaching into the center lane of Makaha bound traffic to turn right onto Hakimo Road. Some of the buses were also observed encroaching into the opposing lane (makai bound land) of Hakimo Road in order to complete the right-turn movement.
3. The vehicular actuated traffic signals at the intersection of Farrington Highway and Hakimo Road operated very efficiently during the peak hours.

Sites 5 and 6 are located adjacent to Lualualei Naval Road, which is owned and maintained by the U.S. Navy. It is a two-lane asphaltic concrete (a.c.) road within a 60-foot right-of-way, used primarily by the Navy for hauling explosives to and from the Lualualei Naval Magazine. General public use of the road is currently prohibited, however the road is accessible to the public between Farrington Highway and the naval magazine. To the general public, the road dead-ends at the naval magazine gate, however there are dirt road connections to Hakimo Road just before the gate, and to Paakea Road, near the cement plant.

⁶Pacific Planning & Engineering, "Traffic Impact Assessment Report for the Lualualei Golf Course," Appendix E of the Final Environmental Impact Statement for the Lualualei Golf Course, April 1991.

The shopping center, landfill, and cement plant have licenses with the Navy to use the road, and each licensed user pays a fee for road use and maintenance. The existing houses on and near Site 5 have "grandfathered" use. The Navy would like to convey ownership of the road to the city or state. Representatives from the Navy, Nanakuli Landfill, and the proposed Lualualei Golf Course met with the City Department of Public Works in late 1993 to discuss road conveyance, but no decision has been made.

According to the owner of the landfill, approximately 200 trucks enter and leave the Nanakuli Landfill daily through the entrance on Lualualei Naval Road, across from Site 6. The road is subject to continuous traffic from large trucks which often line up outside the landfill entrance in the early morning hours.

Other county and private roadways serving the individual candidate sites are described in the Site Evaluation, Chapter VI.

7. Schools, Medical, and Recreational Facilities

The Nanakuli school complex consists of a combined high and intermediate school and two elementary schools: Nanaikapono Elementary and Nanakuli Elementary. The one school in Maili, Maili Elementary, is a part of the Waianae school complex. The enrollments and conditions of existing schools are described in Chapter I of this document.

The Hawaii State Public Library System and the Department of Accounting and General Services are proposing to construct a new public library to serve the communities of Maili and Nanakuli. The Final Environmental Impact Statement and Site Selection for this facility was filed with the Office of Environmental Quality Control in November, 1994.

The Waianae Coast Comprehensive Health Center (located north of Maili Channel) and its satellite Nanakuli Clinic (located across from Nanaikapono Elementary School) service the leeward coast.

The next closest medical facility is St. Francis Medical Center-West in Ewa, which can be reached in approximately 20 minutes from Nanakuli. Round-the-clock ambulance services are available from from the Waianae Fire Station.

Recreation facilities in the area consist primarily of beach parks makai of Farrington Highway, and neighborhood parks/playgrounds adjacent to some existing elementary schools. The Lualualei Golf Course is proposed along Lualualei Naval Road, adjacent to the naval magazine. The course would be a public, daily-fee, 18-hole championship course. The developers are presently pursuing necessary land use permits.

8. 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. In March of 1995, a new fire station, with engine and ladder services, will open in the Campbell Industrial Park area. This new station will also service the Nanakuli area.

C. SOCIO-ECONOMIC CHARACTERISTICS

1. Population and Housing⁷

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.

⁷All data, unless otherwise noted, is based on the U.S. Bureau of the Census, 1990 Census of Population and Housing, Census Tracts, Hawaii.

The 1990 resident population of Nanakuli was 9,575. The median age in 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 (39% for Nanakuli; 25% island-wide). The average household size in Nanakuli (4.6 persons) is also higher than the Oahu average household size of three persons. Residents in the school 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 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.

	<u>Nanakuli</u>	<u>Oahu</u>
Hawaiian	52%	11%
Filipino	13%	14%
Caucasian	15%	32%
Japanese	3%	23%
Samoan	6%	2%

2. Employment and Income

The labor force profile for the Nanakuli area 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.

	<u>Nanakuli</u>	<u>Oahu</u>
% Persons 16 year & over in Labor Force	61%	71%
% Civilian Labor Force Unemployed	7%	4%
% High School Graduates	67%	81%
% Bachelors Degree or Higher	4%	25%
Median Household Income	\$34,400	\$40,600
% Below Poverty Line	20%	8%

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CHAPTER V
**Relationship to Plans,
Policies, and Controls**

V. **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 III Elementary School 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.

Physical Environment- Land-based, Shoreline, and Marine Resources

(b)(3) Take into account the physical attributes of areas when planning and designing activities and facilities.

Priority Guidelines to Promote Quality Education

(8) Explore alternatives for funding and delivery of educational services to improve the overall quality of education.

Policies of the Hawaii State Plan that the new Nanakuli III Elementary School 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- Health

(b)(4) Foster an awareness of the need for personal health maintenance and preventive health care through education and other measures.

Socio-Cultural Advancement- Education

(b)(1) Support educational programs and activities that enhance personal development, physical fitness, recreation, and cultural pursuits of all groups.

(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.

(b)(7) Promote programs and activities that facilitate the acquisition of basic skills, such as reading, writing, computing, listening, speaking, and reasoning.

(b)(8) Emphasize quality educational programs in Hawaii's institutions to promote academic excellence.

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.

Priority Guidelines to Promote Quality Education

(1) Pursue effective programs which reflect the varied district, school, and student needs to strengthen basic skills achievement.

(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.

(9) Strengthen and expand educational programs and services for students with special needs.

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 school is a permissible use within the Urban District, while a Special Use Permit (SUP) or State Land Use District (SLUD) Boundary Amendment is required for a school in the Agricultural District. Special Permits or SLUD Boundary Amendments involving land areas of 15 acres or less require the approval of only the County land use decision-making authority, and not the State Land Use Commission. Candidate Site 5 is within the Urban District. Sites 2, 3, 4, and 6 are within the Agricultural District and, since they are 15 acres or less, a Special Permit or SLUD Boundary Amendment could be processed through the City and County Planning Department. Exhibit V-1 displays the State land use districts in the vicinity of the candidate sites.

C. CITY AND COUNTY OF HONOLULU GENERAL PLAN

Policies of the City and County General Plan that the Nanakuli III Elementary School project should conform to include:

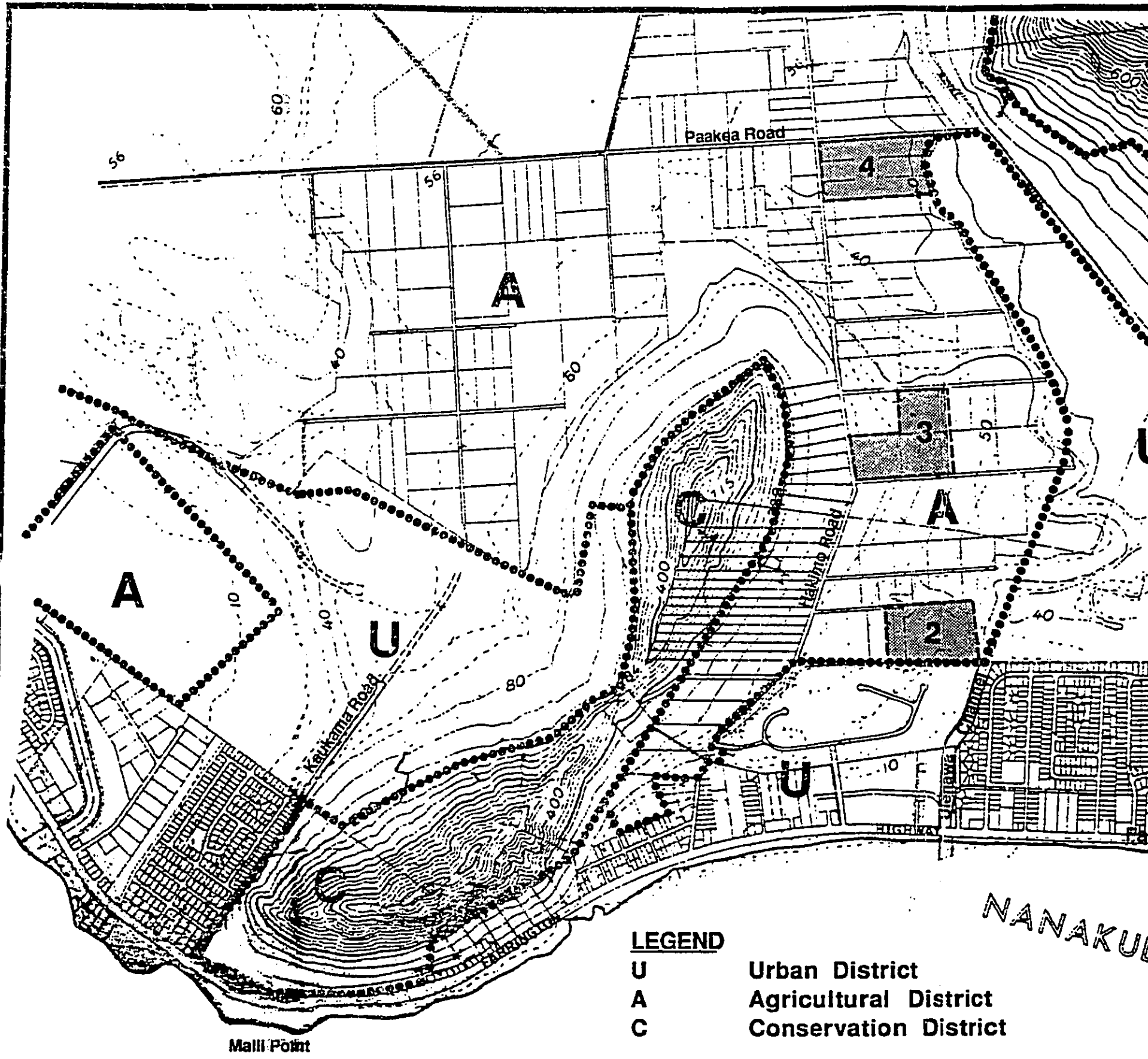
Natural Environment. Objective B

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.

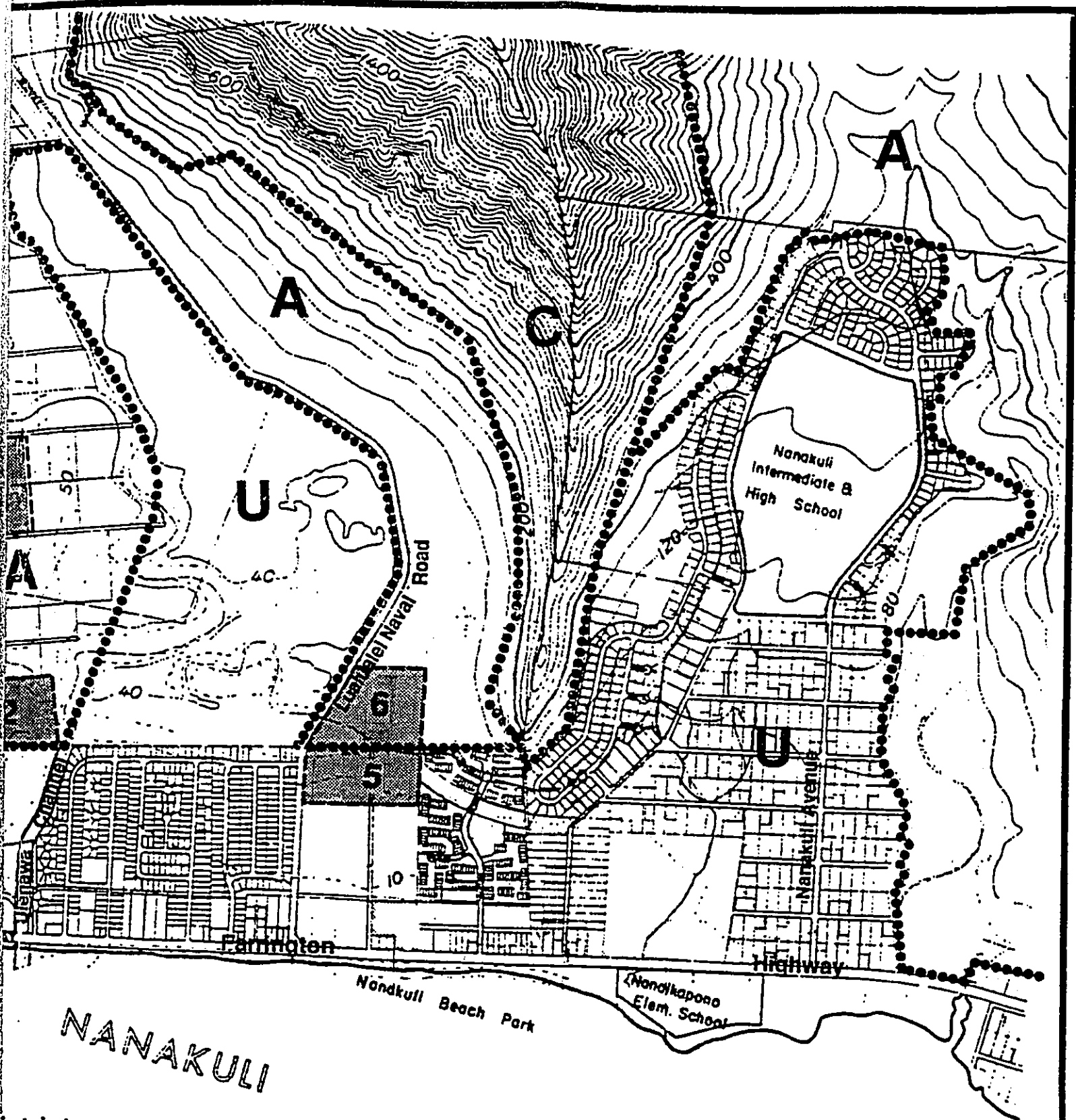
Policy 8: Locate community facilities on sites that will be convenient to the people they are intended to serve.



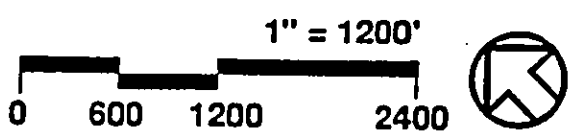
LEGEND

- U** Urban District
- A** Agricultural District
- C** Conservation District

Exhibit V-1
State Land Use Districts



istrict
District



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.

Health and Education, Objective B

Policy 4: Encourage the construction of school facilities that are designed for flexibility and high levels of use.

Policies of the City and County General Plan that the services and programs provided by the proposed school 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.

Natural Environment, Objective B

Policy 4: Provide opportunities for recreational and educational use and physical contact with Oahu's natural environment.

Health and Education, Objective B

Policy 1: Support education programs that encourage the development of employable skills.

Policy 3: Encourage the after-hours use of school buildings, grounds, and facilities.

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.

Culture and Recreation, Objective B

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.

Culture and Recreation, Objective D

Policy 11: Encourage the after-hours, weekend, and summertime use of public schools facilities for recreation.

D. 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 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 (including the subject school) do not require a development plan 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 5 which is designated Residential, and Sites 2, 3, 4, and 6 which are designated Agricultural. Existing land use designations are shown on Exhibit V-2.

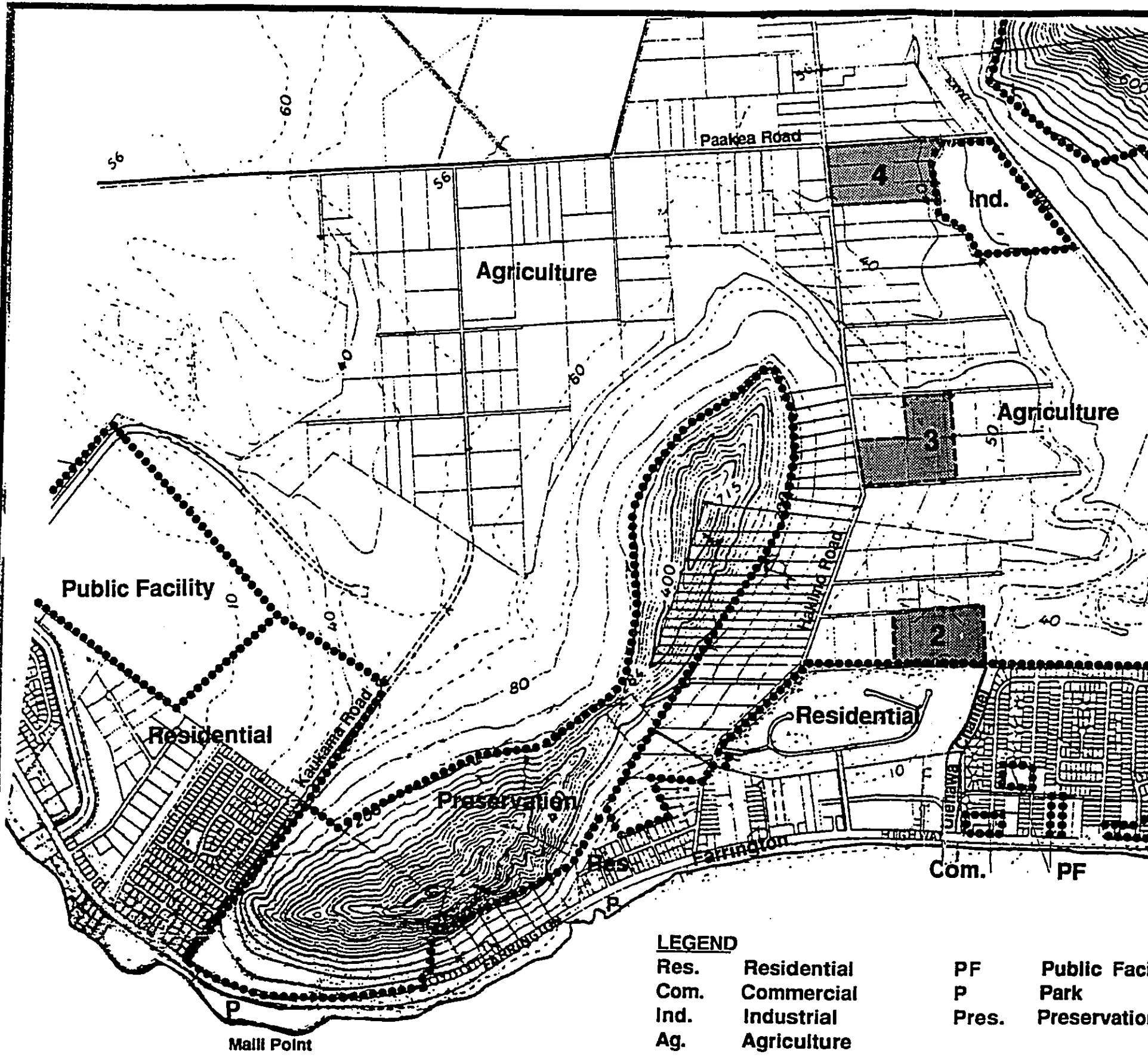
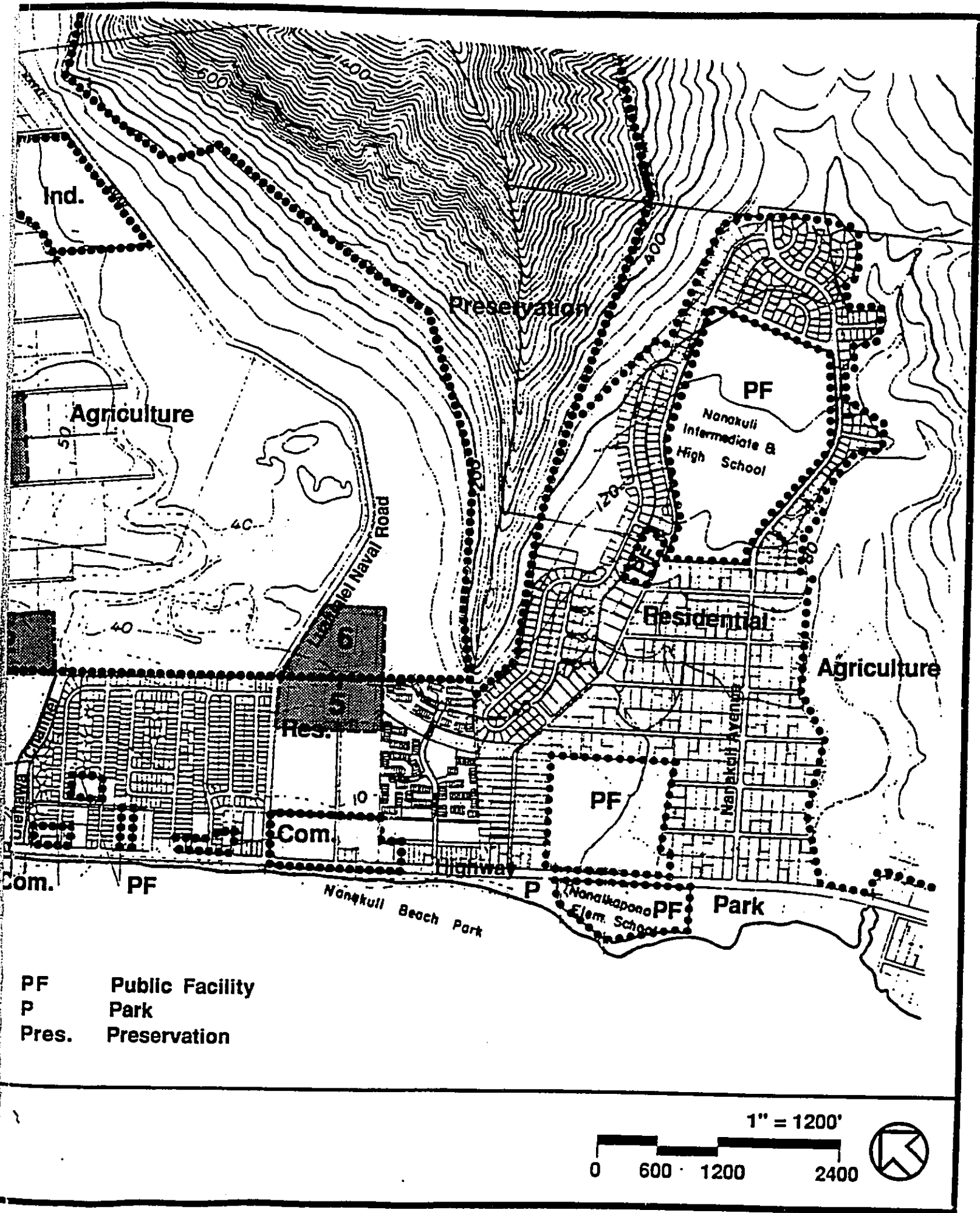


Exhibit V-2
 City & County Development Plan Land Use Designations



The DP Public Facilities Map (DPPFM) 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 for which land acquisition or construction is planned to begin 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 DPPFM shows a symbol for publicly funded improvements to Hakimo Road in the "beyond 6 years" category. According to the City's Department of Transportation Services, there are plans to widen Hakimo Road. The map also shows a symbol for a publicly funded sewer improvement district, site determined, within six years adjacent to Sites 5 and 6.

E. CITY AND COUNTY OF HONOLULU LAND USE ORDINANCE

The proposed Nanakuli III Elementary School 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. If the school exceeds the development standards for its respective zoning district(s), it would require a waiver. Sites 2 and 6 are within the Ag-2 General Agriculture district; Sites 3 and 4 are zoned Ag-1 Restricted Agriculture and Ag-2; and Site 5 is zoned Country and Ag-2. A public school would be permitted as a principal use within each of the zoning districts, and each site would be subject to Site Plan Review. If the site is also within the State Agricultural District (as are Sites 2, 3, 4, and 6), the Site Plan Review approval would be contingent upon approval of the Special Use Permit.

F. 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. None of the five candidate sites are located within the SMA and a Special Management Area Permit from the City and County of Honolulu is not required.

CHAPTER VI
Evaluation of
Candidate Sites

VI. EVALUATION OF CANDIDATE SITES

Five candidate sites were selected after having met the DOE minimum criteria for school sites. This chapter contains the evaluation of these sites against the physical criteria, community criteria, and cost considerations described in Appendix A. Each candidate site is assigned a rating of "good," "fair," or "poor" for physical and community criteria, and dollar amount estimates are made for cost considerations. Evaluation Summary Tables are provided in section C of this chapter so the relative merits of each site can be easily compared. The various criteria are not necessarily weighted equally by the DOE, and are described to afford the DOE as much information as possible from which to make a site selection. These ratings, descriptions, and cost estimates are intended for use as a basis for discussing the relative advantages and disadvantages of each site. The evaluation is for comparison purposes only, and no attempt is made in this document to recommend a particular site.

A. PHYSICAL CRITERIA AND COMMUNITY CRITERIA

In evaluating each site against the physical and community criteria described in Appendix A, it was found that for several criteria, all the sites had the same rating. Therefore, these criteria are described below and are not included in the individual evaluations and ratings for each site as they have no impact on the ultimate comparison of ratings.

Slope

All of the candidate sites have an average slope of three percent or less and are therefore rated "Good."

Roadways

Kaukai Road, a one-lane private roadway with a 30-foot right-of-way, is the only roadway directly serving Site 2. Access to Kaukai is via Hakimo Road which has a 40-foot right-of-way and a two-lane, asphaltic concrete (a.c.) paved area 15 to 20 feet wide. The posted speed limit on Hakimo Road is 20 miles per hour. Its shoulders are unpaved and vary between 5 and 10 feet, and there are no existing walkways along Hakimo Road.

All three roadways serving Site 3 (Hakimo Road, Ulehawa Road, and Kapiki Road) would require widening and other improvements, and all have insufficient rights-of-way. Ulehawa Road and Kapiki Road are privately owned.

Site 4 is served by Hakimo Road and Paakea Road, neither of which is adequate to serve the school, and both have insufficient rights-of-way. The section of Paakea Road which is adjacent to Site 4 is privately owned and maintained, and is not open to through traffic

Sites 5 and 6 are served by Lualualei Naval Road. This road has a 60-foot right-of-way which would accommodate the improvements necessary to serve a school. The road is presently owned and maintained by the U.S. Navy, and permission to use the road for a school would be required. However, the Navy wants to dedicate the road to the City and County of Honolulu or the State of Hawaii. There is also an undeveloped, 30-foot-wide State road easement from Farrington Highway, through Site 5, to the makai boundary of Site 6.

Due to the road characteristics described above, all sites rate "Poor."

Power and Communication

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 receive a "Good" rating.

Pedestrian Safety

There are no existing paved shoulders or walkways along any of the candidate sites that are adequate for the proposed school use. However, shoulders and walkways would be installed with necessary road improvements at each site. As a result, each site rates "Fair" for this criterion.

Public Bus Service

Public bus service on Farrington Highway operates with intervals of 30 minutes or less. However, Sites 2, 3, and 4 are 3,000 feet, one mile, and 1-1/4 miles, respectively, from Farrington Highway. Limited public bus service on Hakimo Road (one-hour intervals) is available to Sites 2, 3, and 4. Sites 5 and 6 are within one-half mile of the public bus line along Farrington Highway, but there is no public bus service along Lualualei Naval Access Road. All sites rate "Fair."

Rainfall

The median annual rainfall of all sites is approximately 20 inches. Therefore, covered walkways and playcourts are not required. All sites are rated "Good."

Highway Noise

All five candidate sites are located more than 500 feet from Farrington Highway and rate "Good" in terms of highway noise impacts on the sites.

Aircraft Noise

The candidate sites are over 15 miles from Honolulu International Airport and Hickam Air Force Base and 8 miles from Barbers Point Naval Air Station, thus receive a "Good" rating for this criterion.

Industrial and Agricultural Nuisances

Although the agriculture-zoned lands surrounding Sites 2, 3, and 4 are primarily residential in use, there is considerable agricultural activity in the Hakimo area, including crop and livestock operations (swine and poultry). Sites 5 and 6 are located near the entrance to an existing landfill, which is used by approximately 200 trucks per day. Noise, dust, odors, and other nuisances associated with these surrounding uses may cause discomfort and hamper school activities at each of the candidate sites. Therefore, all are rated "Poor."

Wetlands

None of the candidate sites are known to contain wetland or have vegetation indicating the presence of wetlands, and are rated "Good."

City and County Zoning

A public school is a permitted use on all five candidate sites. Since all of the sites are entirely or partially within the Ag-2 General Agriculture zoning district, the school use is subject to the Site Plan Review process. As a result, each site rates "Fair."

Special Management Area

None of the candidate sites is located within the Special Management Area and therefore all rated "Good" for this criterion.

Interference with Institutions

No residents of hospitals, rest homes, or other institutions will be impacted by school activities at any candidate site. Each site rates "Good."

EVALUATION OF SITE 2 - Kaukai Road (Refer to Exhibit IV-1)

PHYSICAL CRITERIA

Size

Site 2 consists of one 2.0-acre parcel (TMK 8-7-22:1), and a 10-acre portion of a 138.07-acre parcel (TMK 8-7-9:3). The entire site would be 12 acres.

Rating: Good

Shape

The site is rectangular with an average length to width ratio of 1.6:1.0.

Rating: Good

Soil and Foundation Characteristics

The western one-third of the site consists of Lualualei clay soils, which have more than five-foot depth to bedrock, high shrink-swell potential, low shear strength and slow permeability. The remainder of the site has Mamala stony silty clay loam soils which have a shallow depth of 12 to 18 inches, low shrink-swell potential, and moderate permeability.

Rating: Poor

Aesthetic Qualities

Site 2 is located near the top of a rock cliff surrounding an old quarry site. As a result, the site has some view of Nanakuli and the Nanakuli shoreline. The site itself contains no attractive natural features.

Rating: Fair

Water

The existing 8-inch water main located along Kaukai Road can only provide a flow of 1,500 gpm to the site. Fire protection standards require a minimum flow of 2,000 gpm. The nearest fire hydrant along Kaukai Road is approximately 550 feet from Site 2.

Rating: Poor

Sewer

The existing sewer line on Hakimo Road is over 2,000 feet from the site, resulting in a "Poor" rating. According to the Department of Wastewater Management, it may be possible to connect to existing sewer lines located in Laiku Street, 200 feet makai of the site. However, due to the ongoing residential construction on Laiku Street, the acquisition of an easement across the DHHL residential lease lots is unlikely. An alternative would be to connect Site 2 to a sewer line in Farrington Highway via an easement within the City's Ulehawa drainage channel right-of-way. The off-site distance for this connection would be approximately 1,800 feet. The City DPW has indicated that this joint use of the right-of-way is possible.

Rating: Poor

Drainage

The site is adjacent to Ulehawa Stream, the major drainageway in the area, but is not within a floodway or flood zone. An on-site drainage system could outfall at the stream, eliminating the need for off-site drainage improvements.

Rating: Fair

Pedestrian Access

Presently, pedestrian access to the site is restricted to where Kaukai Road meets the site. However, discussions with the City and County indicate that it may be possible to utilize a portion of the Ulehawa drainage channel right-of-way. Fifteen feet of the 25-foot distance between the top of the channel and the Waianae-side boundary is needed as a maintenance road. This leaves an additional ten feet for a potential pedestrian connection between DHHL's subdivision and Site 2. Another alternative is to acquire an easement across private lease lots within the subdivision.

Rating: Poor

Vehicular Circulation

Site 2 is served by one dead-end street. A dead-end extension of Laiku Street from the DHHL property makai of the site could provide an additional access point, however correspondence from DHHL indicates that vehicular access from Laiku Street would not be provided through their property.

Rating: Poor

Vehicular Safety

Access to Site 2 is via Kaukai Road, a dead-end street.

Rating: Poor

Commercial Attractions

Site 2 is over 1/2 mile from commercial establishments on Farrington Highway.

Rating: Good

COMMUNITY CRITERIA

State Land Use District

Site 2 is within the State Agricultural District and is adjacent to Urban District lands on the makai side.

Rating: Fair

City and County Development Plan

The site is designated Agriculture on the DP Land Use Map.

Rating: Poor

Land Ownership

There are two individual land owners associated with Site 2.

Rating: Fair

Existing Use

Approximately 10 acres of Site 2 are currently vacant and unused. The remaining two acre portion of the site is a pig farm with one residence.

Rating: Poor

Displacement

Acquisition of Site 2 will require relocation of one family and farm.

Rating: Poor

Agricultural Lands

Site 2 has a very poor productivity rating: E.

Rating: Good

Location

Site 2 is within reasonable walking distance (one mile) of 50% of the students to be served by the school.

Rating: Fair

Scenic Value

The site is not an aesthetic asset to the community and does not offer scenic vistas to the general public.

Rating: Good

EVALUATION OF SITE 3 - Ulehawa and Kapiki Roads (Exhibit IV-2)

PHYSICAL CRITERIA

Size

Site 3 consists of three five-acre parcels, totalling 15 acres (TMK 8-7-21:14, 17, and 18). This acreage exceeds the 12-acre requirement by more than ten percent.

Rating: Poor

Shape

The site is L-shaped, and each rectangular "leg" consists of ten acres (80% of the desired school site). The length to width ratio of the legs are 1.8:1.0 (north-south) and 2.2:1.0 (east-west).

Rating: Fair

Soil and Foundation Characteristics

The soils on Site 3 consist of Lualualei clay and Mamala stony silty clay loam. Lualualei clay soils are restrictive to development as they have high shrink-swell potential, low shear strength, and slow permeability. Furthermore, a portion of Site 3 was illegally mined for coral during the late 1980s. The resulting pit was subsequently filled, but the degree of compaction and suitability for construction is unknown.

Rating: Poor

Aesthetic Qualities

The site lacks attractive natural characteristics, and has an unobstructed view of the existing cement plant from the Kapiki Road side of the property.

Rating: Poor

Water

A 20-inch and 6-inch water main are located along Hakimo Road fronting Site 3. Eight-inch water lines are located along both Ulehawa Road and Kapiki Road. All existing water mains are adequate to serve the site. Existing fire hydrants are located on three sides of the property.

Rating: Good

Sewer

Site 3 is over 2,000 feet from an existing 8-inch sewer main along lower Hakimo Road.

Rating: Poor

Drainage

On-site and off-site drainage facilities may be required to handle stormwater runoff from the site.

Rating: Poor

Pedestrian Access

Pedestrian access could be provided along three sides of the site.

Rating: Good

Vehicular Circulation

Site 3 is adjacent to one through street and two dead-end streets.

Rating: Fair

Vehicular Safety

The main access would be from Hakimo Road, which requires improvements to safely handle the school traffic.

Rating: Fair

Commercial Attractions

The site is more than 1/2 mile from any commercial establishments.

Rating: Good

COMMUNITY CRITERIA

State Land Use District

The site is within the State Agriculture District and is not adjacent to the Urban District.

Rating: Poor

City and County Development Plan

The site is designated Agriculture on the DP Land Use Map.

Rating: Poor

Land Ownership

There are three landowners associated with Site 3, one for each parcel.

Rating: Poor

Existing Use

The 5-acre parcel along Hakimo Road is currently vacant and unused. The remaining two parcels contain numerous residential dwelling units.

Rating: Poor

Displacement

Development of Site 3 would require relocating more than five families.

Rating: Poor

Agricultural Lands

The Land Study Bureau has rated a portion of Site 3 as "E", very poor productivity, and a portion is designated U, indicating urban-type development.

Rating: Good

Location

Site 3 is within reasonable walking distance of approximately 40% of the students to be served by the school.

Rating: Poor

Scenic Value

The site is not an aesthetic asset to the community and development would not obstruct scenic vistas.

Rating: Good

EVALUATION OF SITE 4 - Paakea Road (Refer to Exhibit IV-3)

PHYSICAL CRITERIA

Size

Site 4 consists of three parcels totalling 14.74 acres. However, 1.53 acres of the site are located in the Ulehawa Stream floodway and flood zone, leaving 13.47 useable acres. This acreage still exceeds the 12-acre requirement by more than 10 percent. The parcels of Site 4 are identified as TMK 8-7-21:1, 2, and 38.

Rating: Poor

Shape

The site is rectangular with a length to width ratio of 1.8:1.0

Rating: Fair

Soil and Foundation Characteristics

Lualualei clay soils cover Site 4. These soils have a depth of over five feet to bedrock, high shrink-swell potential, low shear strength, and slow permeability.

Rating: Poor

Aesthetic Qualities

The site lacks attractive natural characteristics and is adjacent to industrial-zoned land containing a cement plant. The cement plant structures are visually dominating from the site.

Rating: Poor

Water

A 20-inch water main and 6-inch water main are located along Hakimo Road fronting the site, as well as two fire hydrants.

Rating: Good

Sewer

Site 4 is over 2,000 feet from any existing sewer lines.

Rating: Poor

Drainage

The site may require on-site drainage facilities, but may avoid the need for off-site improvements by directing stormwater into Ulehawa Stream which is adjacent to the site.

Rating: Fair

Pedestrian Access

Pedestrian access can be provided along two sides of the site.

Rating: Fair

Vehicular Circulation

Hakimo Road is a through street. Paakea Road is currently a dead-end street, terminating at the cement plant site, however a road easement continues to Lualualei Naval Road.

Rating: Fair

Vehicular Safety

Hakimo Road, a collector street serving the site, requires improvements to safely handle school-related traffic.

Rating: Fair

Commercial Attractions

The site is well over one mile from any commercial establishments.

Rating: Good

COMMUNITY CRITERIA

State Land Use District

The site is within the State Agricultural District and is adjacent to the Urban District on the eastern boundary.

Rating: Fair

City and County Development Plan

The site is designated Agriculture on the DP Land Use Map.

Rating: Poor

Land Ownership

Site 4 is owned by three individuals.

Rating: Poor

Existing Use

Existing uses on the site include residential and agricultural.

Rating: Poor

Displacement

There are farms and at least four dwelling units on the site, the residents of which must be relocated.

Rating: Poor

Agricultural Lands

The western half of the site has a good productivity rating (B) with irrigation, and very poor (E) without irrigation. The eastern half of the site is rated very poor (E).

Rating: Poor

Location

Site 4 is within reasonable walking distance of approximately 10% of the students to be served by the school.

Rating: Poor

Scenic Value

The site is not an aesthetic asset to the community and development would not obstruct scenic vistas.

Rating: Good

EVALUATION OF SITE 5 - Lualualei

(Refer to Exhibit IV-4)

PHYSICAL CRITERIA

Size

Site 5 consists of a portion of TMK 8-7-8: parcels 76 and 77, and a State-owned road easement between them. The school site would be 12 acres.

Rating: Good

Shape

The site is rectangular with an average length to width ratio of 1.9:1.0.

Rating: Fair

Soil and Foundation Characteristics

The upper half of Site 5 consists of Mamala stony silty clay loam soils which have a shallow depth of 12 to 18 inches, low shrink-swell potential, and moderate permeability. The lower half of the site is a coral outcrop, basically lacking soil cover.

Rating: Fair

Aesthetic Qualities

The site contains no attractive natural features, however, aesthetic value can be developed through appropriate site design and landscaping.

Rating: Fair

Water

There are no existing water lines along Lualualei Naval Road. Water supply to the school would be from an existing eight-inch water main along Mohihi Street, immediately across Lualualei Navy Road. A fire hydrant along the site would be required.

Rating: Fair

Sewer

There are no existing sewer lines along Lualualei Naval Road. Eight-inch sewer mains do exist along Mohihi Street and others in the residential development across Lualualei from the site, however, the existing lines do not have the capacity to serve the proposed school, and would require upsizing or installation of a parallel 8-inch main. Another alternative is

the installation of an 8-inch sewer main along Lualualei Naval Road or the unnamed road easement from the site to the existing 30-inch Nanakuli interceptor sewer located along Farrington Highway, 1,300 feet south of the site.

Rating: Fair

Drainage

There are no on- or off-site drainage facilities near the site, however on- and off-site improvements could be installed, connecting to the existing drainage channel 800 feet south of the site.

Rating: Poor

Pedestrian Access

Pedestrian access will be available along one side of the site and potentially from the road easement which extends through the site from Farrington Highway. There is also a pedestrian greenbelt through the housing development west of the site which could provide pedestrian access.

Rating: Fair

Vehicular Circulation

The site is served only by Lualualei Naval Road, a street that dead-ends at the Naval Reservation, and a State road easement which extends through the site from Farrington Highway.

Rating: Poor

Vehicular Safety

Access to the site is via a collector street which requires improvements to handle school-related traffic.

Rating: Fair

Commercial Attractions

Site 5 is less than 1/4 mile from a shopping center on Farrington Highway containing a bowling alley, fast food restaurant, and theater.

Rating: Poor

COMMUNITY CRITERIA

State Land Use District

Site 5 is within the State Urban District.

Rating: Good

City and County Development Plan

The site is designated Residential on the DP Land Use Map.

Rating: Fair

Land Ownership

The site is comprised of two parcels, each with a single private landowner, and a road easement owned by the State. Parcel 77 (adjacent to Lualualei Naval Road) has been the subject of a land ownership dispute between the State and DHHL. A settlement agreement was approved December 1, 1994 by the Task Force on DHHL Land Title and Related Claims and the Hawaiian Homes Commission. The agreement proposal will be presented to the 1995 State Legislature for action. Action by the Legislature will determine the impact of the claim on a school development and its timetable. Once an agreement is finalized, the privately-owned land will be clear of restrictions.

Rating: Poor

Existing Use

The parcel along Lualualei Naval Road contains numerous housing units, not all of which are within the area delineated as Site 5. The road easement and the western parcel are presently vacant and unused.

Rating: Poor

Displacement

Approximately ten families would be displaced as a result of the proposed project.

Rating: Poor

Agricultural Lands

The entire site has very poor productivity: E.

Rating: Good

Location

Site 5 is within reasonable walking distance of approximately 40% of the students to be served by the school.

Rating: Poor

Scenic Value

The site is not an aesthetic asset to the community and development would not obstruct scenic vistas.

Rating: Good

EVALUATION OF SITE 6 - PVT Site

(Exhibit IV-5)

PHYSICAL CRITERIA

Size

Site 6 consists of a portion of TMK 8-7-9: parcel 7, and is 12 acres in size.

Rating: Good

Shape

The site has an average length to width ratio of 1.0:1.0 as presently delineated. Although the shape is somewhat irregular, this is conceptual in nature and could be refined or modified to accommodate the school facilities layout.

Rating: Good

Soil and Foundation Characteristics

Site 6 consists of Mamala stony silty clay loam soils which contain hard coral at a depth of less than 20 inches. This soil type has low shrink-swell potential and moderate permeability.

Rating: Fair

Aesthetic Qualities

The site consists of grasses, haole koa shrubs, and rocks. It has an expansive view of the landfill across the road, and a limited view of the ocean. Aesthetic value can be developed with appropriate site design and landscaping.

Rating: Fair

Water

There are no existing water lines along Lualualei Naval Road. Service to the site would be from an eight-inch water main along Mohihi Street, 300 feet southwest of the site, across Lualualei Navy Road. There are no existing fire hydrants near the site.

Rating: Poor

Sewer

There are no existing sewer lines along Lualualei Naval Road. Eight-inch sewer mains do exist along Mohihi Street and others in the residential area immediately southwest of the site, across Lualualei Naval Road. However, the existing lines do not have the capacity to serve the proposed school, and would require upsizing or installation of a parallel 8-inch main. More practical would be the installation of an 8-inch sewer main along Lualualei Naval Road from the site to the existing 30-inch Nanakuli interceptor sewer located along Farrington Highway, 2,000 feet south of the site.

Rating: Fair

Drainage

There are no existing drainage facilities on or off the site and drainage improvements will be required.

Rating: Poor

Pedestrian Access

Pedestrian access will be available on one side of the site.

Rating: Poor

Vehicular Circulation

The site is served only by Lualualei Naval Road, a street that dead-ends at the Naval Reservation, and a State road easement which terminates at the site from Farrington Highway.

Rating: Poor

Vehicular Safety

Access to the site is via a collector street which requires improvements to handle school-related traffic.

Rating: Fair

Commercial Attractions

Site 6 is just over 1/4 mile from a shopping center on Farrington Highway. Since Sites 5 and 6 are adjacent to each other, the slight difference in distance to the commercial area does not warrant different ratings. Therefore, Site 6 is rated the same as Site 5.

Rating: Poor

COMMUNITY CRITERIA

State Land Use District

Site 6 is within the State Agricultural District and is adjacent to Urban District lands to the south and west.

Rating: Fair

City and County Development Plan

The site is designated Agriculture on the DP Land Use Map.

Rating: Poor

Land Ownership

The site is owned by one private landowner.

Rating: Fair

Existing Use

Site 6 is presently vacant and unused.

Rating: Good

Displacement

No families, businesses, or farms would be displaced as a result of the proposed project.

Rating: Good

Agricultural Lands

The entire site has very poor productivity: E.

Rating: Good

Location

Site 6 is within reasonable walking distance of approximately 40% of the students to be served by the school.

Rating: Poor

Scenic Value

The open space of the site has some aesthetic value that would be partially lost by the development of the project.

Rating: Fair

B. COST EVALUATION

To further assess the relative merits of each of the candidate sites, a comparison of the costs associated with site acquisition and development, and facility operation are presented. Cost estimates are made for land acquisition, on-site improvements, off-site improvements, and busing subsidies. Since the purpose of this section is to permit comparison of the sites, cost estimates for factors which are approximately equal for all sites are not included. A summary of the site cost estimates is included in Section C of this chapter, Evaluation Summary Tables.

These cost estimates are provided as a guide for comparison purposes only and will require refinement based on a detailed analysis once a final site is selected. The figures presented below have been prepared to a standard of accuracy which is considered sufficient to satisfy the purpose of this Site Selection Study. No claim is made as to the suitability of these figures for determining actual expenditure requirements.

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. By State statute, the cost of land for a State funded project cannot exceed the property's appraisal value.

Comparative land and improvement values are based on the City and County of Honolulu, Department of Finance, Real Property Assessment Division 1993 assessed values. These estimates are for comparison purposes only and are not assumed to accurately reflect the current market value of the site. Actual acquisition costs will be determined by land appraiser reports done for the State Department

of Land and Natural Resources or by the courts in condemnation proceedings if an agreement cannot be reached.

One of the five candidate sites (Site 5) is zoned for urban use which is generally assessed at a much higher rate than agricultural land. Since a school would be an urban use, and the four agriculture-zoned sites are in close proximity to urban uses, it is anticipated that actual acquisition costs would be higher than the assessed values. In spite of these inconsistencies, assessed values are provided as a means of comparing one aspect of the costs associated with the sites.

For comparison purposes, the assessed value of each parcel or parcels on which a potential school site 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 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 1993 assessed value for all improvements on each site is used as the improvement value for each site.

The occupant relocation and replacement housing costs associated with four 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. According to the 1992 State of Hawaii Data Book, the mean farm self-employment income (for households) on Oahu in 1990 was \$8,272. For the purposes of this study, the relocation cost attributed to an existing farm on a candidate site is rounded to \$8,500.

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. Tax office records indicate that only one owner occupant would possibly be displaced by the project, and the worst-case figure of \$15,000 is used for estimating the replacement housing payment. A replacement housing payment of \$4,000 is used for tenant occupants that would be displaced.

Site 2

TMK 8-7-22:1 2.0 acres
 Assessed Value: \$104,700
 Per acre value: \$52,350

TMK 8-7-9:3 138.07 acres
 Assessed Value: \$7,538,200
 Per acre value: \$54,600⁸

Comparative Land Value: 2 ac. x \$52,350
 10 ac. x \$54,600

	\$650,700
Improvement Value:	15,700
Relocation Cost: 1 farm	15,000
Replacement Housing Cost: 1 tenant	<u>4,000</u>
	\$685,400

Site 3

TMK 8-7-21:14,17, and 18 5.0 acres each
 Assessed Value: \$420,000 each
 Per acre value: \$84,000

Comparative Land Value: 15 ac. x \$84,000 =	\$1,260,000
Improvement Value:	235,700
Relocation Cost: 8 houses x \$500 =	4,000
Replacement Housing Cost: 8 tenants x \$4,000 =	<u>32,000</u>
	\$1,531,700

⁸The landowner of TMK 8-7-9:3 is willing to sell its 10-acre portion of Site 2 to the State for \$250,000, or \$25,000 per acre. Refer to the Ching, Yuen and Morikawa letter in Appendix E.

Site 4

TMK 8-7-21:1 5.19 acres
Assessed Value: \$112,700
Per acre value: \$21,715

TMK 8-7-21:2 4.78 acres
Assessed Value: \$117,400
Per acre value: \$24,560

TMK 8-7-21:38 4.77 acres
Assessed Value: \$120,000
Per acre value: \$25,160

Comparative Land Value:	\$350,100
Improvement Value:	270,500
Relocation Cost: 3 farms x \$15,000	45,000
4 houses x \$500 =	2,000
Replacement Housing Cost: 3 tenants x \$4,000 =	12,000
1 owner occupant	15,000
	<u>15,000</u>
	\$694,600

Site 5

TMK 8-7-8:76 12.388 acres
Assessed Value: \$1,179,300
Per acre value: \$95,200⁹

TMK 8-7-8:77 18.222 acres
Assessed Value: \$1,246,400
Per acre value: \$68,400

Road Easement (No TMK) 0.4 acre
Per acre value: \$81,800¹⁰

Comparative Land Value: Parcel 76: 5.1 ac. x \$95,200	
Parcel 77: 6.5 ac. x \$68,400	
Road Easement: .4 ac. x \$81,800	
	<u>\$962,840</u>
Improvement Value: 10 houses x \$9,232 ¹¹ =	92,320
Relocation Cost: 10 houses x \$500 =	5,000
Replacement Housing Cost: 10 tenants x \$4,000 =	40,000
	<u>40,000</u>
	\$1,100,160

⁹The landowner has indicated that their recent purchase price reflects a per acre value of \$167,000. This value could impact the appraisal of parcel 77 also.

¹⁰This land value is based on the average per-acre value of parcels 76 and 77.

¹¹Tax office records show 22 buildings on parcel 77 with a total 1993 value of \$203,100. The average value per building is \$9,232. This figure is multiplied by the number of buildings potentially impacted by the school site to determine the improvement value.

Site 6

TMK 8-7-9:7 179.109 acres
Assessed Value: \$4,764,300
Per acre value: \$26,600¹²

Comparative Land Value: 12 ac. x \$26,600 =	\$319,200
Improvement Value:	0
Relocation Cost	<u>0</u>
	\$319,200

2. **On-Site Improvements**

This section provides a comparison of the costs to provide the improvements required within the boundaries of the school site. Since the purpose of the evaluation is cost comparison between the sites, only those costs that are substantially different for different sites are included. Costs associated with construction of school buildings, play areas, internal accessways, and other standard school facilities will be approximately the same for each candidate site. Fine grading, topsoil import, landscaping, and most on-site utility costs are also considered approximately equal for all sites.

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. An approximate cost for clearing, grubbing, and hauling of site vegetation is \$5,000 per acre. Each dwelling unit or building is estimated to cost \$5,000 to demolish and dispose of.

Site 2

Clear and Grub	12 acres x	\$5,000 =	\$60,000
Demolish Building	1 building x	\$5,000 =	<u>5,000</u>
			\$65,000

¹²The landowner has emphasized that Site 6 is a 12-acre portion of a 179-acre parcel, much of which is characterized by steeper slopes. According to the landowner, Site 6 is within the 40 prime useable acres of the parcel and will command a higher per-acre value than the remainder of the property.

Site 3			
Clear and Grub	15 acres x	\$5,000 =	\$75,000
Demolish Buildings	8 buildings x	5,000 =	<u>40,000</u>
			\$115,000
Site 4			
Clear and Grub	14.74 acres x	\$5,000 =	\$73,700
Demolish Buildings	5 buildings x	5,000 =	<u>25,000</u>
			\$98,700
Site 5			
Clear and Grub	12 acres x	\$5,000 =	\$60,000
Demolish Buildings	10 buildings x	5,000 =	<u>50,000</u>
			\$110,000
Site 6			
Clear and Grub	12 acres x	\$5,000 =	\$60,000

Rough Grading

All of the candidate sites have similar slope conditions and require approximately equal amounts of rough grading. Site 5, however, would require that the 3.8 acre area within the tsunami inundation zone be filled to provide useable area outside the tsunami zone.

Site 5

3.8 acres x 12 feet of fill = 73,568 cubic yards (c.y.) x \$10/c.y. = \$735,680

Wastewater Disposal (on-site)

As discussed in the Candidate Sites Evaluation section of this chapter, Sites 5 and 6 could connect to the public sewer system at less cost than the development of an on-site wastewater system such as a septic system. Site 2 could possibly connect to the public sewer line in the DHHL residential project makai of the site if a sewer easement were established, or could possibly connect to the sewer line along Farrington Highway if an easement along Ulehawa drainage channel could be established with the City. Since these are unknown factors at this time, Site 2, along with Sites 3 and 4, is considered to require an on-site wastewater system for purposes of this cost evaluation.

Sites 2, 3, and 4

Septic System (cost per site) \$225,000

Drainage (on-site)

All of the sites will require on-site drainage improvements to handle storm runoff. Sites 2 and 4 will be able to direct excess runoff directly to Ulehawa Stream, thereby eliminating the need for on-site retention areas. Sites 3, 5, and 6, do not have direct access to an existing drainage channel and will need to provide on-site retention improvements.

Sites 3, 5, and 6

Retention Basin (cost per site) \$50,000

3. **Off-Site Improvements**

Roadways

The City and County of Honolulu has indicated that a standard, fully improved through street would require a 56-foot right-of-way (R-O-W), and a standard, fully improved dead-end street would require a 44-foot right-of-way. Only Sites 5 and 6 are accessible from an existing road with adequate right-of-way, as Lualualei Naval Road has a 60-foot right-of-way. However, Lualualei Naval Road is owned by the federal government, and conveyance of ownership to the City and County or State would be required. Although there may be a nominal cost involved in accordance with federal regulations, no cost for the transfer of ownership is attributed to Sites 5 and 6 in this document.

Right-of-way purchase would be required to provide adequate access to Sites 2 through 4. Sites 2, 3, and 4 would also require acquisition of private roadways which would potentially service the school. Road improvements, such as road widening, sidewalks, curb and gutter, relocation of utility lines, etc. would be required for all sites. Cost estimates for roadway improvements, acquisition of private roads, and additional right-of-way acquisition are provided below.¹³ These costs are for comparison purposes only.

¹³Costs for the acquisition of private roads and additional rights-of-way are based on an average per-acre cost of parcels abutting the respective roads. Costs for potential safety measures, such as traffic control signs or signals, pedestrian overpasses, etc., are not included in this estimate as site-specific requirements have not been identified.

Site 2

Purchase R-O-W along Hakimo		\$261,600
Improve Hakimo Road from Farrington Highway to Kaukai Road	2,750 l.f. x \$200 =	550,000
Acquire Kaukai Road		50,700
Additional R-O-W along Kaukai Road.		24,100
Improve Kaukai Road	900 l.f. x \$200 =	180,000
Acquire R-O-W from Laiku Street to site		19,000
Extend Laiku Street to site	200 l.f. x \$300 =	<u>60,000</u>
		\$1,145,400

Site 3

Acquire R-O-W along Hakimo Road		\$316,000
Improve Hakimo Road from Farrington to Kapiki Road 4,600 l.f. x \$200 =		920,000
Acquire Ulehawa Road		114,750
Acquire R-O-W along Ulehawa Road.		24,000
Improve Ulehawa Road	1000 l.f. x \$200 =	200,000
Acquire Kapiki Road		128,140
Acquire R-O-W along Kapiki Road		27,520
Improve Kapiki Road	1000 l.f. x \$200 =	<u>200,000</u>
		\$1,930,410

Site 4

Acquire R-O-W along Hakimo Road		\$406,400
Improve Hakimo Road from Farrington to Paakea Road	7,700 l.f. x \$200 =	\$1,540,000
Acquire Paakea Road		\$34,140
Acquire R-O-W along Paakea Road		\$2,010
Improve Paakea Road along site	1000 l.f. x \$200 =	<u>\$200,000</u>
		\$2,181,550

Site 5

Improve Lualualei Naval Road from Farrington Highway to and along site	1,750 l.f. x \$200 =	\$350,000
Acquire R-O-W along 30' road easement		32,720
Construct New Road within existing easement from Farrington Hwy. to and along site	1,250 l.f. x \$300 =	<u>375,000</u>
		\$757,720

Site 6

Improve Lualualei Naval Road from Farrington Highway to and along site	2,550 l.f. x \$200 =	\$510,000
Acquire R-O-W along 30' road easement		47,450
Construct New Road within existing easement from Farrington Highway to site	1,800 l.f. x \$300 =	<u>540,000</u>
		\$1,097,450

Water

Sites 3 and 4 have adequate existing water mains adjacent to each site which can meet the ultimate water requirements for the school development, including fire protection requirements. No off-site water system costs are allocated to these sites. The remaining candidate sites will require the following water system improvements:

Site 2

Install a 12-inch water main along Kaukai Road from Hakimo Road to the site.	900 l.f. x \$200 =	\$180,000
Install a fire hydrant within 125 feet of the site =		<u>15,000</u>
		\$195,000

Site 5

Extend 8-inch water main across Lualualei Naval Road, from Mohihi Street to the site	60 l.f. x \$175 =	\$10,500
Install a fire hydrant within 125 feet of the site =		<u>15,000</u>
		\$25,500

Site 6

Extend 8-inch water main across Lualualei Naval Road from Mohihi Street to the site.	250 l.f. x \$175 =	\$43,750
Install a fire hydrant within 125 feet of the site =		<u>15,000</u>
		\$58,750

Sewer (off-site)

Sites 2, 3 and 4 will require individual on-site wastewater systems due to their distance from existing public sewer lines. Only candidate sites 5 and 6 will require off-site sewer improvements as described below:

Site 5

Install an 8-inch sewer line along Lualualei Naval Road from the 30-inch interceptor sewer on Farrington Highway to the site.
1,300 l.f. x \$120 = \$156,000

Site 6

Install an 8-inch sewer line along Lualualei Naval Road from the 30-inch interceptor sewer on Farrington Highway to the site.
1,800 l.f. x \$120 = \$216,000

4. **Bus Subsidy Costs**

An allowance for bus transportation is provided by the State for students residing more than one mile walking distance from the school. Bus subsidy costs for each candidate school site are based on the estimated number of students who would qualify for the subsidy and the amount of subsidy per bus.

Based on DAGS, Central Services Division figures, a subsidy rate of \$150 per bus per day is assumed for purposes of this comparison. Each bus has a maximum of 50 students and each bus is assumed to make two trips in each direction per day. Student enrollment is assumed to be 500 in 1998, 650 in 1999, and 775 in years 2000 to 2010, based on school construction increments. There are typically 180 days per school year.

Site 2

<u>Year</u>	<u>Enrollment</u>	<u># Students Qualified (50%)</u>	<u>Buses Daily</u>	<u>Annual Subsidy</u>
1998	500	250	3	\$ 81,000
1999	650	325	4	\$108,000
2000-2010	775	388	4	\$108,000
TOTAL BUS SUBSIDY (Site 2)				\$1,377,000

Site 3

<u>Year</u>	<u>Enrollment</u>	<u># Students Qualified (60%)</u>	<u>Buses Daily</u>	<u>Annual Subsidy</u>
1998	500	300	3	\$ 81,000
1999	650	390	4	\$108,000
2000-2010	775	465	5	\$135,000
TOTAL BUS SUBSIDY (Site 3)				\$1,674,000

Site 4

<u>Year</u>	<u>Enrollment</u>	<u># Students Qualified (90%)</u>	<u>Buses Daily</u>	<u>Annual Subsidy</u>
1998	500	450	5	\$135,000
1999	650	585	6	\$162,000
2000-2010	775	698	7	\$189,000
TOTAL BUS SUBSIDY (Site 4)				\$2,376,000

Sites 5 and 6

<u>Year</u>	<u>Enrollment</u>	<u># Students Qualified (60%)</u>	<u>Buses Daily</u>	<u>Annual Subsidy</u>
1998	500	300	3	\$ 81,000
1999	650	390	4	\$108,000
2000-2010	775	465	5	\$135,000
TOTAL BUS SUBSIDY (Sites 5 & 6)				\$1,674,000

C. 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, and Bus Subsidy Costs.

The following criteria are not included in the tables since, for each individual criterion, all sites had the same rating. These are summarized below:

<u>Physical Criteria</u>	<u>Rating</u>	
Slope	Good	+
Roadways	Poor	-
Power and Communication	Good	+
Pedestrian Safety	Fair	o
Public Bus Service	Fair	o
Rainfall	Good	+
Highway Noise	Good	+
Aircraft Noise	Good	+
Industrial & Agricultural Nuisances	Poor	-
Wetlands	Good	+
<u>Community Criteria</u>		
Zoning	Fair	o
Special Management Area	Good	+
Interference with Institutions	Good	+

**PHYSICAL AND COMMUNITY CRITERIA
SUMMARY EVALUATION TABLE**

CRITERIA	CANDIDATE SITES				
	2	3	4	5	6
PHYSICAL CRITERIA					
SITE CHARACTERISTICS					
Size	+	-	-	+	+
Shape	0	0	0	0	+
Soils & Foundation	-	-	-	0	0
Aesthetic Qualities	0	-	-	0	0
ROADS AND UTILITIES					
Water	-	+	+	0	-
Sewer	-	-	-	0	0
Drainage	0	-	0	-	-
ACCESSIBILITY & SAFETY					
Pedestrian Access	-	+	0	0	-
Vehicular Circulation	-	0	0	-	-
Vehicular Safety	-	0	0	0	0
ENVIRONMENT					
Commercial Attractions	+	+	+	-	-
TOTAL PHYSICAL CRITERIA					
Good +	2	3	2	1	2
Fair o	3	3	5	7	4
Poor -	6	5	4	3	5

CRITERIA	CANDIDATE SITES				
	2	3	4	5	6
COMMUNITY CRITERIA					
GOVERNMENT					
State Land Use	0	-	0	+	0
Development Plan	-	-	-	0	-
COMMUNITY EFFECTS					
Land Ownership	0	-	-	-	0
Existing Use	-	-	-	-	+
Displacement	-	-	-	-	+
Agricultural Lands	+	+	-	+	+
Location	0	-	-	-	-
Scenic Value	+	+	+	+	0
TOTAL COMMUNITY CRITERIA					
Good +	2	2	1	3	3
Fair o	3	0	1	1	3
Poor -	3	6	6	4	2
GRAND TOTAL					
Good +	4	5	3	4	5
Fair o	6	3	6	8	7
Poor -	9	11	10	7	7

**COST CONSIDERATIONS
SUMMARY EVALUATION (IN DOLLARS)**

	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6
LAND ACQUISITION					
Land Value	\$650,700	\$1,260,000	\$350,100	\$962,840	\$319,200
Improvements	\$ 15,700	\$235,700	\$270,500	\$92,320	-0-
Relocation	\$15,000	\$4,000	\$47,000	\$5,000	-0-
Replacement Housing	\$4,000	\$32,000	\$27,000	\$40,000	-0-
TOTAL	\$685,400	\$1,531,700	\$694,600	1,100,160	\$319,200
ON-SITE IMPROVEMENTS					
Clearing and Grubbing	\$65,000	\$115,000	\$98,700	\$110,000	\$60,000
Rough Grading	-0-	-0-	-0-	\$735,680	-0-
Wastewater Disposal	\$225,000	\$225,000	\$225,000	-0-	-0-
Drainage	-0-	\$50,000	-0-	\$50,000	\$50,000
TOTAL ON-SITE	\$290,000	\$390,000	\$323,700	\$895,680	\$110,000
OFF-SITE IMPROVEMENTS					
Roadways	\$1,145,400	\$1,930,410	\$2,182,550	\$757,720	\$1,097,450
Water	\$195,000	-0-	-0-	\$25,500	\$58,750
Sewer	-0-	-0-	-0-	\$156,000	\$216,000
TOTAL OFF-SITE	\$1,340,400	\$1,930,410	\$2,182,550	\$939,220	\$1,372,200
TOTAL IMPROVEMENTS (ON AND OFF-SITE)	\$1,630,400	\$2,320,410	\$2,506,250	\$1,834,900	\$1,482,200
BUS SUBSIDY	\$1,377,000	\$1,674,000	\$2,376,000	\$1,674,000	\$1,674,000
TOTAL	\$3,692,800	\$5,526,110	\$5,576,850	\$4,609,060	\$3,475,400

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CHAPTER VII
Potential Impacts and
Mitigation Measures

VII. POTENTIAL IMPACTS AND MITIGATION MEASURES

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. Emissions would be generated during the operation of construction equipment and vehicles. 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. As a result, construction emissions are not expected to be significant and no long-range impacts are expected.

3. Water Quality

During construction, and particularly during grading and excavation for building foundations, soil will be exposed and potentially susceptible to erosion in the event of heavy rain. By adhering to City and County grading ordinances, soil runoff will be controlled. Mitigation of storm discharge during construction should include installation of appropriate measures such as siltation berms and/or straw bale sediment barriers, sandbag sediment barriers, filter berms, filter fences, filter inlets or flexible down-drains.

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 receiving waters, particularly Ulehawa Stream.

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 on-site construction-related vehicles should not be significant, but may cause some minor inconveniences to residents and businesses in the vicinity. Off-site construction along access roads for roadway, water and/or sewer improvements may also cause temporary inconvenience and traffic congestion. 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).

Soil testing will be necessary to determine whether the selected site is suitable for construction, particularly for Site 3 which was previously mined and filled.

7. Economic

The short-term economic impacts resulting from the construction of the school 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 school. 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 or current 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 school 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

In the long-term, periodic increases in noise levels during school hours can be anticipated due to such activities as student drop-off and pick-up, recess, lunch, and outdoor physical education. Noise level increases are not expected to be significant and would be limited to day and early evening hours only. However, they may be audible to nearby residences.

Off-site noise from agricultural land uses, landfill activities, and truck traffic on Hakimo Road and Lualualei Naval Road may adversely affect the school environment at any candidate site. If ambient noise levels at the selected site warrant it, air conditioning the buildings would be an effective mitigation measure for indoor uses. It would not be effective in reducing adverse noise levels outside the buildings.

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 periodic nature of traffic during school opening and closing hours.

Of greater concern is the impact of ambient air quality on the school users, due to the sites' proximity to agricultural and industrial land uses. Dust and odors from nearby agricultural or landfill activities may create possible health problems to students and staff with allergies. In addition, airborne dust may leave a dirty film on school buildings, in classrooms, and on sensitive equipment such as computers. Potential mitigation measures for dust impacts include solid and/or landscape buffers along the perimeters of the site and air-conditioned buildings. The effectiveness of these measures for outdoor users is limited.

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 school can potentially increase the amount of impervious surface area and associated runoff, including runoff from parking areas. Drainage design for the school 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 III Elementary School 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.

Site 4 contains 1.53 acres which are located in the Ulehawa Stream floodway and flood zone according to the Flood Insurance Rate Maps. Site 4 has 13.47 remaining acres that are not in a flood hazard area,

which exceeds the required 12 acres for the proposed school. As a result, all school-related buildings and facilities (including play fields) can be accommodated on the site without using lands within the flood hazard area.

A portion of Site 5 is within the tsunami inundation zone (refer to Exhibit III-2). However, if Site 5 is selected for the new school, the low area (approximately 3.8 acres) would be filled to be outside the tsunami zone.

All of the candidate sites meet the DOE minimum criteria requiring a school to be at least 50 feet from a power line greater than 45 kilovolt. One corner of Site 3 is 200 feet from an existing 46 kV line. The remaining sites are more than 1000 feet from this power line, as indicated on Exhibit III-2.

The proximity of Sites 5 and 6 to the Nanakuli Landfill and the truck traffic on Lualualei Naval Road is a health and safety concern. Since the landfill only accepts demolition debris, concrete, rock, dirt and grub, odor is not a major concern. Asbestos-containing material is accepted and is buried within an asbestos handling area, and the landfill is approved by the State of Hawaii to bioremediate petroleum contaminated soil. Rock crushing operations and earth moving on the landfill site create noise and dust which would conflict with school activities. Potential mitigation for noise and air quality impacts are discussed above.

Landfill and Navy-related truck traffic on Lualualei Naval Road must be mitigated to ensure vehicular and pedestrian safety for school users. Mitigation measures are discussed under the Traffic section below.

6. Agriculture

Unfortunately, due to limited urban lands in the proposed school service area in Nanakuli, agricultural lands must be considered for the Nanakuli III Elementary School site. Candidate Sites 2, 3, and 4

are designated for agricultural use at the state and county levels, and are surrounded primarily by residential/agricultural uses. There are inherent land use conflicts associated with locating urban-type uses in agricultural areas. A primary concern is that of nuisance complaints against the intensive crop and livestock operations that are near or upwind of these sites. (Agricultural odors are known to carry long distances.) Chapter 165, Hawaii Revised Statutes (Hawaii Right-to-Farm Act), notwithstanding, nuisance complaints can adversely affect normal operations of intensive agricultural uses that are on or near urban uses such as schools. An example of this is found at Maili Elementary School where students and staff have complained of odors, dust, and flies coming from adjacent poultry and layer (egg) operations. According to the Department of Health, Sanitation Branch, there have also been numerous complaints from the Hakimo Road area regarding agricultural odors.

As the encroaching use, the school development, and not the existing farming activities, should bear the cost of carrying out mitigation actions. Such actions could include screening doors and windows, installing air curtains, physically separating the kitchen and cafeteria from classrooms, and installing air conditioning in the kitchen and cafeteria and/or classrooms.

7. History and Archaeology

Based on the absence of archaeological findings from the previous archaeological investigations, together with the current condition of each site, no significant archaeological remains are expected in any of the candidate school sites. The project archaeologist recommends, however, that an archaeological inventory survey be conducted following the final site selection for the Nanakuli III School. The inventory survey would include additional background research regarding traditional Hawaiian settlement in the Waianae District and research regarding the Ulehawa Stream area. The inventory survey would also include a more intensive documents search, and selective subsurface sampling with backhoe as warranted. No testing is recommended if Candidate Site 3 is selected, due to the

negative results of the previous archaeological investigation in a portion of the site area.

8. Utilities

Design and construction of the proposed school 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 where possible. The existing capacities of the various systems should be adequate to accommodate the proposed school without major utility expansion work.

According to the Board of Water Supply (BWS), the existing water systems along Hakimo Road and the private roads adjacent to Sites 3 and 4 are presently adequate to serve these Sites. The existing 8-inch water main along Kaukai Road, however, does not meet the minimum flow requirement for fire protection to Site 2. The developer will be required to install a 12-inch water main along Kaukai Road and install a fire hydrant within 125 feet of Site 2. Since there are no existing water lines along Lualualei Naval Road, an existing 8-inch water main must be extended from Mohihi Street to serve Sites 5 and 6, and a fire hydrant must be installed within 125 feet of either site, if selected.

All water system improvements must be in accordance with BWS Water System Standards and 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 (DWM), the existing sewer system in the area is adequate to serve a new elementary school. An "Application for Sewer Connection" must be filed and be approved by the department in order to reserve sewer capacity for project.

Sites 5 and 6, and possibly Site 2, could connect to the public sewer system at less cost than the development of an on-site system. A new 8-inch sewer line along Lualualei Naval Road would be installed from the 30-inch interceptor sewer on Farrington Highway to Site 5 or 6. Permission from the Navy, or transfer of ownership of Lualualei Naval Road to the City or State would be a prerequisite, however Site 5 or 6 would only be selected if the ownership issue is resolved to provide access to either site.

It may be possible to connect Site 2 to the existing interceptor sewer on Farrington Highway via an existing City and County right-of-way along Ulehawa drainage channel. According to DPW Drainage Section, the right-of-way is 25 feet wide from the top of the channel to the Waianae-side property line. Fifteen feet of this is needed by DPW as a maintenance road, however a buried sewer line would not conflict with their use of the right-of-way.

Another option for Site 2 is to connect to existing sewer lines located in Laiku Street in the under-construction DHHL subdivision. However, a sewer easement through private, lease property, between Site 2 and Laiku Street, would be required. Due to the existing development and small lot sizes, this option is questionable and could cause significant delays.

Sites 3 and 4, and possibly Site 2, would require an on-site wastewater system such as a septic system. All candidate sites are in the "Pass Zone" within which septic tanks are allowed. Still, the system must be designed in compliance with the DOH rules to prevent potential groundwater contamination.

Off-site drainage improvements are not proposed at any of the five sites. Runoff from all sites will be accommodated by overland discharge into an adjacent stream, or through dissipation into on-site dry wells or retention areas. The design of the proposed school 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 school site will conform to the Department of Public Works Storm Drainage Standards.

All sites have adequate overhead power and communication lines available.

9. Traffic

The new school facility will generate additional traffic in the vicinity of the selected site on school year weekdays during opening and closing hours. Chapter VI, Evaluation of Candidate Sites, discusses traffic related to the sites in terms of adequacy of roadways serving each site, vehicular circulation and safety, and pedestrian accessibility and safety. Site specific roadway-related improvements are also discussed in the Cost section of Chapter VI.

Since the main thoroughfare in the site selection area, Farrington Highway, has adequate capacity, a new school is not expected to require improvements to this highway. Although the Hakimo/Farrington intersection is operating at "under" capacity conditions, DOT Highways Division is considering a project to add a separate southbound left turn lane at the intersection. If found feasible, construction could occur in 1995.¹⁴ According to City and County Department of Transportation Services and the Planning Department, there are plans for widening Hakimo Road, but these plans are in the "Beyond 6 Years" category on the Development Plan Public Facilities Map. These plans would affect Site 1 and Site 3 with 10-foot road widening setbacks, and Site 4 with a two-foot setback.

School access roads will be improved to provide adequate capacity for school-generated traffic, including the provision of safe vehicular turning movements at intersections. Sufficient parking, student

¹⁴Julian Ng, Inc., "Traffic Assessment Report, Princess Kahanu Estates," Appendix A of Draft Environmental Assessment, Princess Kahanu Estates, Prepared by Calvin Kim & Associates, Inc. and Gerald Park for Department of Hawaiian Home Lands, March 28, 1994.

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 school.

Heavy landfill-related truck traffic on Lualualei Naval Road could potentially conflict with buses and other vehicles transporting students to and from a school at Site 5 or 6. This heavy traffic may also pose a greater risk of danger to pedestrians crossing the street. Hakimo Road has considerable agriculture/residential truck traffic as well, potentially impacting Sites 2, 3, and 4. Road improvement measures would be required on Lualualei Naval Road or Hakimo Road to mitigate adverse effects from the existing truck traffic and to ensure vehicular and pedestrian safety.

Once a site has been selected, the City and County Department of Transportation Services and State DOT will evaluate the traffic and safety conditions and will recommend appropriate mitigative measures to ensure pedestrian and vehicular safety. If it is determined to be necessary, a traffic impact analysis will be prepared. Mitigation measures such as road widening to separate truck and school traffic, pedestrian walkways and/or overpasses, and traffic control signs or signals must be considered in the planning and design of roadway improvements. All plans for construction work within the State highway and county road rights-of-way will be prepared during the school facilities design phase and will also be submitted for State and the County review.

Use of Lualualei Naval Road by a new school would require approval from the U.S. Navy, or conveyance of ownership of the road from the Navy to the City and County of Honolulu or the State of Hawaii. The Navy is in favor of dedicating the road. The landowner of Nanakuli Landfill has expressed concern that a school use at Site 5 or 6 may result in restrictions to their use of the road, which is heaviest during school opening hours.

10. Visual Impacts

Development will not affect views of Puu O Hulu from Ulehawa Beach Park which is identified in the Development Plan Special Provisions for Waianae as an important public view to be protected. None of the candidate sites is visible from Farrington Highway and thus will not adversely affect significant coastal views.

11. Social Impacts

The establishment of a new elementary school in Nanakuli will relieve the current overcrowding on the Nanaikapono Elementary School campus, and will accommodate projected enrollment growth in the Nanakuli School Complex.

Since all the candidate sites are privately owned, each would require negotiations and compensation to the landowner(s), unless the landowner(s) is willing to donate the land to the State. Selection of Sites 5 and 6 would preclude the owners from their planned developments: a 144-unit residential cluster development on Site 5, and a recycling center on Site 6.

If Site 2, 3, or 4 is selected, land currently used for residential/agricultural purposes will be used for a more urban type use. This impact, in itself, is not considered significant due to the proximity of the sites to existing urban lands, and the rural character of the area.

The existing Nanakuli Landfill is the only landfill permitted to accept construction and demolition waste and asbestos containing materials, and is one of three petroleum contaminated soil remediation sites in the Honolulu area. As such, it serves a public benefit that could not easily be replaced if constraints on its operation were imposed due to siting a school in close proximity. A recycling center, proposed in the location of Site 6, would also serve a public benefit by providing an outlet for recovered materials. Recycling helps preserve the capacity of the landfills for future generations. Recycling and reuse of construction and demolition materials are two solid waste management strategies discussed in the Integrated

Solid Waste Management Plans for the State of Hawaii and City and County of Honolulu. The proposed school would not preclude development of the recycling center, but would move its location mauka and adjacent to the proposed school site.

12. Displacement

One of the main criterion for the selection of sites for the proposed school 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.

Sites 2, 3, 4, and 5 would require the displacement of owner-occupant and tenant families and/or agricultural operations. 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. Any farm displaced by the project would also receive relocation assistance and moving expense reimbursement.

A single family housing development is under construction immediately makai of Site 2, and other surrounding land uses of the candidate sites are primarily residential and agricultural. 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.

The landowner of a portion of Site 5 has filed an application for rezoning as part of a proposed 144-unit townhouse development. (Refer to Chapter IV. A. 1.) Awareness of the development schedules for the housing and school projects is critical during the site selection process to avoid additional displacement of families on Site 5.

The landowner of Site 6 (PVT Land Company) has plans to develop a 40-acre recycling center on Site 6 and surrounding lands, and to use the remainder of its 180-acre property in the Agricultural District for landfill and recycling center expansion. PVT anticipates commencing operation of the recycling center prior to construction of the proposed school, contingent on a City and County Special Use Permit and other permits. If this were the case, displacement of a business on Site 6 would be involved. PVT has indicated it will oppose all efforts to condemn Site 6.

13. Economic Impacts

Permanent employment opportunities will be available once the school is opened. A typical school, the size of the proposed Nanakuli III Elementary School, employs approximately 75 people, including administration, faculty, service, and maintenance personnel. The employment will generate new revenue to the State from income tax associated with employee wages and salaries.

The school 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. Relative to the multi-million dollar project cost and the social benefits of a new elementary school in Nanakuli, 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 farms will be incurred if Site 3 or 4 is selected for the school.

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 III Elementary School will result in very few environmental impacts, all of which can be mitigated, as described in previous sections. It will generate some social impacts, specifically the displacement of residents and/or farms on four of the five candidate sites. However, if approved, the development will result in a number of long-term benefits.

The short-term effects of the development of the Nanakuli III Elementary School 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 educational benefits to the community will result by avoiding the need for large and overcrowded enrollments at the existing elementary schools as the enrollment population increases, and providing a convenient location for students in the service 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 12 to 15 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 selected school 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.

There are two unresolved issues related to Candidate Site 2. It is uncertain at this time whether an easement would be obtainable across private lease lots within DHHL's Princess Kahanu Estates subdivision or along the City's drainage channel to allow pedestrian access from the subdivision to Candidate Site 2. Second, it is unresolved whether Site 2 could connect to an existing sewer line in Laiku Street (within the DHHL subdivision) or in Farrington Highway, or whether an on-site septic system would be required. The establishment of a sewer easement across DHHL land to Site 2 or within the City's drainage channel right-of-way to Farrington Highway is the determining factor.

The land ownership and title claim dispute between the State of Hawaii and the State Department of Hawaiian Home Lands, which involves parcel 77 of Site 5, is an unresolved issue. However, a settlement agreement has been reached, and is currently before the 1995 State Legislature for action. If the agreement is approved as is, or is amended to satisfy all parties involved, the affected lands will be clear of restrictions. If the agreement is rejected, DHHL will pursue settlement in court. Failure to settle this issue soon could adversely impact the project's development schedule.

Specific future land uses on the PVT property mauka of Site 6 are uncertain. The Nanakuli Landfill master plan indicates landfill and recycling center expansion, but the types of materials that may be accepted at the landfill may include hazardous wastes. Presently, the existing landfill is the only state and county approved privately owned and operated solid waste disposal and processing facility on Oahu. It is also the only facility on Oahu accepting asbestos containing materials and one of three sites on Oahu approved by the State of Hawaii to bioremediate petroleum contaminated soil.

Access to Candidate Sites 5 and 6 via Lualualei Naval Road is an unresolved issue due to the federal ownership of the road. Although the Navy is willing to convey ownership to the State or City and County, no agreement was reached during previous discussions with the City and County. It is also unresolved who would be responsible for road improvements (to meet applicable standards) mauka of the school, if Site 5 or 6 was selected. The State (DOE) would only incur roadway improvement costs from Farrington Highway to the selected school site.

CHAPTER XI

List of Necessary Approvals

XI. LIST OF NECESSARY APPROVALS

		CANDIDATE SITES				
		2	3	4	5	6
A.	<u>FEDERAL</u>					
	U.S. Navy (Road Access)				x	x
B.	<u>STATE OF HAWAII</u>					
	Water Allocation	x	x	x	x	x
	Dept. of Health Noise Permit	x	x	x	x	x
	Dept. of Health Septic Permit	x	x	x		
	DHHL Agreements	x			x	
	Work within State R-O-W	x	x	x	x	x
C.	<u>CITY AND COUNTY OF HONOLULU</u>					
	Special Use Permit	x	x	x		x
	Site Plan Review	x	x	x	x	x
	Subdivision/Consolidation 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		
	Application for Sewer Connection	x			x	x
	Work within County R-O-W	x	x	x	x	x

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 AGENCIES

Department of the Army, Corps of Engineers
Department of the Navy

B. STATE AGENCIES

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
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 AGENCIES

Board of Water Supply
Building Department
Department of Housing & 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
Police Department

D. ORGANIZATIONS AND INDIVIDUALS

State Senator James Aki
City Council Member John DeSoto
Hawaii Electric Company
Gasco
GTE Hawaiian Tel
Nanaikapono Elementary School PTA
State Representative Henry Peters
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.

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APPENDIX A
Site Evaluation Criteria

APPENDIX A. DESCRIPTION OF SITE EVALUATION CRITERIA

This section describes Site Evaluation Criteria based on standards established by the Department of Education to assess the relative merits of candidate sites selected as potential locations for a new school. The Site Evaluation Criteria represent a wide range of considerations that are important in selecting an appropriate site for new school facilities.

The criteria are divided into three categories:

Physical Criteria are used to compare physical parameters important to site development and school operation such as environmental characteristics, roadways, utilities, and access.

Community Criteria enable evaluation of school development in terms of governmental land use compatibility and the relationship of the school to the surrounding community.

Cost Considerations are used to compare the relative costs associated with school development and operations such as land acquisition, off-site development, on-site development, and bus subsidies.

In the evaluation process, a rating of good, fair, or poor is assigned for the physical and community criteria, and dollar amount estimates are made for cost considerations.

A. **PHYSICAL CRITERIA**

This set of criteria is used to evaluate the physical characteristics of the candidate sites, the availability of infrastructure, and the potential effects of the surrounding environment on school activities.

1. **Site Characteristics**

- a. **Size** - The Department of Education has indicated that the minimum size requirement for the New Nanakuli III Elementary School is 12 acres of usable area. The need for a school site in excess of the minimum required due to slope,

parcel size, or other factors is considered less desirable as it generally would increase site acquisition costs. The following ratings are applied based on the size of the designated candidate site, not the tax map parcel(s) involved.

Good - The site is 12 usable acres.

Fair - The site meets the DOE minimum 12-acre site requirement and does not exceed it by more than 10%.

Poor - The site exceeds the DOE minimum size requirement of 12 acres by more than 10%; or the site is less than the DOE minimum of 12 acres.

- 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, play areas and parking. In general, the steeper the site the more difficult it is to prepare the site for construction and to maintain the site once it has been developed. The DOE uses the following general guideline to determine the percentage of usable land area as it relates to slope:

<u>Slope of Land</u>	<u>% of Total Area Considered Usable</u>
0 - 12%	100%
13 - 15%	90%
over 15%	0% (not usable)

Good - The average slope of the site is between 1 and 3%.

Fair - The average slope of the site is between 4 and 10%.

Poor - The average slope of the site is between 11 and 15%.

- c. **Shape** - The shape of the site affects the ability to accommodate buildings and other school facilities in appropriate locations. The site should generally be rectangular with a length to width ratio not to exceed 2.5:1.0.

Good - Length to width ratio 1.0:1.0 to 1.7:1.0.

Fair - Length to width ratio 1.8:1.0 to 2.0:1.0.

Poor - Length to width ratio 2.1:1.0 to 2.5:1.0.

- d. **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-foot depth to bedrock, low shrink-swell potential, high shear strength, high bearing capacity, and/or rapid permeability.

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

Poor - Soils with high shrink-swell potential, low shear strength, low bearing capacity, and/or low permeability.

- e. **Aesthetic Qualities** - Natural beauty is considered a positive attribute for a school site. Features such as shade trees, attractive plants, rock formations, and pleasant views can be integrated into the school campus to enhance the educational experience and learning environment.

Good - The site has some natural beauty in the form of trees, plants, waterways, rock formations, or views which can be preserved and integrated into the school campus.

Fair - The site lacks most attractive natural characteristics but has potential aesthetic value which can be developed through appropriate site design and landscaping.

Poor - The site has no attractive natural features.

2. Roads and Utilities

- a. Roadways - Roads serving a school site must be adequate to safely and efficiently accommodate automobile and bus 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, curb/gutters, sidewalks, etc. A minimum desired R-O-W is 56 feet for through roads and 44 feet for dead ends or cul-de-sacs. Roadways must be wide enough for two-way traffic plus a parking lane, thus a minimum of 34 feet of paving.

If existing roads to the site are inadequate, additional costs will be incurred to bring the roads up to appropriate standards. If an existing roadway does not have sufficient right-of-way to accommodate necessary improvements, additional right-of-way may have to be purchased.

Roadways and rights-of-way serving the school should be either public-owned, or private-owned that are open to the public. Private-owned roads and rights-of-way which are not open to the public would require acquisition.

Good - The site is served by at least one roadway adequate to meet the ultimate school needs. A minimum right-of-way of 56 feet is available.

Fair - The site is served by roadways requiring widening or other improvements to meet the ultimate school needs. A minimum right-of-way of 44 feet is available.

Poor - The site has no roadways and will require the construction of a roadway system; or the existing road right-of-way is less than 44 feet; or the existing roadway is privately-owned and not open to the public.

- b. **Water** - Water of safe quality must be available in sufficient quantity and under adequate pressure to meet the school'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 the ultimate school needs; and has adequate fire hydrants available along one adjacent roadway.

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

Poor - The site has inadequate water service and will require development of a new system or extensive improvements to an existing system to meet the ultimate school needs.

- c. **Sewer** - Wastewater generated by the school facility must be disposed of in accordance with the standards set by the State of Hawaii Department of Health. If an existing sewage treatment system is not available, or if the capacity of the existing system is not sufficient to meet the school needs, construction of an individual on-site system will be required.

Good - Sewer lines are available in close proximity to the site or will be available by the time of school construction, and sufficient capacity exists to accommodate the wastewater that will ultimately be generated by the school.

Fair - A sewer line is or will be available within a reasonable distance from the school site (within 2000 feet) although off-site improvements to transmission facilities will be required. Capacity of the existing sewage treatment system is or will be adequate to accommodate the wastewater that will ultimately be generated by the school.

Poor - There are no sewer lines in the vicinity of the site and none are planned for the future; or the existing system does not have available capacity to serve the ultimate school needs. Extensive improvements to an existing system or the development of an on-site sewage treatment facility will be required.

- d. **Drainage** - The school site must not be in a major flood plain exposed to excessive stormwater runoff if adequate drainage facilities cannot be provided at reasonable costs. Drainage facilities should convey stormwater from the school site without increasing runoff at other locations. Without adequate provisions for drainage, stormwater runoff can affect the safety and convenience of school users and water damage to improvements can occur.

Good - The site has adequate drainage facilities available to meet ultimate school needs.

Fair - The site may be connected to off-site drainage facilities or drainage facilities can readily be provided to serve the ultimate needs of the school.

Poor - The site requires substantial off-site drainage facility improvements or may require the development of an extensive on-site drainage system to specifically meet school needs.

- e. Power and Communications - Electricity and telephone service are essential for effective school operations. The distance from these services and the ease of extending them will affect school development costs.

Good - Adequate existing power and communications service is available in the vicinity of the site.

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

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

3. Accessibility and Safety

- a. Pedestrian Access - Pedestrian access to the site must be adequate to permit the convenient, safe movement of students, faculty, and staff from outside of the school site into the different areas of the school facilities. Students should not be inclined to take short cuts through private property.

Good - Relatively unrestricted pedestrian access to the site can be provided along three sides.

Fair - Relatively unrestricted pedestrian access to the site can be provided along two sides.

Poor - Pedestrian access to the site is restricted or can be provided on only one side.

- b. Pedestrian Safety - Pedestrian safety is a primary concern in the establishment of a new school. Pedestrians should be separated from vehicular traffic by providing sidewalks along roads and over/underpasses across heavy traffic corridors.

Good - Adequate and safe paved shoulders/walkways are available to the site.

Fair - Adequate and safe paved shoulders/walkways can be provided along school access roads.

Poor - The site may require traffic signals, pedestrian over/underpasses, or other measures in addition to shoulder/walkway improvements to insure safe pedestrian access.

- c. **Vehicular Circulation** - Circulation patterns affect the flow of traffic generated by school buses, faculty and staff vehicles, and student drop-offs. Through streets offer the greatest opportunity for smooth, safe access to and from the school 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 on at least one other side.

Poor - The site is served only by one street; or is a flag lot.

- d. **Vehicular Safety** - Roadways must be capable of safely handling heavy traffic at school opening and closing hours. 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, high speed highway.

- e. Public Bus Service - Public mass transit can help alleviate conflicts between school and rush hour work traffic, and can provide a socially and environmentally responsible alternative to the private automobile.

Good - The site is served by a public bus line passing by the site at intervals appropriate for the hours of school operation (maximum 30 minute intervals).

Fair - The site is served by a public bus line passing by the site at intervals greater than 30 minutes; or a public bus line running at intervals of 30 minutes or less passes within 1/2 mile of the site.

Poor - No appropriate public bus service is available; or a bus line is located farther than 1/2 mile from the site.

4. Environment

- a. Rainfall - The new Nanakuli III Elementary School complex will consist of several physically separate classrooms and support facilities which will require students, faculty, and staff to walk between buildings during the school day. For safety and convenience the DOE requires covered walkways and playcourts in areas with a median annual rainfall greater than 40 inches.

Good - The site has an average annual rainfall less than 30 inches.

Fair - The site has an average annual rainfall between 30 and 40 inches.

Poor - The site has an average annual rainfall greater than 40 inches.

- b. **Highway Noise** - Motor vehicle noise from major highways, and freeways can be at a level which interferes with the ability of students and teachers to communicate effectively. A major highway is defined by DOE as a highway with posted speed limits of 35 mph or more; a freeway is defined as a controlled access highway with posted speed limits of 45 mph or more. When a school facility is located in close proximity to these roadways, mitigation measures such as the installation of air conditioning may be required so windows can remain closed. In applying the highway noise criteria the distance is measured from the center of the closest traffic lane to the building setback line of the site.

Good - The site is more than 1,500 feet from major highways or freeways.

Fair - The site is between 1,500 feet and 500 feet away from major highways or freeways.

Poor - The site is within 500 feet of a major highway or freeway.

- c. **Aircraft Noise** - As with traffic noise, noise from aircraft take-off and landing can interfere with the ability of students and teachers to communicate effectively.

Good - The site is more than one mile away from the normal aircraft flight patterns into and out of airports and air bases.

Fair - The site is far enough away (0.5 to 1 mile) from the normal flight pattern so that aircraft noise does not interfere with normal conversations.

Poor - The site is directly under (within 0.5 miles) the approach and take-off pattern.

- d. Industrial and Agricultural Nuisances - Noise, odors, dust, smoke, flies, and other nuisances associated with industrial and agricultural land uses can cause discomfort and conflict with school activities. The school site should be separated from these land uses if significant nuisances cannot be avoided or mitigated.

Good - The site is free from noise, dust, odors, smoke, and other nuisances created by industrial or agricultural activities.

Fair - Nuisances from industrial or agricultural activities are at worst periodic but well within the limits of human toleration.

Poor - Nuisances from agricultural or industrial activity will cause considerable discomfort and hamper school activities.

- e. Commercial Attractions - When located near a school site, commercial establishments such as game rooms, video centers, bowling alleys, pool halls, and convenience stores may attract students during school hours. The school site should be located at a sufficient distance from such businesses so that distractions to students are minimized.

Good - The site is more than 1/2 mile from commercial establishments that may attract students during school hours.

Fair - The site is between 1/2 and 1/4 mile from commercial establishments that might attract students during school hours.

Poor - The site is within 1/4 mile of commercial establishments that might attract students during school hours.

- f. Wetlands - Wetlands are lands that are either inundated with surface water or saturated with groundwater long enough to make it necessary for the vegetation to adapt to growing in saturated soil conditions. Wetlands help filter and clean ground and surface waters, help store floodwaters and provide valuable habitat for a wide variety of species. It is the policy of DAGS and DOE to avoid the use of wetlands or otherwise adversely impact wetlands resources.

Good - The site does not contain wetlands and wetlands would not be impacted by development of the site.

Fair - The site does not contain wetlands, however off-site wetlands could be affected by development of the site.

Poor - The site is known to or may contain wetlands.

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, schools are outright permitted uses within the "U" Urban State Land Use District, while a Special Use Permit or State Land Use District Boundary Amendment is required for a school in the "R" Rural or "A" Agricultural Districts. Lands within the "A" Agricultural District but adjacent to the "U" Urban District are preferred over "A" Agricultural District Lands surrounded only by other "A" Agricultural lands. It is the policy of the DOE not

to establish schools within the "C" Conservation Land Use District.

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

Fair - The site is within the "R" Rural State Land Use District, or within the "A" Agricultural District and adjacent to the "U" Urban District.

Poor - The site is within the "A" Agricultural District and not adjacent to the "U" Urban District.

- b. City and County Development Plan - The Development Plan program provides a relatively detailed framework for implementing the City and County General Plan objectives and policies on a regional basis. The school service area is within the Waianae Development Plan region.

Good - The site is designated Public Facility or identified as a school site on the regional Development Plan Land Use Map.

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 on the regional Development Plan Land Use Map.

- c. City and County Zoning - The City and County of Honolulu Land Use Ordinance (LUO) establishes several zoning districts within the City and County and delineates the respective types of uses permitted in each district.

Good - The site is within a zoning district which allows schools as a principal permitted use, and is not subject to the Site Plan Review process.

Fair - The site is within a zoning district which allows schools, but is subject to Site Plan Review process.

Poor - The site is within any other zoning district and a zoning amendment or use variance will be required.

- d. 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 the SMA Rules and Regulations of the 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.

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 or company or the State Department of Hawaiian Home Lands (DHHL) is involved. Acquisition can be even further complicated when a site is under the ownership of more than one individual or company.

Good - The site is entirely owned by the Federal, State (excluding DHHL), or County Government.

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

Poor - The site is owned by DHHL, or three or more individuals or businesses.

- b. **Existing Use** - The acquisition of a site for school use should result in a minimum amount of disruption to the pattern of living within the community and neighborhood in which the site is located. Development of the site with school facilities must not result in the destruction of any cultural, historic, or scenic building or site.

Good - The site is vacant and unused.

Fair - The site is being used by government agencies or institutions.

Poor - The site is being used for agriculture, residential, or private business purposes.

- c. **Displacement** - Relocation of existing residences, farms, or businesses to accommodate a school can result in hardship to the individuals currently using the site, as well as additional time and expense for site acquisition and development.

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

Fair - The site may be acquired without relocating any farm or business or more than five families and living units.

Poor - The site cannot be acquired without the relocation of any farm, business, or more than five families.

- d. Agricultural Lands - Productive agricultural lands are considered a valuable resource in Hawaii and their protection is given high priority in the decision making process. The University of Hawaii Land Study Bureau has classified the agricultural lands of the State by productivity ratings ranging from A through E with A being the most productive and E the least.

Good - The site is located on land with a very poor productivity rating (E), or has an urban designation (U).

Fair - The site is located on land with a fair (C) or poor (D) productivity rating.

Poor - The site is located on land with a very good (A) or good (B) productivity rating.

- e. Location - A school should be located as close as possible to the major concentration of the students to be served by the facility in order to minimize bus transportation costs and student drop-off traffic. The DOE considers one mile as the maximum reasonable walking distance for students.

Good - The site is within reasonable walking distance of at least 75% of the students to be served by the school.

Fair - The site is within reasonable walking distance of 50% to 75% of the students to be served by the school.

Poor - The site is within walking distance of less than 50% of the students to be served by the school.

f. Interference with Institutions - A school site should be located at a sufficient distance from hospitals, rest homes, and other institutions that generally require a "quiet zone" so that occupants of these facilities will not be disturbed by the activities of large groups of students.

Good - The site is greater than 1/2 mile from hospitals, rest homes, or other institutions which may be disturbed by school activities.

Fair - The site is between 1/4 and 1/2 mile from any hospital, rest home, or similar institution so that any disturbance caused by school activities would be minimal.

Poor - The site is adjacent to a hospital, rest home, or similar institution which may be disturbed by school activities.

g. Scenic Value - Buildings and other structures associated with a school may obstruct or conflict with aesthetically valuable qualities that are important to a community.

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

Fair - The site has some aesthetic value or may partially obstruct scenic vistas if a school is developed.

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

C. COST CONSIDERATIONS

A major consideration in the selection of a site for a new school is the relative cost associated with site acquisition, on- and off-site development, and facility operation. To further compare the relative merits of each candidate site, cost estimates are made for comparative land value, off-site improvements, on-site improvements and busing subsidies. These estimates are prepared to permit comparison of the costs associated with each site and are not intended to reflect actual expected 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.

1. Land Acquisition

For comparison purposes, comparative land and improvement values are based on the 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 may not accurately reflect actual market value, but instead is to be used here to compare the relative value of each candidate site.

Additional acquisition costs are incurred for occupant relocation. By State law, any person, farm or business displaced by a government agency is eligible for relocation benefits and displaced persons are also entitled to replacement housing payments.

2. On-Site Improvements

Development of a new school will require on-site improvements which may include clearing and grading of the site, and construction of drainage facilities, wastewater treatment systems, and water facilities. Costs associated with construction of buildings, play areas, internal roadways and parking areas, and other standard school facilities will be approximately the same for each site and are therefore not considered in the cost comparisons.

3. Off-Site Improvements

Development of a new school may require extending, upgrading, or new construction of utilities, roadways, sidewalks, drainage facilities, water lines, and/or wastewater systems to serve the school site. As with comparative land values, estimates are made for comparison purposes only and are not intended as a means of determining actual expenditure requirements.

4. Bus Subsidy

An allowance for bus transportation is provided to students residing more than one mile in road distance from the school. For purposes of this study, bus subsidy costs are computed based on the number of students qualifying for bus subsidy for the years 1998 to 2010.

APPENDIX B

Archaeological Assessment

ASC94-3

ABSTRACT

This report presents the results of an archaeological assessment requested by DHM, Inc. in six candidate sites proposed for the Nanakuli III Elementary School. These sites are situated on the coastal and immediate inland areas of Luahualei Valley, Wai'anae District, island of O'ahu. A review of archaeological literature and historical documents was undertaken to assess extant archaeological sites within the candidate sites. On-site field inspections were also conducted to evaluate the current condition of the area and document archaeological and historical resources. Information obtained from this research may then be used in the formulation of a research design and scope of work for further archaeological investigations.

Results of this assessment revealed that no previously recorded archaeological sites exist within the candidate sites. An archaeological inventory survey was previously completed in portions of Candidate Site 3 by Chiofioji and Hammatt (1993), but revealed no surface or subsurface cultural remains. The remaining candidate sites have undergone extensive land clearing or development activities. Due to these disturbances, no subsurface archaeological remains are expected.

With the exception of Candidate Site 3, an archaeological inventory survey is recommended following the selection of the final Nanakuli III Elementary school site.

AN ARCHAEOLOGICAL ASSESSMENT
OF SIX CANDIDATE SITE AREAS
FOR THE NANAKULI III ELEMENTARY SCHOOL
(TMK 8-7-7; por. 4; 8-7-8; por. 76, por. 77;
8-7-9; por. 3, por. 7; 8-7-21:1, 2, 14, 17, 18, 38; 8-7-22:1)

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INTRODUCTION

At the request of DHM, Inc., Aki Sinoto Consulting of Honolulu conducted an archaeological assessment of six candidate sites for the proposed Nanakuli III Elementary School. The objective of this assessment was to evaluate each candidate site for potential cultural resources to assist in the selection of the final school site. On-site field inspections were conducted on January 4 and 26, 1994, by Aki Sinoto and Jeffrey Panialao. A review of historical and archaeological literature, by Barry Nakamura and Jeffrey Panialao, has been submitted under separate cover (Nakamura and Panialao 1994).

PROJECT LOCATION

The candidate sites for the proposed Nanakuli III Elementary School are located in the *chupua'a* of Lualualei, Wai'anae District, O'ahu Island (Fig. 1). Information regarding specific locations and boundaries of each candidate site is included in the Survey Results section. Generally, the candidate sites are situated in the coastal and immediate inland areas of a small side valley located at the southeastern corner of the mouth of Lualualei Valley proper. The area is nestled between two cinder cones, Pu'u Hulu Kai and Pu'u Hulu Uka to the northwest and Pu'u Heleakala to the east. The sites all occur within an area bounded by Hakimo Road to the northwest, Farrington Highway to the southwest, Lualualei Naval Road to the southeast, and Paakea Road to the northeast (Fig. 2). Four of the candidate sites are located along Hakimo Road in the northwestern sector. Candidate Site 1 (TMK 8-7-7: por. 4) is located on the south side of Hakimo Road in a portion of a large open parcel immediately northeast of a continuous cluster of residential lots *mauka* of Farrington Highway. Candidate Site 2 (TMK 8-7-9: por. 3, 8-7-22: 1) is located northeast of the southeastern half of Kaukai Road. Candidate Site 3 (TMK 8-7-21: 14, 17, 18) is located northeast of Ulehawa Road from the intersection with Hakimo Road. Candidate Site 4 (TMK 8-7-21: 1, 2, 38) is located southwest of the closed-off segment of Paakea Road immediately southeast of Hakimo Road. The two remaining candidate sites are located along Lualualei Naval Road in the southern sector. Candidate Sites 5 (TMK 8-7-8: por. 76 and por. 77) and 6 (TMK 8-7-9: por. 7) are adjoining lots located south of Lualualei Naval Road at the northeastern edge of existing residential lots.

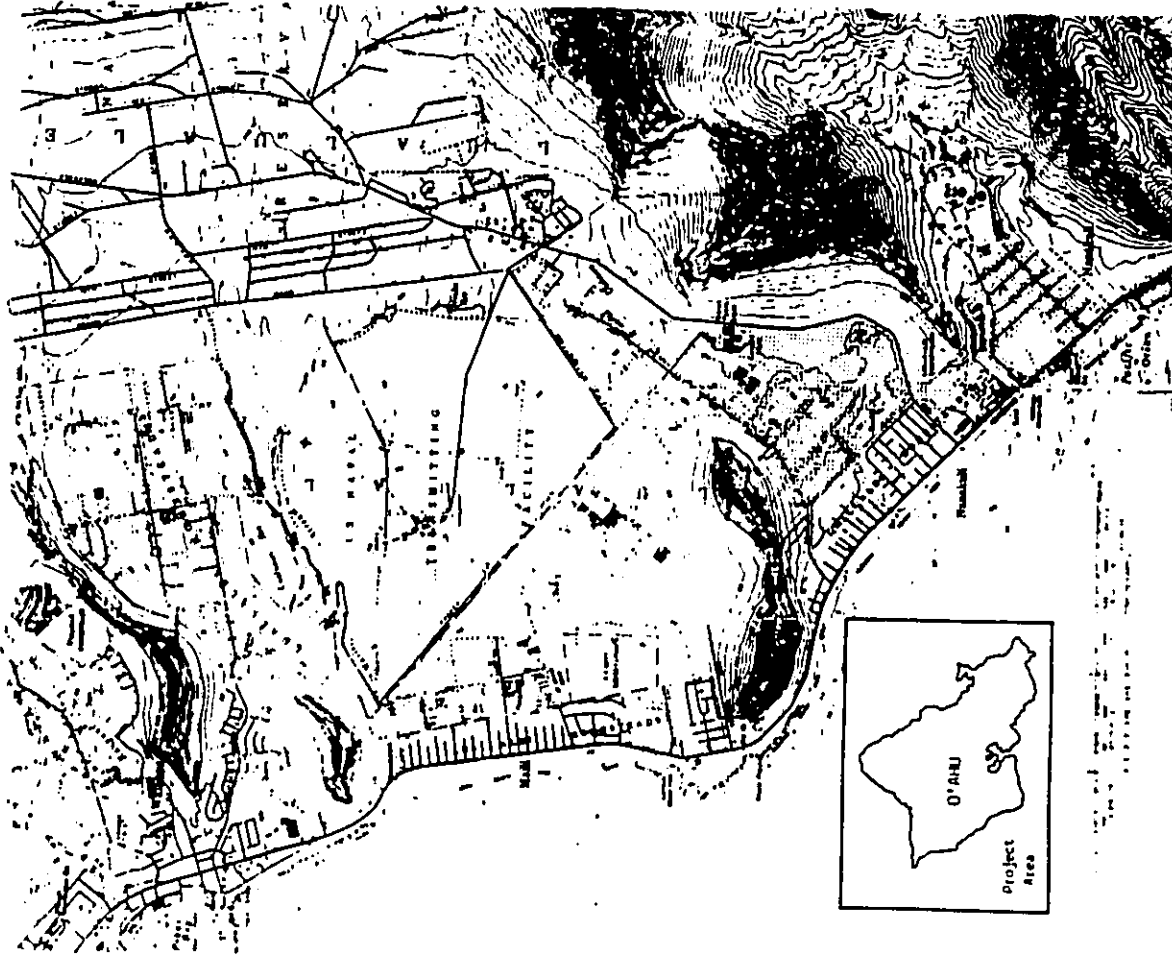


Figure 1. Location of Project Area on USGS Waianae Quadrangle.



Figure 2. Location of the Nanakuli III Elementary School Candidate Sites.

ENVIRONMENT

Since all six of the candidate sites proposed for the Nanakuli III Elementary School are situated within the same locality in Lualualei, only a general description of the environmental setting is included in this section. Specific environmental characteristics of each candidate site are presented in the Survey Results Section.

Generally, the terrain is level, but all of the sites have been altered by previous land modifications for residential development or agricultural activities. Ulehuwa Stream traverses through Lualualei Valley, originating in the Waianae Mountains and extending to the coast. This stream flows just southeast of Candidate Sites 2, 3, and 4.

The district of Wai'anae is characterized as hot and dry, with mean annual temperatures at 80 degrees Fahrenheit. Annual rainfall along the coast averages between 10 and 15 inches, with most of the precipitation occurring during the winter months between November and April. Elevation of the candidate sites ranges from 10 to 40 feet above mean sea level. Candidate sites 1 and 5 are within or adjacent to the Tsunami Inundation Zone.

Soil in the area is classified as Lualualei-Fill Land-Ewa Association. This association 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 area are included in the Survey Results Section. These variations include Mamala Stony Silty Clay loam, 0-12% slopes; Mokuleia Clay; Lualualei Clay, 2-6% slopes; Coral Outcrop; and quarry.

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.

Mokuleia Clay occurs in small areas on coastal plains. This soil was 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 former reefs 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 Jaucas, Keaau, and Mokuleia 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 six candidate sites are largely vegetated by secondary growth. This vegetation regime includes *kiawe* (*Prosopis pallida*), *koa haole* (*Leucaena glauca*), *kiu* (*Acacia farnesiana*), and finger grass (*Chloris inflata*). Variations of this regime among the six candidate sites is limited to density and level of disturbance. Specific vegetation in each candidate site is included in the Survey Results Section.

SCOPE OF WORK

The objective of the current assessment was to determine the presence/absence and potential significance of any extant archaeological resources in the six candidate sites. This included a brief background research of previous archaeological work conducted within or in the vicinity of the candidate sites, historical literature and documents review, and on-site inspections. The specific tasks undertaken included:

- 1) Historic literature and documents search,
- 2) review of previous archaeological work,
- 3) brief on-site surface assessment,
- 4) synthesis of information and report writeup, and
- 5) any necessary coordination with the State Historic Preservation Division, Department of Land and Natural Resources.

METHODS

The on-site field inspection involved assessing each candidate site area for surface remains and the potential for subsurface archaeological remains. Those site areas presently occupied by residential and/or commercial structures or actively cultivated with truck crops could not be closely examined. Areas that allowed pedestrian access were examined for surface

archaeological features. Standard archaeological survey procedures were followed. Black and white 35mm photographs were taken of each candidate site area, showing an overview of existing conditions.

A brief historical summary and compilation of archaeological background data for Lualualei and Nanakuli were completed and are presented under separate cover. Historical reference material pertaining to Lualualei was reviewed at the Bishop Museum archives, State Bureau of Conveyances, and DAGS 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 six candidate sites was reviewed at the State Historic Preservation Division library, Department of Land and Natural Resources in Honolulu. Information from these resources were used to assess each site area.

SURVEY RESULTS

No surface archaeological remains were identified in any of the candidate sites during the on-site field inspections or cited in background sources. Previous archaeological research was conducted in a portion of Candidate Site 3 (Chiogioji and Hammatt 1993); however, no surface or subsurface remains were identified. The following are brief descriptive summaries, including specific location, boundaries, environment, and survey results for each of the six candidate sites.

CANDIDATE SITE 1

This 12 acre area is a portion of a larger parcel located southeast of Hakimo Road in an abandoned limestone quarry (TMK 8-7-7:por. 4). The area is bounded by Hakimo Road to the northwest, residential developments to the northeast and southwest, and open land to the southeast. Previous modifications in this area included limestone quarrying activities followed by a failed attempt to develop a residential subdivision evident from the abandoned infrastructure consisting of roads, sidewalks, sewers, and parking lots (Figs. 3 and 4). The northwestern boundary along Hakimo Road is defined by an exposed, sheer face of limestone, left by the quarrying activity (Fig. 5). A paved road with sidewalks and a sewer system defines the southeastern boundary of Area 1. Several parking lots are situated along this roadway. Vegetation includes *kiawe*, *koa haole*, and finger grass. No surface archaeological remains were found within the subject site area. Due to extensive quarrying and subsequent grading activities, no subsurface remains are expected.

The zoning map prepared by the City and County Department of Planning for the area depicts a polygon designated with a "P" located within the area of Site 1. In order to confirm that the "P" did not indicate preservation of an archaeologically or historically significant site, inquiries were made to the Planning Department. Staff planner, Mr. Matt Higashida, confirmed that the symbol indicated a designated park area.

Several, probably historic or modern archaeological features were noted on the northwest side of Hakimo Road across from Area 1. These remains included a square well, excavated 2.0 meters deep into the limestone, a retaining wall constructed of stacked limestone slabs, and an enclosure constructed of stacked limestone slabs and basalt cobbles and boulders. Since these features are located outside of Area 1, no additional documentation is presented here.

CANDIDATE SITE 2

This 12 acre area is located at the southeast end of Kaukai Road (TMK 8-7-9:por. 3; 8-7-22:1). The area is bounded by Kaukai Road to the northeast, Ulehuwa Stream to the southeast, an open lot to the northwest, and the quarry to the southwest. Soils in the area include Mamala Stony Silty Clay loam, 0-12% slopes, and Lualualei Clay, 2-6% slopes. The area is currently occupied by a pig farm and one residential dwelling. The probability of *in-situ* archaeological remains appears minimal (Fig. 6).

CANDIDATE SITE 3

This 15 acre area, located at the intersection of Hakimo and Ulehuwa roads (TMK 8-7-21:14,17,18), is bounded by Hakimo Road to the northwest, Ulehuwa Road to the southwest, Kapiki Road to the northeast, and open land to the southeast. Soils in the site area include Mamala Stony Silty Clay loam, 0-12% slopes, and Lualualei Clay, 2-6% slopes. Presently, one-third of Area 3 is open land with isolated *kiawe* and finger grass; however, the area was previously utilized for a hydroponic farm and later for a basil growing and processing business. Chiogioji and Hammatt (1993) conducted an archaeological inventory survey in a portion of this area, consisting only of TMK 8-7-21:17. No archaeological remains were found during this investigation. Four subsurface tests were conducted in selected areas in the parcel, revealing three stratigraphic layers, but no cultural remains. Chiogioji and Hammatt (1993) developed a general stratigraphic sequence for the area. The limestone shelf, which was exposed during earlier sea level fluctuations, was later covered by not more than 60 cm of alluvium from Ulehuwa Stream. Subsequently, soil developed on the alluvium and incorporated fragments of the decomposing limestone. Several structures were also described in the parcel, including 5 houses fronting Hakimo

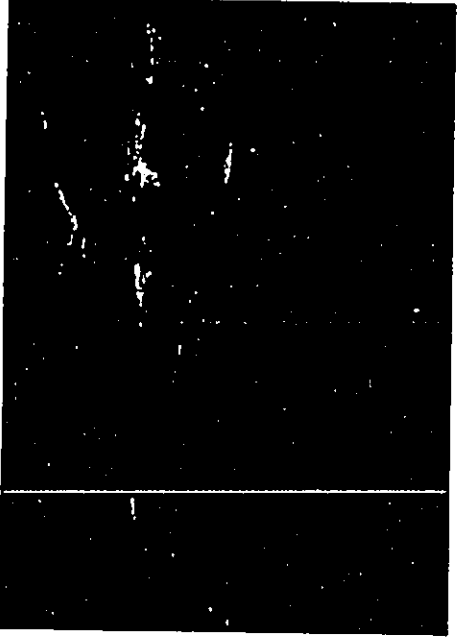


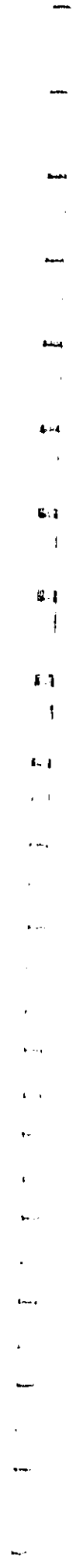
Figure 3. Overview of Candidate Site 1. View to West.



Figure 4. Overview of Candidate Site 1. View to Northeast.



Figure 5. Sheer Limestone Face Resulting from Quarrying. View to Northwest.



Road, 3 houses fronting Ulehawa Road, and 3 quonset huts and a cold storage building at the southeast end of the parcel. A gravel road provided access to the quonset huts from Ulehawa Road. Also noted in the parcel were wooden utility poles and PVC irrigation pipes. The current investigation determined that eleven structures, including 9 houses, are still extant. Also the concrete foundations for several of these structures still remain (Fig. 7). Since Site Area 3 has adequately been archaeologically sampled, no further work is recommended.

CANDIDATE SITE 4

This 14.74 acre area is located at the intersection of Hakimo and Paakea roads (TMK 8-7-21:1,2,38). The area is bounded by Hakimo Road to the northwest, a gated, privately owned continuation of Paakea Road to the northeast, Ulehawa Stream to the southeast, and truck farms to the southwest. Soil in the area includes Lualualei Clay, 2-6% slopes. Presently, it is cultivated with truck crops (Fig. 8). Pertinent archaeological work in the vicinity included an archaeological inventory survey by Hammatt, Robins, and Stride (1993), which was located to the northeast of Site Area 4. During this survey 8 sites were recorded, including a cattle wall, a furnace, wells, a house lot, a cement foundation, a wall remnant, and a habitation complex. Two of these sites, 4364 and 4365, are situated in the vicinity of Area 4. These sites include a cattle wall (4364) and a military shelter (4365). Since this area is actively being cultivated with truck crops, the potential for significant archaeological remains are minimal.

CANDIDATE SITE 5

This 12 acre area is located at the intersection of Lualualei Naval Road and Mohihi Road (TMK 8-7-8:por.76, por.77). The area is bounded by Lualualei Naval Road to the northwest, Area 6 to the northeast, the Puu Heleakala apartments to the southeast, and residential development to the southwest. Soils in the site area include Mamala Stony Silty Clay loam, 0-12% slopes, and coral outcrop. Presently, Area 5 is open land with isolated *Kiawe* and finger grass (Fig. 9). Several abandoned vehicles occupy the site area. Bulldozer berms are evident throughout the site area, indicating that the original landscape has been altered. A gravel road leads into Area 5 from Lualualei Naval Road, providing access to the 10 existing homes in its southwestern quadrant. Due to extensive land clearing activities throughout this site area, no significant archaeological remains are expected.



Figure 6. Overview of Candidate Site 2. View to Southwest.

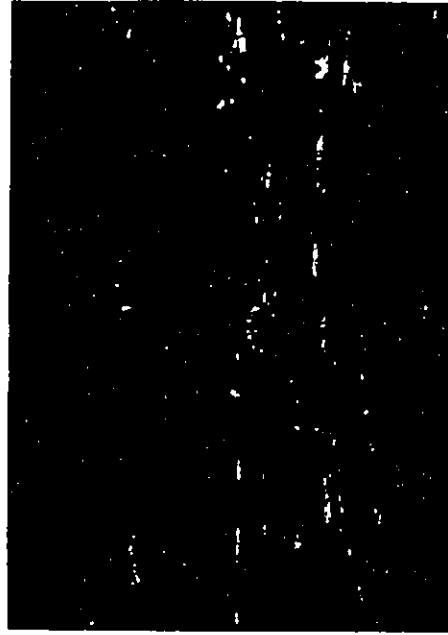


Figure 7. Overview of Candidate Site 3. View to North.

CANDIDATE SITE 6

This 12 acre area is located at the intersection of Luahalei Naval Road and Mohihi (TMK 8-7-9:por. 7). The area is bounded by Luahalei Naval Road to the northwest, Area 5 to the southwest, and open land to the northeast and southeast. Soil in the area includes Mamala Stony Silty Clay loam, 0-12% slopes. Currently, Area 6 is open land with finger grass and occasional *koa haole* and *kiawe* (Fig. 10). Several abandoned cars are located along the southwest end of the area. This area has been mechanically cleared, evident from bulldozer berms throughout the area. Due to the extensive previous disturbance, no significant archaeological remains are expected.

DISCUSSION

The current work determined the absence of extant surface archaeological resources through a surface inspection and assessed the potential for subsurface remains through a review of literature and documents. Extensive land clearing and development activities were found to have occurred in each of the candidate site areas.

Candidate Site 1 is the location of a former limestone quarry. Significant alteration of the original topography is evident from the high exposed face along the northwestern boundary (see Fig. 5). Subsequently, infrastructure, including sewers, parking lots, and walkways, was constructed for residential development of the area; however, this development was never completed. At present, these improvements remain fairly intact within the site area (see Figs. 3 and 4). Candidate Site 2 is presently occupied one house, abandoned vehicles, and a pig farm. Candidate Site 3, currently consisting of open land and 9 residences, has been extensively disturbed by previous farming activities. A portion of this area was studied archaeologically, but revealed no cultural remains. Candidate Site 4 is currently under cultivation for truck crops. Candidate Site 5 has been extensively disturbed. Candidate Site 6 has been extensively cleared and is currently open grass land.

No surface archaeological remains were identified in the candidate site areas during the on-site inspection. Although only a few archaeological studies have been conducted along the coastal and immediate inland portions of Luahalei, the resulting data indicate a paucity of traditional Hawaiian remains. The majority of sites are related to cattle ranching or military activities. Subsurface testing in portions of Area 3 by Chitioji and Hammatt (1993) revealed no subsurface cultural remains. Thus, based on the negative results of previous archaeology, together with the current condition of each site area, no significant archaeological remains are expected in any of the candidate site areas.



Figure 8. Overview of Candidate Site 4. View to Southeast.

A review of the literature concerning traditional Hawaiian settlement of Luualalei indicated a diverse range of interpretations. Following the final selection of the Nanakuli III Elementary School 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 Luualalei. It has been generally accepted that the leeward 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 Luualalei may be emerging. 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 Panialoo (1994) argue that the presence of Ulehawa Stream suggests that the area may have been agriculturally productive. Nakamura and Panialoo further state that "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'. The area potentially could have had adequate fresh water resources within an enclosed and somewhat protected area." (Ibid: 7). Since this stream provided the main water source for the *maka* portion of Luualalei Valley, archaeological sites may have been located in this area. Further research should be conducted concerning the stream area, especially since this area has not yet been closely studied archaeologically. This research may help to elucidate whether the lack of archaeological sites along the coastal area of Luualalei 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 candidate site areas. Previous archaeological testing within candidate site 3 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 selection of the Nanakuli III Elementary School site, an archaeological inventory survey is recommended. No testing is recommended if candidate site 3 is selected, due to the negative results of the previous archaeological investigation in a portion of the site area.

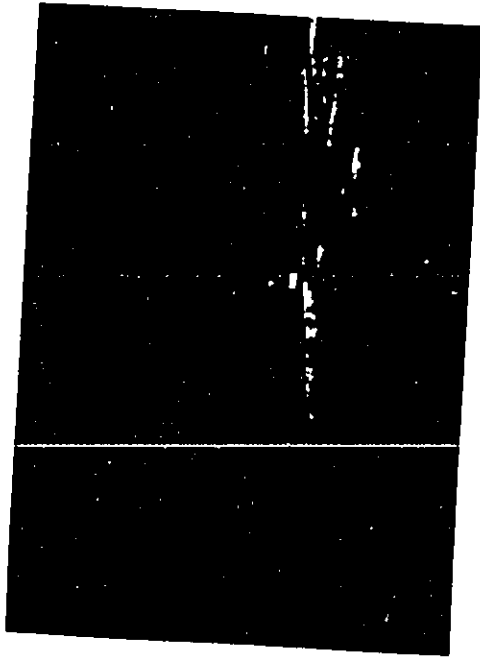


Figure 9. Overview of Candidate Site 5. View to Northeast.

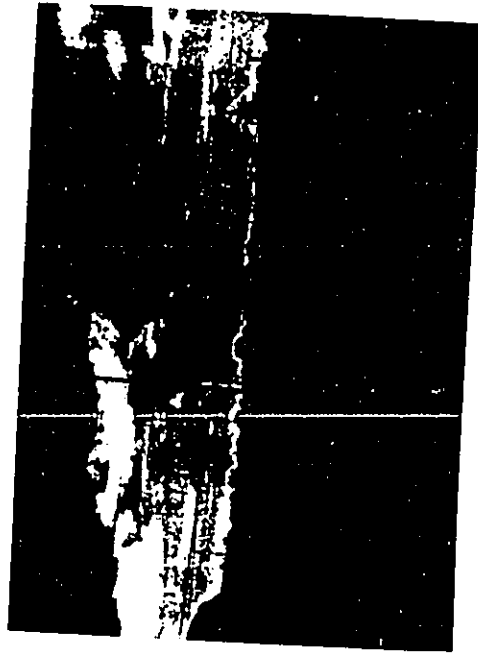


Figure 10. Overview of Candidate Site 6. View to east.

The inventory survey will include additional background research regarding traditional Hawaiian settlement in the Wai'anae District, a more intensive documents search, and selective subsurface sampling with backhoe.

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APPENDIX C

**Aspects of the History of
Lualualei and Nanakuli**

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ABSTRACT

This report presents the results of an archaeological and historical literature review for a cultural resources 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'anac District in the *ahupua'a* of Luahualei and Nanakuli, the current report was produced to satisfy the background summary requirements for both projects.

ASPECTS OF THE HISTORY
OF LUALUALEI AND NANAKULI
WAI'ANAE DISTRICT, O'AHU

The Wai'anac 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'anac. Another area where such fertile conditions may have existed is in a southern niche of Luahualei Valley, in an area watered by Ulehawa Stream.

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This portion of Luahualei is an enclosed land area, surrounded by Pu'u Hulu Kai and Uka to the north and Pu'u Heleakala, the ridge which divides Luahualei 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'anac 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 Luahualei from Wai'anac. Although this cultivation occurred towards the back (*maka*) 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 *heiau* 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.

April 1994

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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 Luualalei 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 Kaukama 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 niche surrounded by ridges in the southeastern portion of at the mouth of Luualalei Valley (Fig. 3). This area is defined by Pu'u Huhu Kai 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 Luualalei 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 (DAGS), 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.

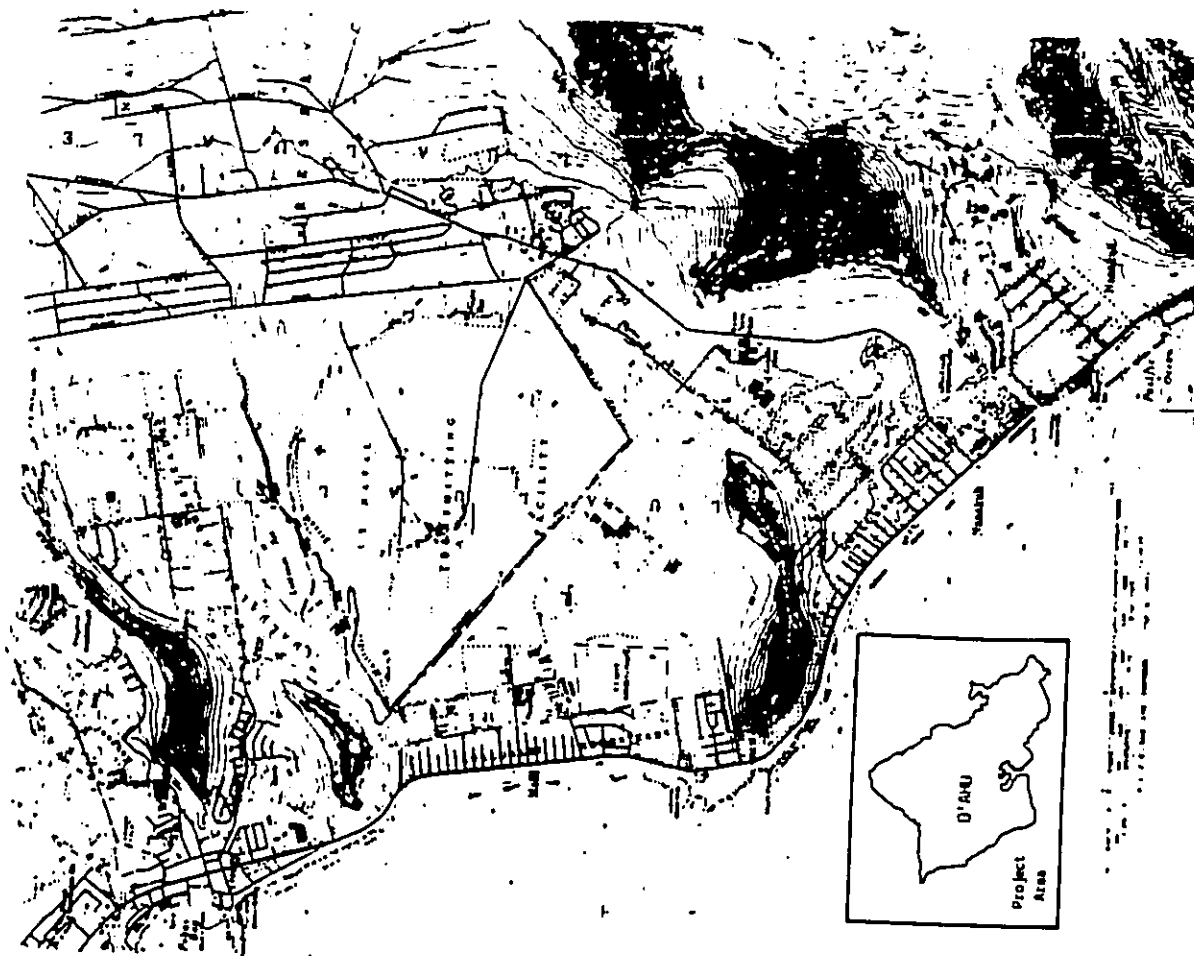


Figure 1. Location of Study Area on USGS Waianae Quadrangle.

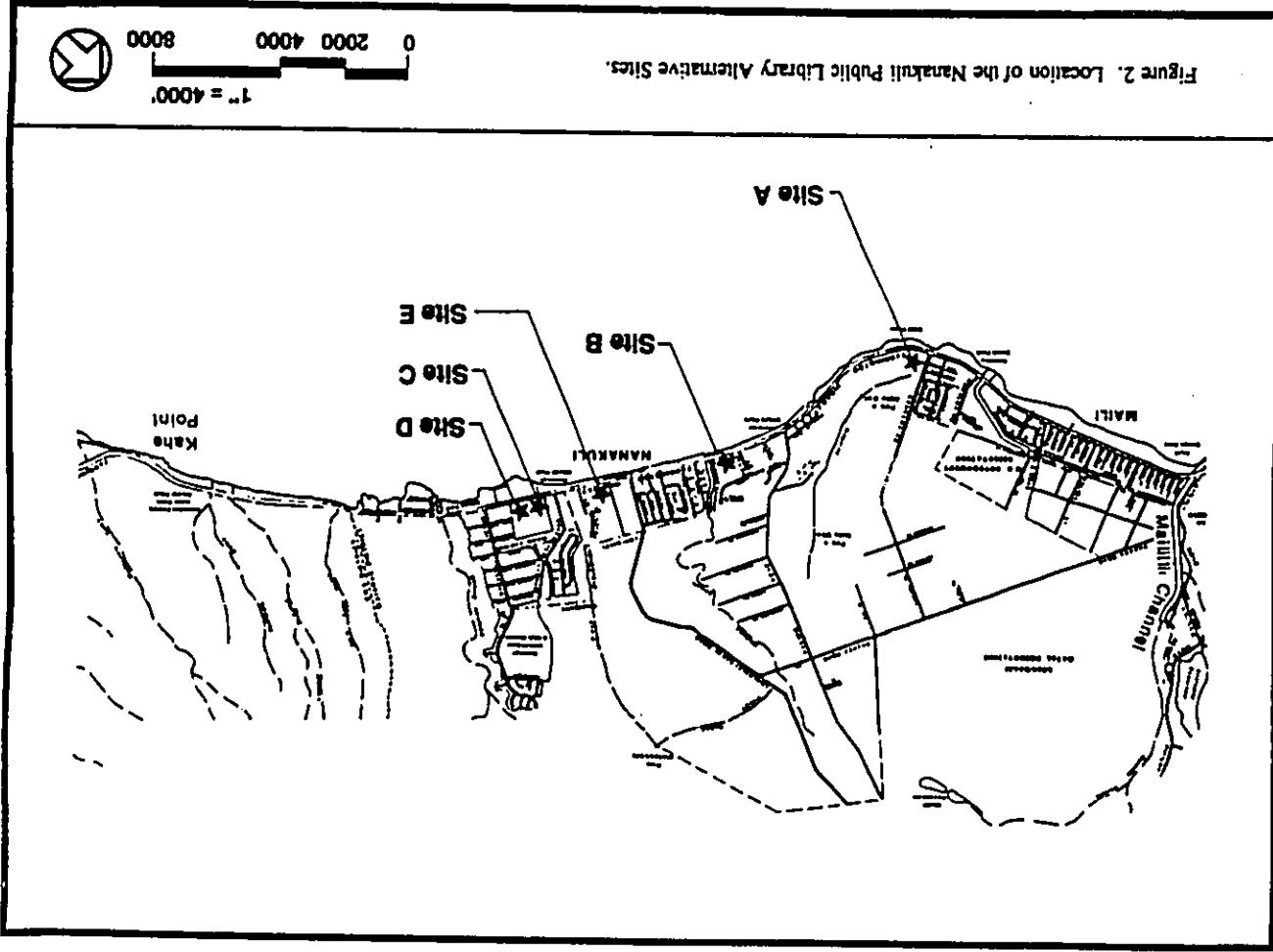
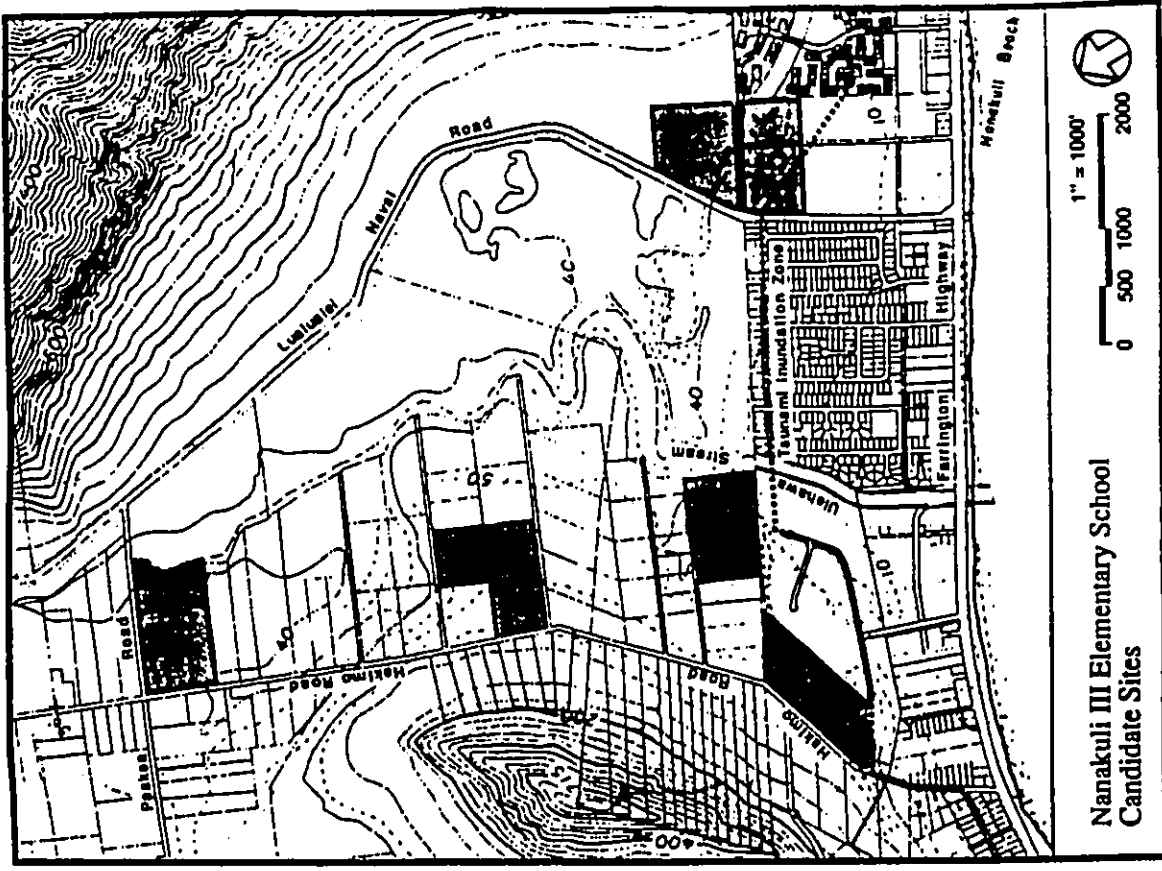


Figure 2. Location of the Nanakuli Public Library Alternative Sites.



Nanakuli III Elementary School Candidate Sites

Figure 3. Location of the Nanakuli III Elementary School Candidate Sites.

HISTORICAL BACKGROUND

O'ahu is one of the eight main islands of the Hawaiian archipelago. Traditionally and by boundaries defined during the Great Māhele of 1848, O'ahu was divided into six districts (Fig. 4): Kona (Honolulu), Ko'olaupoko, Ko'olaupoko, Waialua, Wai'anāe, 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'anāe, O'ahu.

The present-day Wai'anāe District consists only of the area located to the west of the Wai'anāe Mountain Range (King 1935:221). At the time of the Great Māhele of 1848, an event which legalized the concept of private ownership of property in Hawai'i (see below), the district of Wai'anāe also encompassed a large portion of land, known as Wai'anāe Uka, which crossed over the Wai'anāe Mountain Range into the central plateau of O'ahu. This land area was removed from the Wai'anāe District by Act 84 of the Session Laws of 1909, and added to the Waialua District (King 1935:219-220). Subsequently, Wai'anāe Uka was removed from the Waialua District and combined with the *ahupua'a* (a land division defined below) of Wai'ānae to form a new and seventh district, Wai'ānae, 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'anāe 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'anāe was divided into nine *ahupua'a* (Fig. 5). From northwest to southeast, these *ahupua'a* were: Keawa'ula, Kahanahaiki, Makua, 'Ohikilolo, Kea'au, Makaha, Wai'anāe, Luualalei, and Nanakuli (Sterling and Summers 1978: map of Wai'anāe district).

There is a question, however, concerning the *ahupua'a* status of Luualalei and Nanakuli, as both land areas are not listed in the *Indices of Awards (Hawai'i [Ter.] Commissioner of Public Lands)*. Evidently, both Luualalei and Nanakuli were considered a part of the *ahupua'a* of Wai'anāe in the Māhele. However, Sterling and Summers 1978 (map of

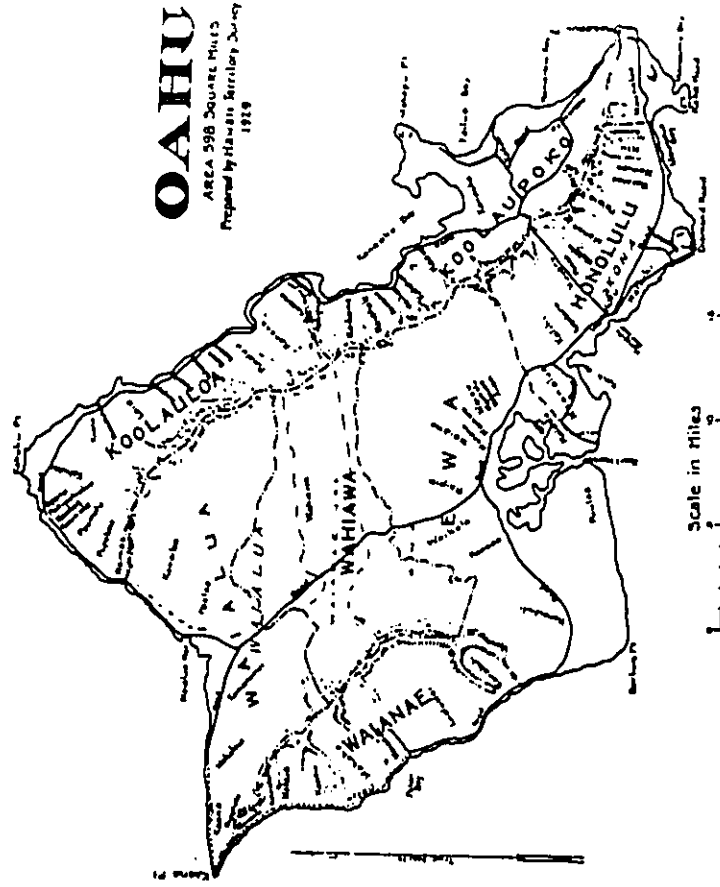


Figure 4. Map of O'ahu Island. Note Wai'anāe District (Hawai'i [Ter.] Commissioner of Public Lands 1929:691).

Wai'anāe) and Marion Kelly in her report, "Notes on the History of Luualalei" (1991:313, 319-320) specifically and without documentation label Luualalei an *ahupua'a*. As for Nanakuli, besides the Sterling and Summers (1978) map of Wai'anāe attribution of this land area as an *ahupua'a*, Lokomaika'iokalani Snakenberg, in his article "O'ahu: Pre-Mahele Moku and Ahupua'a," (1990:7) in agreement noted, "Nanakuli, the first *ahupua'a* in the moku [district] of Wai'anāe" (Figure 6). Further research as to the status of Luualalei and Nanakuli as *ahupua'a* should be undertaken, particularly with State Land Court and Land Management records.

For the purposes of this report, Luualalei 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 III Elementary School are located within the *ahupua'a* of Luualalei, while the five alternative sites of the proposed Nanakuli Public Library occur in Luualalei and Nanakuli *ahupua'a*.

MYTHS AND LEGENDS

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

WAI'ANAE

The origin of the district and *ahupua'a* name, Wai'anāe, is uncertain. Ethnologists E. S. Craighill Handy and Elizabeth Green Handy have posited one possible explanation based on Pūcha fishpond:

To the west of the Wai'anāe Stream, near the sea, there was a large fresh-water fishpond called Pūcha . . . As this was the type of seaward fresh-water pond in which young mullet were enclosed until they completed their growth, it is possible that the entire area acquired its name, Wai (water)-'ānāe (full grown mullet), or Water-of-the-mullet, from this pond [Handy and Handy 1972:468].

The district and *ahupua'a* of Wai'anāe were mentioned in the epic and poetic legend of the Moikeha. On his return journey from Kahiki, the *ali'i nui* (high chief) Moikeha allowed his followers to depart at various points of the islands. According to Samuel Manaizakalani Kamakau, while Moikeha eventually ends up at Kaua'i, two of Moikeha's followers, Pūka'i and Mo'ēka, depart at Wai'anāe:

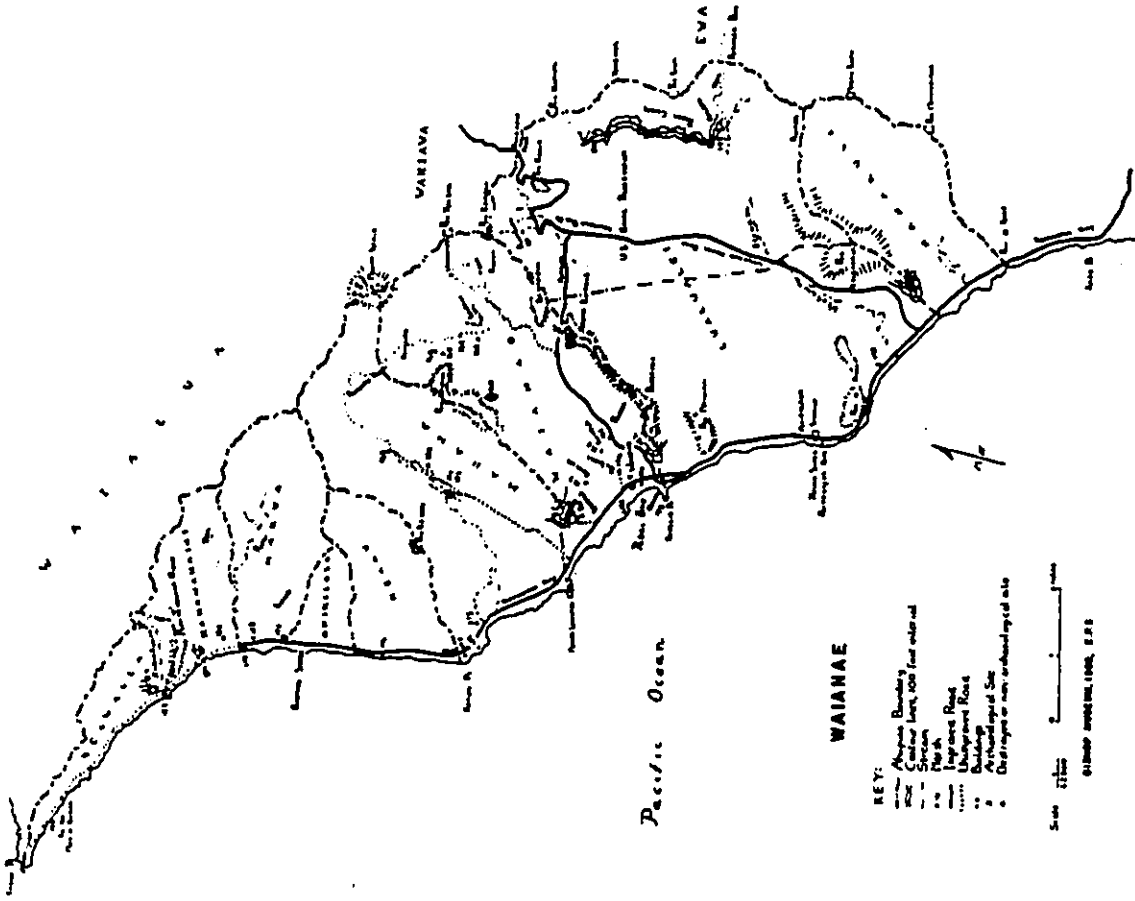


Figure 5. The Wai'anāe District, Showing its *ahupua'a*. (Sterling and Summers 1978)

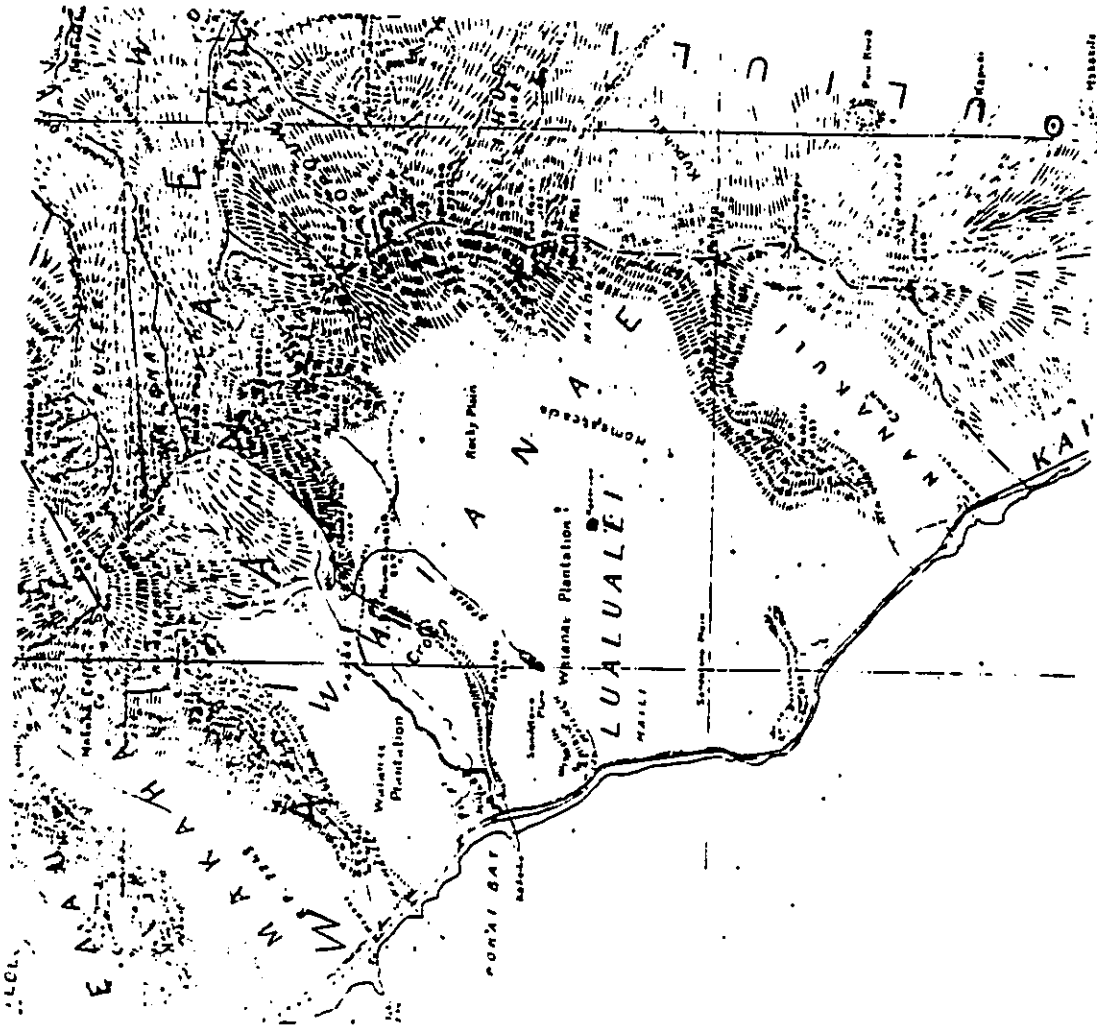


Figure 6. Lualualei and Nanakuli. Portion of 1912 Map of O'ahu by Donn (Hawai'i State Survey Office, Reg. No. 2374).

Poka'i and Mo'oke remained on O'ahu in Wai'anae--in Wai'anae of the gentle Kalaulu wind, the sweet waters of 'Eku, the thick poi of Pahoa, the stringy poi of Lehaeo and Kuaiwa, the rich poi of Kamaile, and the *aku* fish "iibits" (*aku nahu pu*) of Wai'anae--in Wai'anae, land beloved of the sun [Kamakau 1991:106].

Lualualei

Why Lualualei was so named was suggested in a letter to the Honolulu Advertiser on 5 July 1934. This letter by A. Mouritz 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 allegory relating to the clever strategy of the famous Maile-kukahi, a high chief of Oahu, whose flexible flanks of warriors surrounded four invading armies from Hawaii and Maui at the great battle of Kipapa (Kipapa, paved) where the corpses of the slain paved the bottom of this ravine, about A. D. 1410 [quoted in Sterling and Summers 1959:68].

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 Mookini provide a possible explanation for the name Nanakuli. When translated literally as "look [nana] at [the] knee [kuli]," the *ahupua'a* of Nanakuli is "said to be named in honor of the tattooed knee of Ka'opulupulu, a priest whose chief, Ka-habana, turned a deaf [kuli] 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 passersby; hence they looked at them and pretended to be deaf" (ibid.). This explanation was corroborated 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 in 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 Kanui, 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 mamaka 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 they 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 kuli, deaf--that is, Deaf mutes 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, Nanakuli would appear to be a resource-poor *ahupua'a*. However, as explained below, adequate food resources, in the form of sweet potato cultivation, along with the resources of the ocean, would have made Nanakuli a productive habitation area.

Ulehawa

Another locale which is pertinent to the proposed school and library sites is Ulehawa, a part (perhaps an *ʻiʻiʻi*) of Luualalei. Ulehawa is the name of a stream and section of land located in the southern part of Luualalei. 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-Kalana). S. M. Kamakau provided the following explanation:

...Akaalana lived with Hinakawea, and Maui-mua, Maui-waena, Maui-ikiiki, and Maui-a-kalana, all boys were born.

At Ulehawa and Kaolae 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 Hina made her tapa, the fishhook Manaiakalani, the snare for catching the sun, the places where Maui's adzes

were made, and all his other implements. But Maui-a-kalana went to Kahiki after the birth of his son in Hawaii'i and the last of his children born of Hina-a-kealoha was Hina-akeka, 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 [quoted in Sterling and Summers 1978:64].

The area of interest is the *makaʻi* portion of Ulehawa Stream. This location is surrounded and enclosed by hills; Pu'u Huhu 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 Wai'anae Mountain Range. According to a recent study, Ulehawa Stream may formerly have flowed all year around:

...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 [Bordner 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 Wai'anae Mountain Range where Pohakea Pass and Nioula *heiau* are located. Pohakea Pass was noted by I'i in the 19th century (see pp. 9-10 of this report). Nioula *heiau* was an important religious structure which McAllister said was "very ancient, belonging to the chief, Kakuhihewa" (McAllister 1933:110).

EARLY DESCRIPTIONS OF WAI'ANAE

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

From the commencement of the high land to the westward of Opooroah [Puuloa] was...one barren rocky waste, nearly destitute of verdure, 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 shabby cucurbit trees, and along those shores are a few straggling fishermen's huts. Nearly in the middle of this side of the Island is the only village we had seen westward of Opooroah. In its neighbourhood the bases of the mountains retire further from the seashore, and a narrow valley, presenting a fertile cultivated aspect,

seems to separate and wind 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, is a high rock (Mauna Lahihi) 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 is we should stay until morning, their chief would be on board with a number of hogs, and a great quantity of vegetables; but that he could not visit us then because that day was taboo. The face 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 leeward slopes of the Wai'anae range as far as the boundary of the rich district of 'Ewa, which surrounds the spreading lochs 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 [1972:467].

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 leeward 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 leeward 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 I'i early in the 19th century:

...there were three trails to Wai'anae, one by way of Puu o Kapolei, another by way of Pohaka, and the third by way of Kotele [1959:97].

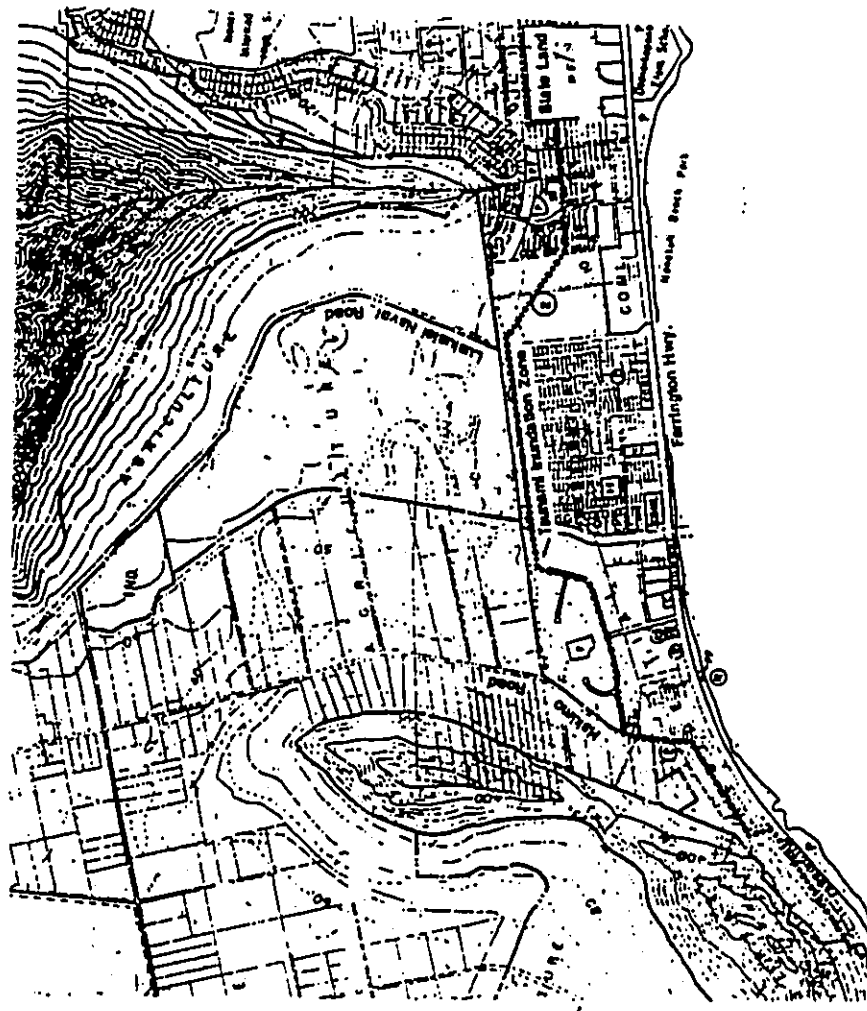


Figure 7. Area of Ulehuwa Stream, Puu o Huhu Uka, Pu'u o Huhu Kai, and Pu'u Heleakala. Note lands designated "agriculture." (DP Map/C&C)

The trails which would most affect the areas we are concerned with in this report are the Puu o Kapolei and Pohakaea trails. The Puu o Kapolei trail went through the *ahupua'a* of Honouliuli in the 'Ewa district and stayed close to the shoreline of the Wai'anae district. The Pohakaea trail led through the Pohakaea Pass in the Wai'anae Mountain Range and descended towards the areas of concern. The third trail, the Kolekole trail, descended through the Wai'anae Mountain Range further to the north.

RESOURCES OF LUALALEI AND NANAKULI

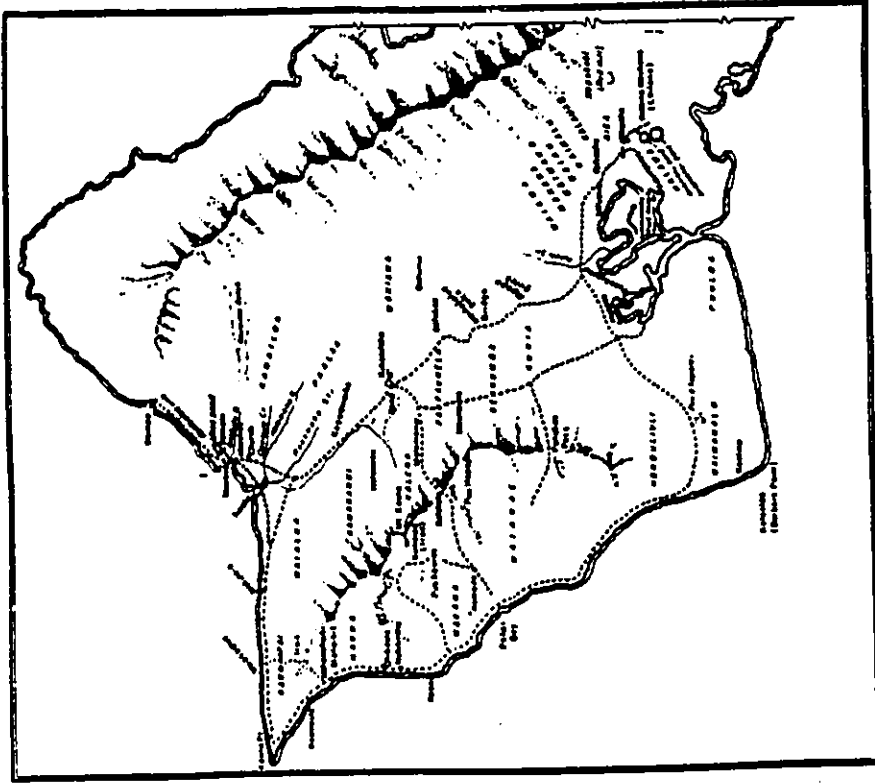
Population

By the time of the Great Māhele 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 1.
Hawaiian and Part-Hawaiian Population of the Hawaiian Islands, 1778 to 1896
(From Schmitt 1977:7, 25)

1778-79	200,000-250,000
1800	165,000-195,000
1823	135,000-145,000
1853	71,019
1878	47,508
1896	39,504

The decline in population was apparent also at the Wai'anae district. In 1863, a missionary stationed on the Wai'anae 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 Wai'anae district from 1831-32 to 1900 showed a constant decline. Following 1900, however, the population of the Wai'anae district grew significantly (Table 2).



Trails of leeward Oahu as described by li. Map by Paul Rockwood.

Figure 8. Some of the trails of the Wai'anae District. Note the Pohakaea Pass Trail and the trail which went through Honouliuli by Pu'u o Kapolei. Map by P. Rockwood, based on descriptions by John Papa I'i (1959:96).

Table 2.

Population of the Wai'anae District, 1831 to 1970
(From Schmitt 1977:12-14)

1831-32	1,868
1835-36	1,654
1890	903
1896	1,281
1900	1,008
1910	1,846
1920	1,802
1930	1,923
1940	2,948
1950	7,024
1960	16,452
1970	24,077

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 1920
(From Schmitt 1977:12-14)

1831-32	13,344
1835-36	12,994
1890	22,907
1896	29,920
1900	39,306
1910	52,183
1920	81,820

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 (*uata*) 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 localities, 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-uka, 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:

...its [Wai'anac's] compensatory feature was the exceptionally rich deep-sea fishing available off and beyond Ka'ena Point, where the great current pressed by the northeast trade winds flows in a westerly direction along these shores. It was here that the ancient chief Kawelo distinguished himself as a fisherman; and there were also many stories of the culture hero Maui as a great fisherman identified with this area. Much of the coast hereabouts is marked by steeply built-up, shifting sand dunes and treacherously rough seas, which probably accounts for the acclaim connected with particular fishing exploits of the past [1972:467-68].

In addition, the following narrative by John Papa I'i noted the existence of a fishpond at Luualalei in the early 1800s, one of the only instances of the Luualalei fishpond being mentioned:

The travelers stopped only one night and spent the following night on the other side of Pohakea. The elders and the children who went with them slept above Kunia, on this side of Pohakea. The coming of the retinue was announced in Waanae; and it was told that the family, elders and children together, would be set on fire for the wrong committed by Kalakua. Though he alone was thought to have committed the misdeed, the whole family was held guilty. *The company, somewhat in the nature of prisoners, spent a night at Luualalei near the fish pond on the plain. ... Finally, a proclamation from the king was given by Kaulainamoku [sic], stating that there would be no deaths, for Kalakua had not worn the king's malo. Thus was the Luluka family spared a cruel fate. A child born in the family later was named Luualalei* [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 Wai'anac 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 "Gourds, 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 Hawaii'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 fee 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 Hawaii'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 Luualalei and Nanakuli were both crown lands. Although neither land area is listed in the *Indices 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 Wai'anac 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 Hawaii'i. Some Kuleana or Land Commission Awards (L.C.A.) were made in Luualalei, 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 Wai'anac coast, one of the first cattle ranches was located at Luualalei.

This Luualalei ranch was begun by Paul F. Manini, son of Don Francisco de Paula Marin (1774-1837). Marin 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 Wai'anac coast:

Waianac's potential for grazing livestock attracted the first outside interest since the discovery of sandalwood. In 1851 a hapa-haole Spaniard named Paul F. Manini leased 17,000 acres in Luualalei 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 Waianae 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 fee simple titles. These six or seven parties may be called lords of the soil. The missionary added with distaste that 'there are in Waianae 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 Wai'anae coast is described as follows:

Another name that turns up in the old Waianae Coast records is that of the Dowsett clan, descendants of a British sea captain. One of the early ranchers in Waianae 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 Waianae Uka with an Irish partner, George Galbraith. *He also ran cattle at different times in Nanakuli, Mikilua and Lualualei.* Dowsett, once reputed to be the wealthiest man in the Islands, did not live on the Waianae Coast. But in 1880 a member of the clan was running a grazing ranch in Waianae Valley on 17,200 acres leased from the crown [McGrath 1973:32; emphasis added].

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

Leaving Waianae, 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 sixteen thousand acres from the Crown. Its dimensions do not differ materially from those of the Waianae Valley, except that it is broader--say, two miles in width by a length of six or seven miles. *The hills which inclose it, however, are not so precipitous as those at Waianae, 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 [Bowser 1880:493-94; emphasis added].

Bowser's visit preceded the cultivation of sugar cane at Lualualei Valley. Continuing towards 'Ewa from Lualualei, Bowser 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 Hoacae, 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 [Bowser 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 been a well digger]. In 1894, he and a man named Tom King chartered the brigantine Oakland in Seattle, filled her hold with cattle and the cabins with food, and sailed for Hawaii. By the turn of the century, McCandless' ranching empire covered much of the Waianae Coast including land at Nanakuli, 4,000 acres at Lualualei, San Andrews' property in Makua and pastures toward Kaena Point [McGrath 1973:68].

From 1851 to into the 20th century, therefore, ranching was an important industry at the Wai'anae district. The extensive grazing of cattle in the valleys of Lualualei and Njnjkuh 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 Waianae Sugar Company

Though ranching continued to be an important part of the lifestyle of the Wai'anae district into the 20th century, another important development was the establishment of the Wai'anae 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 [Wai'anae] plantation gained in power and influence, much of the Waianae Coast did not yet feel its push into a new lifestyle. In 1878, Nanakuli a family of brothers named Robinson ranches as usual. On the hot plains of Lualualei the Dowsetts and other did the same...[McGrath 1973:44].

Prior to the establishment of the Wai'anae 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 1863, "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 Hermann 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. ...Hermann A. Widemann... obtain[ed] a lease on Wai'anae crown lands. In 1879 he leased all of Wai'anae Kai for 25 years" (McGrath 1973:37).

Widemann and his partner, J. L. Richardson, quickly moved to develop their leased acreage. When George Bowser visited the area shortly after they had begun the Wai'anae Sugar Plantation, he was impressed with the progress which 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 Messrs. 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 500 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 cocoa nut 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 sugar cane is secured by irrigation. A good landing has been constructed, and the produce of the place is shipped in sailing vessels direct to Honolulu...[Bowser 1880:493].

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 Luailualei 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 hands were noticeable for their neat uniform. The train first went to Luailualei, 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 carried the party 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 McGrath 1973:48].

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

By 1890, Wai'anae Sugar Company had 600 acres under cultivation with an estimated yield that year of 2,500 tons of sugar. The plantation was described as a little model of a place with 12 miles of railroad, three locomotives and 350 laborers. Fields were being started in Makaha and Luailualei. 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 sweeten brackish irrigation water being pumped from the Kamale wells. Other pumps lifted the mixture into a network of flumes and ditches which led to cane furrows as far away as Luailualei. 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 Luailualei [McGrath 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. E. Dillingham and the Development of the Oahu Railway and Land Company (OR&L) 1889 to 1899

Improved transportation arrived on the leeward coast of O'ahu in 1895 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 modernly efficient manner.

OR&L was begun by Benjamin Franklin (B. F.) Dillingham (1844-1918), who moved to Hawai'i from Massachusetts in 1864 (Day 1984:34). 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 O'ahu. 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 1967:68), the OR&L opened to sugar cane cultivation the vast acreage of the western and northern areas of O'ahu 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 *ohupua'a* of Honouliuli and the 'iwa 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 Waialua. 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 Kahuku 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 Wai'anae coast until 1946 when it went out of business. Along with the OR&L, the Wai'anae Sugar Plantation also decided to close its operations.

Additional Developments in Luahalei and Nanakuli

In the 20th century, Luahalei and Nanakuli were the sites of various developments. Government homesteads were offered for sale at Luahalei, and Nanakuli was designated as an area for Hawaiian homesteads. Then, the U. S. government condemned a major portion of Luahalei for a naval ammunition depot, and later a radio transmitting station. For more information on the above, see McGrath 1973:85-88, 111-118, and Kelly 1991:328-334, 339-341.

Camp Andrew

A 31.6 acre parcel located immediately mauka of the current Nanaikapono 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 Luahalei 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-19823, 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).

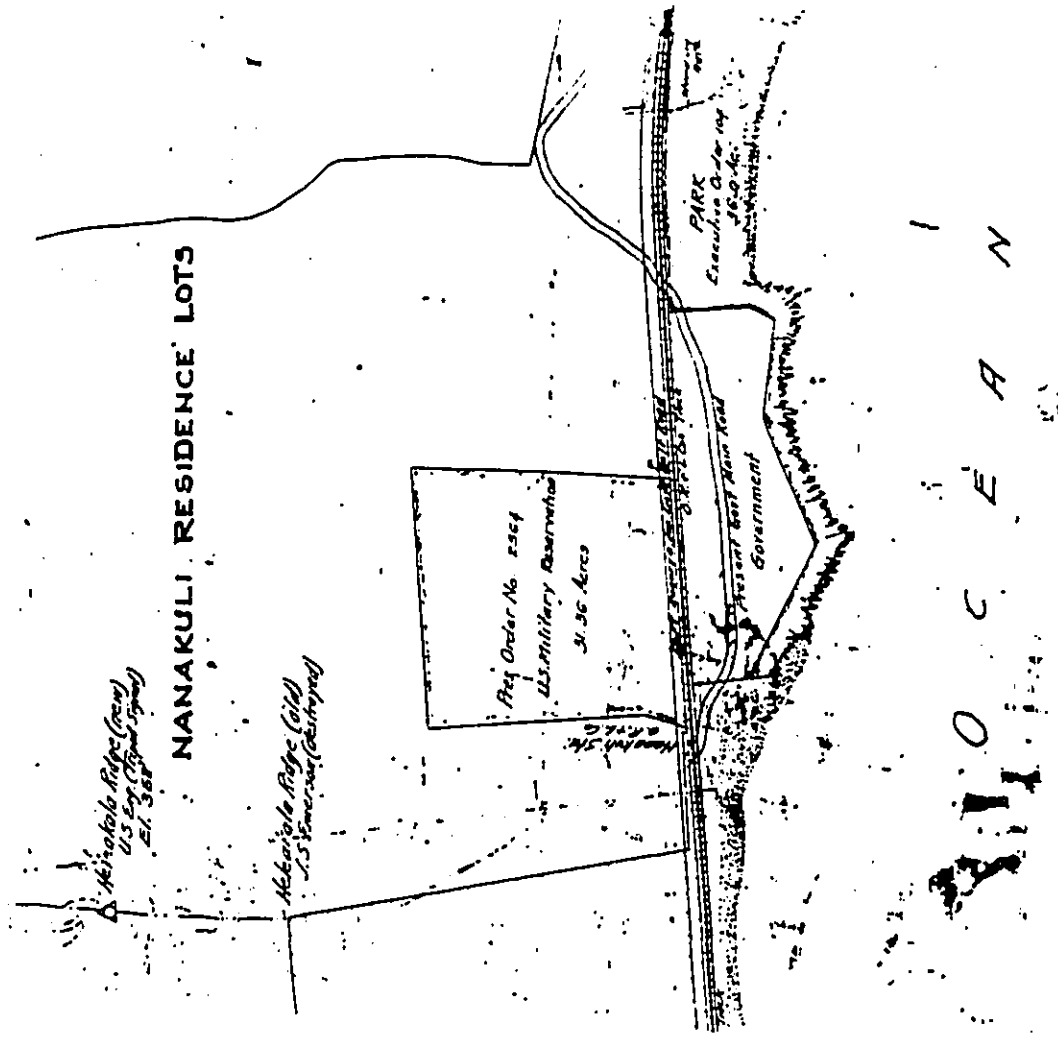


Figure 9. Camp Andrew, Military Reservation, on a 1929 Territorial Map (Reg. 2535).

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), Bordner (1977), Chiojioji et al. (1993), Cordy (1975, 1976), Hammatt et al. (1991), Haun (1991), Kennedy (1983), Mayberry and Rosendahl (1988), Pak and Cordy (1990), Pantaleo 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 Nanakuli station (railroad) toward Pu'u o Huluh. According to McAllister:

Northeast of the road on the property of E.P. Fogarty 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 reposed 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 Summers 1978:64).

Barrera (1975) conducted an archaeological survey of approximately 80 acres in Ma'ili. 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.

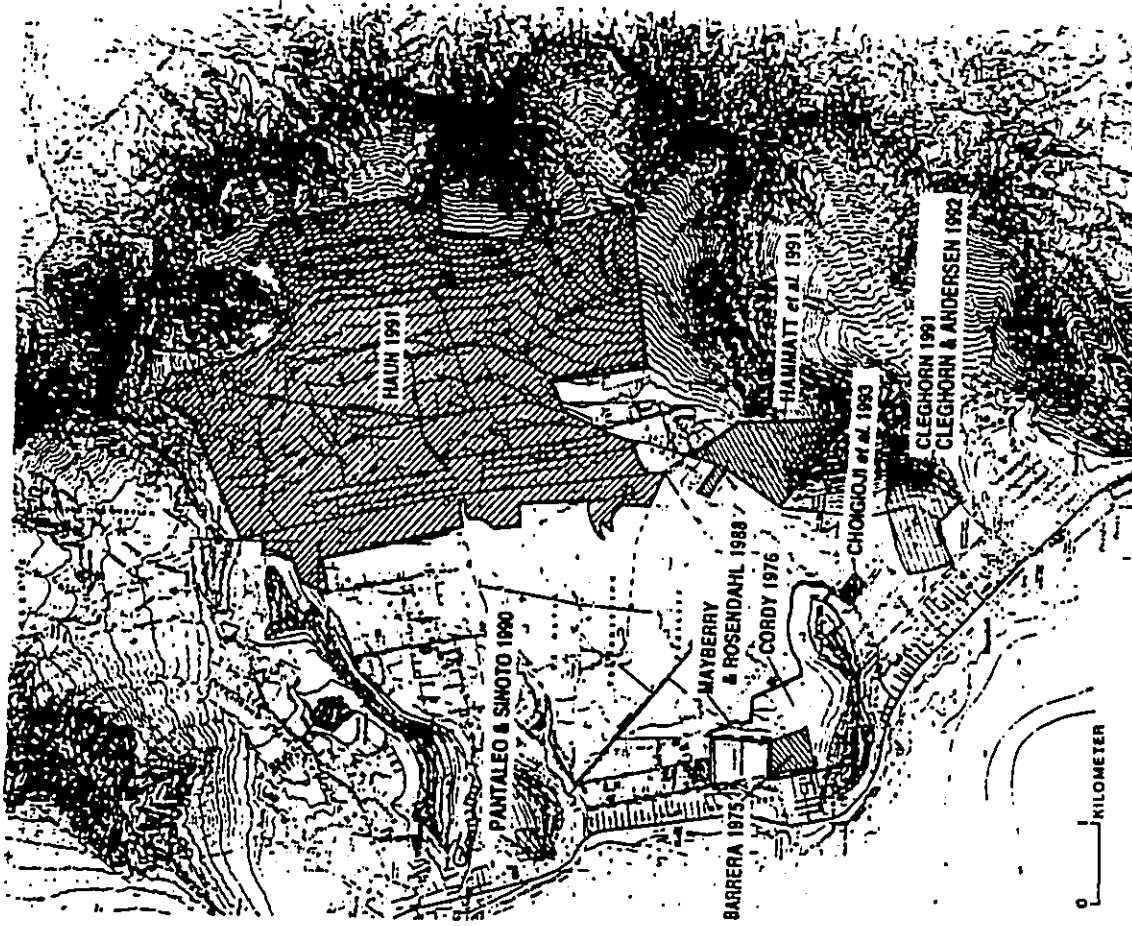


Figure 10. Location of Previous Studies in the Area (After Hammatt 1991).

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.

Chiogioji and Hammill (1993) conducted an archaeological investigation of a 5-acre parcel in Luualalei, 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-Oa-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 this 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.

Hammill, Robins, and Stride (1991) conducted an archaeological inventory survey for the proposed Luualalei golf course. Eight sites (4364-4367, 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 house lot 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.

Haun (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 Luualalei. 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 Luualalei 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 Luualalei may be due to the availability of fresh water resources.

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

Mayberry and Rosendahl (1988) conducted an archaeological reconnaissance survey for the Ma'ili Kai property in Luualalei. 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-Oa-7, 8, 9, 12, 13, 16, 19-24, 28, and 29) and 12 new sites (Temporary Sites T-2, 4-9, 12, 17, 18, 20, 21). Twenty-four of these sites date to the twentieth century, while the remaining two sites may pre-date the twentieth 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 DIHHL-DLNR 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 control/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 cisterns.

Panaleo and Sinoto (1990) conducted an archaeological surface assessment for the proposed Village Poka'i Bay Subdivision in Luualalei. No archaeological sites were identified during this survey.

Clegghorn (1991) conducted a reconnaissance survey in the central portions of the project area on both sides of Luualalei 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 Heleakala. Clegghorn and Andersen (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 cited.

SETTLEMENT PATTERN

Although limited archaeological research has been conducted in coastal Luualalei, a generalized settlement pattern for the area can be postulated. Settlement of Luualalei 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. Ulehawa Stream was probably the primary source of fresh water for the current project area in the *makaai* portions of southeast Luualalei. Unfortunately, no archaeological studies have been conducted in the vicinity of Ulehawa Stream. Thus, the paucity of prehistoric archaeological sites in the subject project 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 project 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 Ulehawa Stream. Although surface remains appear unlikely, types of features that may be encountered include terraces, *auwai*, water diversion/retention features, and mounds.

DISCUSSION

The Wai'anāe 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 O'ahu. 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 condemnation 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 Luualalei 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 *kalo* and wet-land agriculture which flourished in the neighboring *ahupua'a* of Makaha and Wai'anāe 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 reliable 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 Luualalei.

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 III 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 (Panialoa and Sinoto, 1994).

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APPENDIX D

**EIS Consultation Phase,
Comments and Responses**

**APPENDIX D. 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
Department of the Navy

B. STATE

Department of Agriculture
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 Parks and Recreation*
Department of Public Works
Department of Transportation Services
Department of Wastewater Management
Planning Department
Police Department*

D. OTHER

Ching, Yuen & Morikawa
Dwyer Imanaka Schraff Kudo Meyer & Fujimoto
Ryoei and Nancy Higa
Kusao & Kurahashi, Inc.
Waianae Coast Neighborhood Board #24

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

OTHER

Councilmember John DeSoto
Representative Henry Peters
Senator James Aki
Landowners of the Candidate Sites
(except for Kusao & Kurahashi, Inc. regarding Site 1; Ching, Yuen & Morikawa regarding Site 6 and a portion of Site 2; Dwyer Imanaka Schraff Kudo Meyer & Fujimoto regarding a portion of Site 3; and Ryoei and Nancy Higa regarding a portion of Site 4)



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

SENT TO
ATTENTION OF

March 18, 1994

JOHN WAIHEE
GOVERNOR

GC

RECEIVED

MAR 21 1 21 PM '94
DIVISION OF PUBLIC WORKS
4463

Planning Division

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

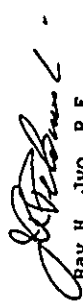
Dear Mr. Takushi:

Thank you for the opportunity to review and comment on the Environmental Assessment and Environmental Impact Statement Preparation Notice for the New Nanakuli III Elementary School, Nanakuli, Oahu. The following comments are provided pursuant to Corps of Engineers authorities to disseminate flood hazard information under the Flood Control Act of 1960 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. Based on the information provided, the project does not involve work in waters of the U.S.; therefore, a DA permit is not required. However, after final selection and detailed plans are developed, the applicant will need to consult with our Operations Division to determine if the project will involve work in coastal or stream/drainage channel waters. Please contact them at 438-9258 for further information.

b. The flood hazard information provided on page 16 of the Environmental Assessment is correct.

Sincerely,


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



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

MAY 5 1994

Mr. Ray H. Jyo
Director of Engineering
Department of the Army
U. S. Army Engineer District, Honolulu
Building 230
Fort Shafter, Hawaii 96858-5440

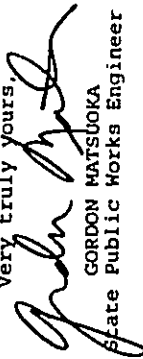
Dear Mr. Jyo:

Subject: Nanakuli III Elementary School
EIS Consultation Phase
DAGS Job No. 12-16-6380

Thank you for your March 18, 1994 comments on the subject project. Development of the candidate school sites is not expected to involve work below the high water mark of adjacent channels 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.

We appreciate your input for this project. If you have any further 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

RM:jk
cc: DHM, Inc.

ROBERT P. TAKUSHI
COMPTROLLER
LLOYD I. UEBASAKI
DEPUTY COMPTROLLER
(P) 1319.4



DEPARTMENT OF THE NAVY
 COMMANDER
 NAVAL BASE PEARL HARBOR
 BOX 110
 PEARL HARBOR, HAWAII 96860-5000

PLEASE REFER TO
 11010
 Ser #4(239)/7356
 JUL 13 1994

4 WAHAE
 46700R



STATE OF HAWAII
 DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
 P O BOX 118, HONOLULU, HAWAII 96818

ROBERT P. TAKUSHI
 COMPTROLLER
 LLOYD L. UMEBASAMI
 DEPUTY COMPTROLLER
 (P) 1785-4
 LETTER NO.

AUG 29 1994

Mr. Ralph Morita
 Public Works Division
 Department of Accounting
 and General Services
 State of Hawaii
 P.O. Box 119
 Honolulu, HI 96810

Dear Mr. Morita:

ENVIRONMENTAL ASSESSMENT
 (ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE)
 FOR THE NEW NANAKULI III ELEMENTARY SCHOOL

Thank you for the opportunity to comment on the subject Environmental Assessment dated January, 1994. It is noted that three of the proposed alternative school sites, sites 5 and 6, adjacent to Luualalei Access Road and Site 4 along Hakimo and Paakea roads, represent a potential for increased vehicular traffic along Luualalei Access Road.

Luualalei Access Road is owned by the Federal Government and used primarily for hauling explosives to and from the Naval Magazine, Luualalei. General public use of the road is currently prohibited. Although there have been discussions with the City and County of Honolulu to convey ownership of the road, there is no assurance that this will occur. It is recommended that the Environmental Impact Statement address conveyance of Luualalei Access Road to the City and County of Honolulu.

Our point of contact is Mr. Stanford Yuen, Facilities Engineer, at 471-3124.

Sincerely,

Stanford B.C. Yuen
 STANFORD B.C. YUEN, P.E.
 Facilities Engineer
 By direction of
 the Commander

Copy to:
 Ms. Wendie McAllister
 DHM, Inc.
 1975 Ualakaa Street
 Honolulu, HI 96822

Mr. Stanford B.C. Yuen, P.E.
 Facilities Engineer
 Department of the Navy
 Naval Base Pearl Harbor
 Box 110
 Pearl Harbor, Hawaii 96860-5020

Dear Mr. Yuen:

Subject: Nanakuli III Elementary School
 EIS Consultation Phase

Thank you for your July 19, 1994 comments on the subject project. The information you provided regarding the Federal Government's ownership and use of Luualalei Access Road will be included in the project Site Selection Study and Draft EIS. The EIS will address conveyance of Luualalei Access Road to the City and County of Honolulu and/or the State of Hawaii.

We appreciate your input for this project.

Very truly yours,
Gordon Matsuoka
 GORDON MATSUOKA
 State Public Works Engineer

RM:jj
 cc: DHM Inc.

JOHN WAIHEE
Governor

RECEIVED

APR 13 1994

DIV. OF PLANNING



State of Hawaii
DEPARTMENT OF AGRICULTURE
1428 So. King Street
Honolulu, Hawaii 96814-2512

YUKIO KITAGAWA
Chairperson, Board of Agriculture
LEITIMA M. UYEHARA
Deputy to the Chairperson

FAX: (808) 973-9613

Mailing Address:
P. O. Box 22159
Honolulu, Hawaii 96823-2159

Merits

Mr. Robert P. Takushi
April 13, 1994
Page 2

and not the existing farming activities should bear the full cost of carrying out mitigating actions.

We believe proposed sites 1, 5, and 6 are better choices because they appear to be distant from intensive agricultural uses.

Should you have any questions, please call me at 973-9551, or Dr. Paul J. Schwind, Planning Program Administrator, at 973-9469.

April 13, 1994

To: Robert P. Takushi, State Comptroller
Department of Accounting and General Services

From: Yukio Kitagawa, Chairperson
Board of Agriculture *YK*

Subject: EIS Consultation Phase (Preparation Notice) *2*
Manakuli III Elementary School *SA*
Six potential sites
TKM: 8-7-07: por. 4 (12 acres)
8-7-08: por. 76, 77 (12 acres)
8-7-09: por. 7 (12 acres)
8-7-21: 1, 2, 38 (14.74 acres)
8-7-21: 14, 17, 18 (15 acres)
8-7-22: 1 (and) 8-7-09: por. 3 (12 acres)
Manakuli, Oahu

The Department of Agriculture has reviewed the subject document and offers the following comments.

We are concerned that selection among proposed school sites 2, 3, or 4 may eventually result in nuisance complaints against the intensive crop and livestock operations that are on or near these sites. Sites 2 and 3 are near to livestock (swine, poultry) operations. A portion of Site 4 is used for vegetable farming. In the case of Site 4, displacement and relocation of the affected farm(s) are issues that need to be addressed. Chapter 165, Hawaii Revised Statutes (Hawaii Right-to-Farm Act), notwithstanding, nuisance complaints can adversely affect normal operations of intensive agricultural uses that are on or near urban uses such as schools. An example of this is found at the Maili Elementary School where students and staff have complained of odors, dust, and flies coming from the adjacent poultry and layer (egg) operations.

The Leeward coast is the center of the livestock industry on Oahu. The introduction of urban-like uses such as an elementary school will increase the likelihood of conflict such as evidenced at the Maili Elementary School. We prefer that such conflicts be avoided. In cases where conflicts do occur, the encroaching use

YK



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 115, HONOLULU, HAWAII 96810

ROBERT P. TAKUSHI
COMPTROLLER

LLOYD UNEBASAM
DEPUTY COMPTROLLER

LETTER NO. (P) 1476.4

JUN 1 1994

Honorable Yukio Kitagawa
Chairperson
Department of Agriculture
State of Hawaii
Honolulu, Hawaii

Dear Mr. Kitagawa:

Subject: Nanakuli III Elementary School
EIS Consultation Phase
DAGS Job No. 12-16-6380

Thank you for your April 13, 1994 comments on the subject project. The relationship of Sites 2, 3, and 4 to existing agricultural activities is recognized. Concerns regarding farm displacement or relocation, the potential for agricultural nuisances, and urban/agriculture land use compatibility are considerations in the site selection study for the proposed school. These concerns will also be discussed in the draft EIS.

Your preference for Site 5 or 6 for the new school, based on apparent distance from intensive agricultural uses, is noted. (Site 1 has been eliminated from consideration.)

We appreciate your input on this project. If you have any further questions, please have your staff contact Mr. Gary Chong of the Public Works Division at 586-0487.

Very truly yours,

Robert P. Takushi
ROBERT P. TAKUSHI
State Comptroller

EXECUTIVE OFFICE



STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
LAND USE COMMISSION
Room 104, Old Federal Building
335 Merchant Street
Honolulu, Hawaii 96813
Telephone 587-3023

JOHN WALKER
Commissioner

MARI HANNEMANN
Deputy Director

JEANNE L. SCHWARTZ
Deputy Director

DAVID W. WOODWARD
Deputy Director

RECEIVED

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

General Pacific Plaza 229 South King Street, Suite 1000, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 1529, Honolulu, Hawaii 96813 Telephone: (808) 546-2446 Fax: (808) 546-2177

March 16, 1994

The Honorable Robert P. Takushi
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 Assessment (Environmental Impact Statement Preparation Notice) for the New Nanakuli III Elementary School.

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,

Mari Hannemann
Mari Hannemann

Enclosure

STATE OF HAWAII PUBLIC WORKS
APR 16 1994
1 - Mr. P. Takushi
1 - Mr. Ueda
1 - Mr. Wood
1 - Ms. Ueda
1 - Mr. Ueda
1 - Mr. Ueda
1 - Mr. Ueda
1 - Mr. Ueda
1 - Mr. Ueda

SUBJECT: Director's Referral No. 94-081-L
Environmental Assessment (Environmental Impact
Statement Preparation Notice) for the New
Nanakuli III Elementary School

We have reviewed the subject Environmental Assessment ("EA") and confirm that the six candidate sites, as presented in Exhibit III-1 (page 14 of the EA) are within the following State Land Use Districts:

Site	TMK	Land Use District
1	8-7-07: por. 04	Urban
2	8-7-22: 01; 8-7-09: por. 03	Agricultural
3	8-7-21: 14, 17, 18	Agricultural
4	8-7-21: 01, 02, 38	Agricultural
5	8-7-08: por. 76, por. 77	Urban
6	8-7-09: por. 07	Agricultural

We have no further comments at this time.

EU:LRA:th

JOHN WASHBEE
CHIEF FINANCER



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 114, HONOLULU, HAWAII 96810

ROBERT P. TAKUSHI
COMPTROLLER
LLOYD L. NEBEJAMA
DEPUTY COMPTROLLER
(P) 1321.4
LETTER NO.

MAY 9 1994

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

Dear Mr. Hannemann:

Subject: Nanakuli III Elementary School
EIS Consultation Phase
DACS Job No. 12-16-6380

Thank you for your March 15, 1994 letter forwarding comments from the State Land Use Commission on the subject project. We appreciate its confirmation of the location of Sites 1 through 6 with respect to the State Land Use Districts. The draft EIS will include a map showing the relation of all candidate sites to the State Land Use Districts.

We appreciate your input for this project. If you have any further questions, please have your staff contact Mr. Gary Chong of the Public Works Division at 586-0486.

Very truly yours,

ROBERT P. TAKUSHI
State Comptroller

JOHN WARD
GOVERNOR

RECEIVED

MAR 23 9 55 AM '94

STATE OF HAWAII



DEPARTMENT OF EDUCATION
P. O. BOX 204
HONOLULU, HAWAII 96810

CHARLES T. LODGE
SUPERINTENDENT

Mr. P. Takushi	Mr. Aizawa	Mr. M. Aizawa	Mr. M. Aizawa	Mr. M. Aizawa	Mr. M. Aizawa	Mr. M. Aizawa	Mr. M. Aizawa	Mr. M. Aizawa	Mr. M. Aizawa
Mr. M. Aizawa	Mr. M. Aizawa	Mr. M. Aizawa	Mr. M. Aizawa	Mr. M. Aizawa	Mr. M. Aizawa	Mr. M. Aizawa	Mr. M. Aizawa	Mr. M. Aizawa	Mr. M. Aizawa

March 21, 1994



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 118, HONOLULU, HAWAII 96810

JOHN WARD
GOVERNOR

ROBERT P. TAKUSHI
COMPTROLLER

LLOYD I. UKEBASAH
DEPUTY COMPTROLLER

LETTER NO. [P] 1320.4

MAY 11 1994

Honorable Herman Aizawa
Superintendent
Department of Education
State of Hawaii
Honolulu, Hawaii

Dear Dr. Aizawa:

Subject: Nanakuli III Elementary School
EIS Consultation Phase
DAGS Job No. 12-16-6380

Thank you for your March 21, 1994 comment on the subject project. The enrollment of Nanaikapono Elementary School will be corrected in all applicable documents.

We appreciate your input for this project. If you have any further questions, please have your staff contact Mr. Gary Chong of the Public Works Division at 586-0486.

Very truly yours,

Robert P. Takushi
ROBERT P. TAKUSHI
State Comptroller

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

F R O M: Herman M. Aizawa, Ph.D., Acting Superintendent
Department of Education

SUBJECT: Nanakuli III Elementary School
EIS Consultation Phase (Preparation Notice)

We have reviewed the subject preparation notice and have the following comment:

On page 2 of the document, the 1993 enrollment at Nanaikapono Elementary School should be 1,044 students instead of 1,152 students.

We have no other comment at this time. We request that the consultant proceed with the draft environmental impact statement and finalize the document for public input.

Should there be any questions, please call the Facilities Branch at 737-4743.

HMA:AH:hy
cc: A. Suga
L. Viduya

AN AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY EMPLOYER

JOHN WAHIEE
GOVERNOR
STATE OF HAWAII



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
HONOLULU, HAWAII 96825

RECEIVED
MAY 18 8 12 AM '94
DIVISION OF PUBLIC WORKS
STATE OF HAWAII

HOALIKU L. DRAKE
CHAIRMAN
HAWAIIAN HOMES COMMISSION

JOHN WAHIEE
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
HONOLULU, HAWAII 96825

ROBERT P. TAKUSHI
COMPTROLLER
DEPUTY COMPTROLLER
LETTER NO. (P)1322-4

MAY 6 1994

Honorable Hoaliku Drake
Director and Chairperson
Department of Hawaiian Home Lands
State of Hawaii
Honolulu, Hawaii

Dear Ms. Drake:

Subject: Nanakuli III Elementary School
EIS Consultation Phase
DAGS Job No. 12-16-6380

Thank you for your March 16, 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.

We recognize the need to consider deleting Site 1 (TMK 8-7-7:04) from the list of candidate sites for the proposed school due to its pending development. Please assist us in evaluating this issue further by sending us the following information:

1. A description of the proposed development.
2. A site plan of the proposed development.
3. A detailed development schedule.
4. A phasing or increment plan and schedule, if applicable.

We appreciate your input for this project. If you have any further questions, please have your staff contact Mr. Gary Chong of the Public Works Division at 586-0486.

Very truly yours,

Robert P. Takushi
ROBERT P. TAKUSHI
State Comptroller

MEMORANDUM

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

FROM: Hoaliku L. Drake, Chairman
Hawaiian Homes Commission

SUBJECT: New Nanakuli III Elementary School
EIS Consultation Phase (Preparation Notice)

Thank you for your letter of March 3, 1994, requesting comments on the Site Selection Report and EIS Preparation Notice for the subject project. Our comments are:

1. Site No. 1, TMK No. 8-7-7:04
DHHL requests that this site be deleted from further consideration. This entire parcel has been committed for our Princess Kahanu Estates project. A development agreement has been executed, eligible homestead applicants have been notified, and construction will proceed shortly.
2. Site No. 2, TMK 8-7-22:01 and 8-7-9:03 PDL.
Either vehicular or pedestrian access to Site No. 2 cannot be provided through the Princess Kahanu Estates.
3. Site No. 5, TMK 8-7-8:76 PDL and 77
Title to Parcel 77 is in dispute, is being reviewed by the Governor's Task Force on DHHL Title and Related Claims, and legal action may be required.

Should you have any questions, please call me at 586-3800 or have your staff call Darrell Yagodich at 586-3836.

HLD:DY/3194L

OFFICE OF PUBLIC WORKS

DATE: March 16, 1994

TO: Mr. Robert P. Takushi

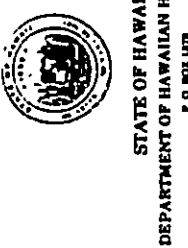
FROM: Mr. Hoaliku L. Drake

SUBJECT: New Nanakuli III Elementary School

APPROVED: Hoaliku Drake

DATE: March 16, 1994

MAILED
MAY 23 1994
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES



HOA LIKULI DRAKE
CHAIRMAN
HAWAIIAN HOMES COMMISSION
1111 Kalia Road, Suite 100
Honolulu, Hawaii 96813
Tel: 833-2222

Merite

OEQC BULLETIN
May 23, 1994

The applicant proposes to increase the house footprint from 641 square feet to 2,235 square feet. The addition will be built to the rear of the existing structure, 19 feet from the rear lot line. The 30-year old house is on a sloped lot at the end of a dead end street. The neighboring residence on Pookun Street is at a higher elevation. The proposed project will blend with the existing neighborhood. The 2516 square foot subject parcel is in a Conservation District Subzone and is located in Kalaheo, Oahu.

These are no anticipated adverse environmental impacts. The reconstruction and landscaping will enhance the environment. There are no historic or archeological cultural sites in this area. Existing vegetation is common grass (California grass, weeds, and vine). There are no rare native plants present. No environmental problems are known at the site:

- (e) There are no underground storage tanks.
- (b) The Department of Health has no negative report.
- (c) Honolulu Fire Department has no report of emergency spillage.
- (d) Bureau of Conveyances has no negative environmental past history.
- (e) The property is not on the E.P.A. "CERCLIS" database report and does not have a history of a site threat.

PRINCESS KAHANU ESTATES

DRILLER: Waiwaea
TMK: 8-7-07:04 and 8-7-33:14
Agency: Department of Hawaiian Home Lands
Contact: Darrell Ing (586-3816)
Subject: Princess Kahanu Development Corporation
Consultant: Craig Wirtz (736-9099)
Consultant: Gerald Peik Urban Planner (633-0018)

Princess Kahanu Development Corporation, a registered Hawaii corporation, proposes to construct residential subdivision on lands situated at Lualaba, Waianae District, City and County of Honolulu, Hawaii. The property is located north of Farrington Highway between Hakimo Road to the north and the Ulehuwa Drainage Channel to the south. The subdivision site encompasses an area of 52.369 acres.

The applicant proposes to develop a single-family residential subdivision consisting of 272 residential lots each with a minimum lot size of 5,000 square feet. In addition, a 1.3 acre site has been set aside for a daycare center and one lot (± 6,000 square feet) for a community association office.

The property is owned by the Department of Hawaiian Home Lands. Title to the property was acquired in 1992 by deed transfer from the Housing Finance and Development Corporation, State of Hawaii.

Residential lots will be leased to homeowners for \$1,000/year for 99 years with provisions for renewal. Houses will be sold at estimated prices previously disclosed.

The cost of all improvements is estimated at \$50.6 million dollars and will be borne by applicant. Construction will commence after

if necessary approvals are received. The project will be developed in one phase separated into three construction increments. Tentatively, the developer proposes to commence infrastructure construction in July 1994 and house construction in January 1995. The first homes should be ready for occupancy in May 1996, and house construction should be completed in July 1996.

WAIPAHU PUBLIC LIBRARY

DRILLER: Ewa
TMK: 9-4-17:62
Agency: Department of Accounting and General Services
Contact: Ralph Morita (586-0486)

The project is to design and construct a reinforced concrete masonry public library building of approximately 16,000 square feet floor area within the Waiapu Civic Center parcel. Also included are any site improvements, connection to public utilities and easements which may be required as a result of the project.

EIS PREPARATION NOTICES

According to the listed agency, the following actions may have significant impacts upon the environment. As a consequence, Environmental Impact Statements will be prepared for these projects. A thirty-day consultation period commences with the initial publication of these projects in the bulletin (see listed deadline dates). The purpose of soliciting comments during the consultation period is to establish the scope and depth of coverage that the Draft EIS should have.

Aggrieved parties who wish to challenge the agency's determination have sixty days from the initial date of publication of the EIS Preparation Notice to initiate litigation.

Please send the original copy of your comments to the accepting authority and duplicate copies of the comments to the proposing agency or applicant, consultant and OEQC.

MAUI

KAHULUI AIRPORT

DRILLER: Waiuku
TMK: 3-08-01:19, 20, 46, 73, 76, 78, 80, 82, 86, 88, 100, 106, 121, 123, 124, 127, 129, 131, 133, 134, 136, 138, 141, 142, 144, 145, 147, 149, 152, 156, 157, 162, 166, 168, 173, 176, 178, 181, 187, 189, 193, 195, 196, 204, 206, 208, 211, 212, 214, 220, 222

Accepting Authority:
Governor, State of Hawaii
c/o Office of Environmental Quality Control
220 South King Street, Suite 400
Honolulu, Hawaii 96813

MEMORANDUM

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

FROM: Hoaliku L. Drake, Chairman
Hawaiian Homes Commission

SUBJECT: Nanakuli III Elementary School
EIS Consultation Phase
DAGS Job No. 12-16-6380

Enclosed is the information you requested regarding Oahu Tax Map Key 8-7-07:04 upon which we will be developing the Princess Kahanu project of 272 residential lots and houses.

1. The project description as contained in the OEQC Bulletin of May 23, 1994 is attached.

2. Project site plan maps (3) are attached.

3. The project will be developed in one phase separated into three construction increments, with estimated start in July 1994 and completion in July 1996.

If you have further questions regarding the impact of this development upon your plans for a Nanakuli III Elementary School, please call Darrell Ing of our Land Development Division at 586-3816.

HLD:DY:JC/3289L

Attachments

cc: Darrell Ing, DHHL-LDD

Department of Hawaiian Home Lands

Princess Kahanu Estates
Project Summary

Project: Princess Kahanu Estates (formerly known as the Keystone site)
Luvalualei, Oahu
Site size: approximately 53.6 acres

Developer: Princess Kahanu Development Corporation, an affiliate of Mark Development, Inc.

Development Plan:
Infrastructure
Repair existing facilities as feasible
Construct new facilities as needed

Size	Estimated Price
41 Model A (2 bed/1 bath)	\$78,000
81 Model B (3 bed/1 1/2 bath)	\$102,000
94 Model C (3 bed/2 bath)	\$125,000
28 Model D (3 bed/2 1/2 bath)	\$136,000
28 Model E (4 bed/2 1/2 bath)	\$145,000
Total: 272 houses	

Community Association Complex (.5 acres)
Daycare Center Site (1.3 acres)

Preliminary Schedule:

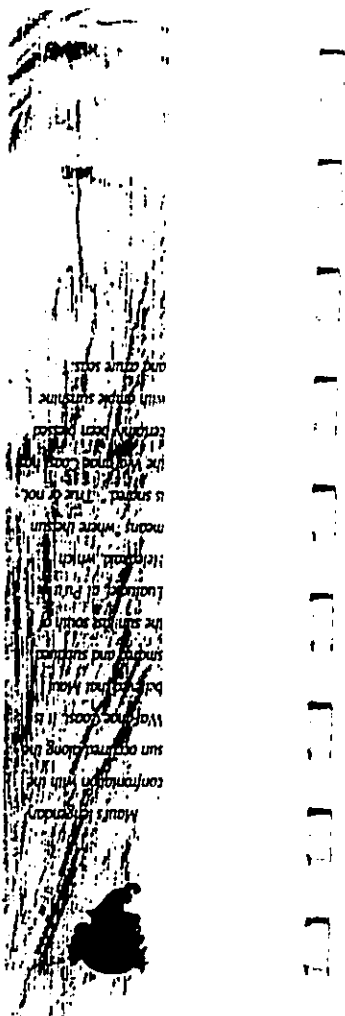
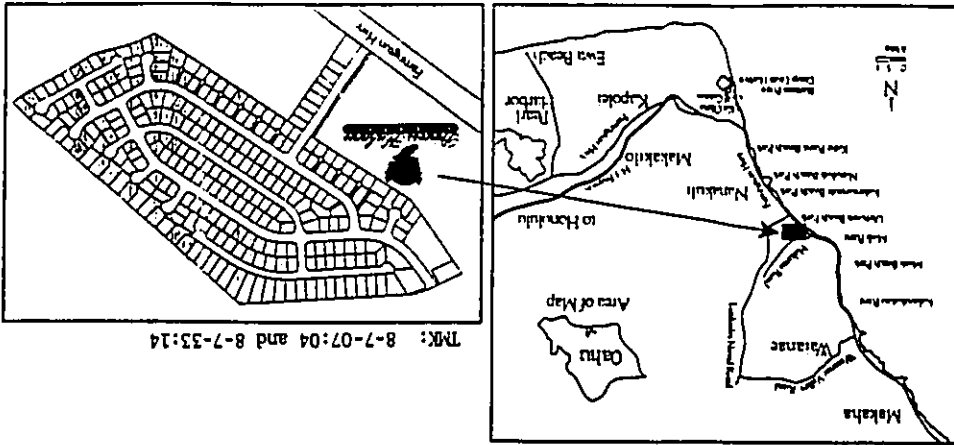
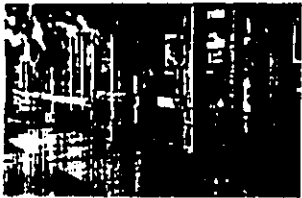
May 94	Lot selections
July 94	Begin infrastructure construction
Jan. 95	Begin house construction
March 95	Complete infrastructure construction
May 95	First homes ready for occupancy
July 96	House construction complete

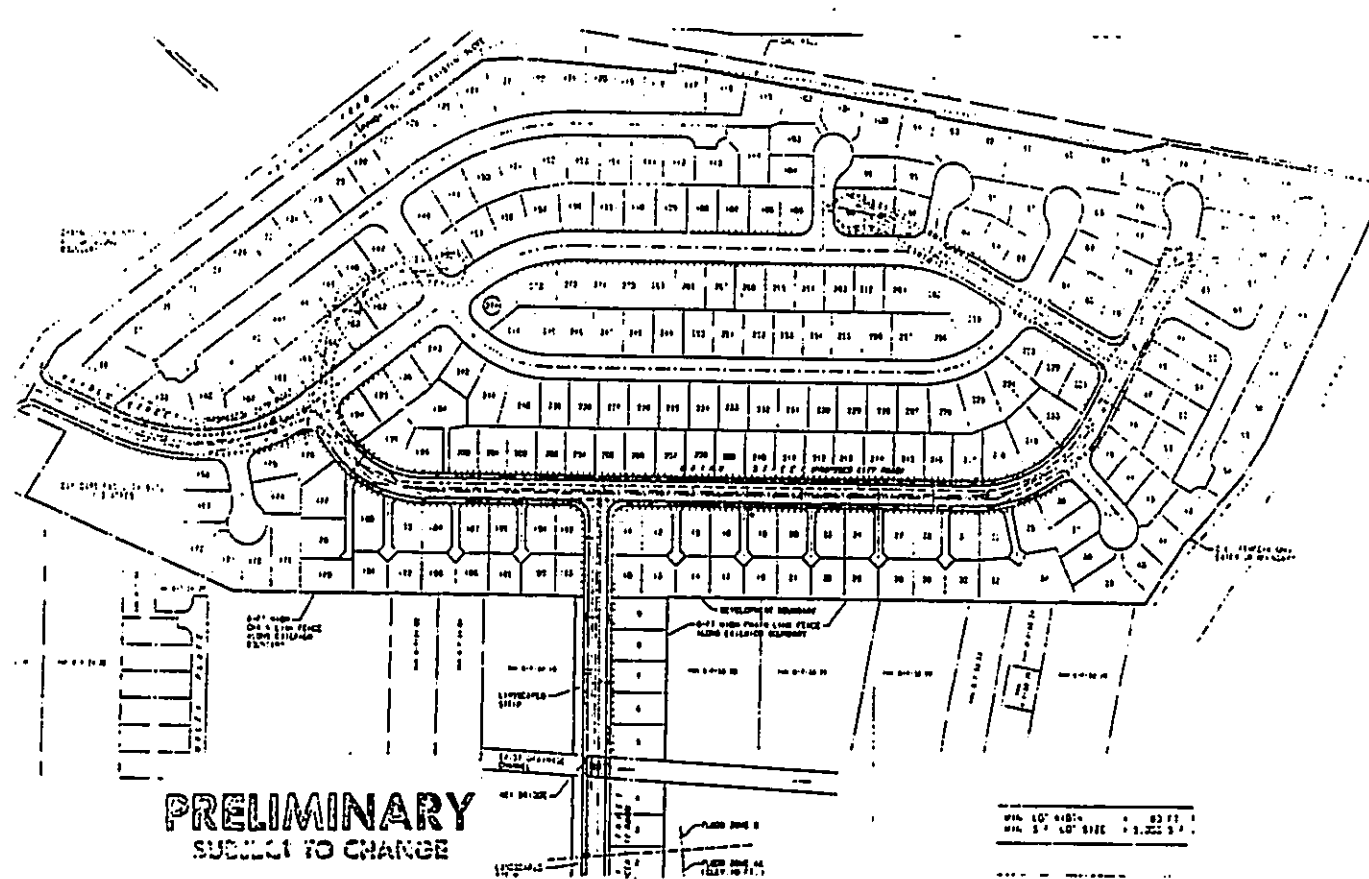
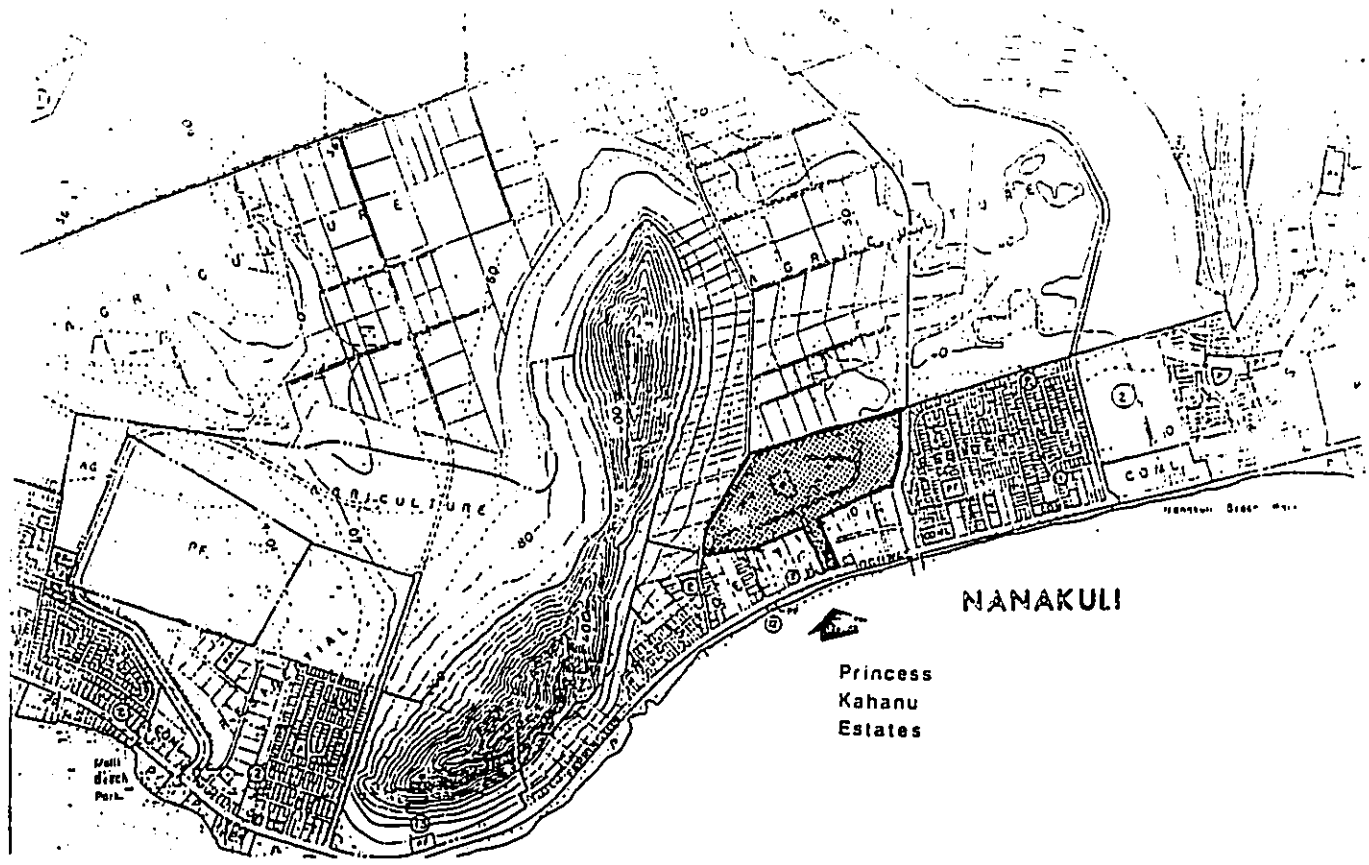
Total Project Cost: \$50.6 million

01/27/94

*O'ku'u wahi'opi'u weweu ia, nou ia.
My little grassy portion of earth is all for you.*

With growth in the Ewa plain, the new Waikaele shopping center and planned activities at Ko Olina and Kapolei, the Second City, living in West Oahu will be increasingly more convenient as time goes by. Over the next 15 to 20 years, Central Oahu is expected to house over 40% of O'ahu's residents, bringing job opportunities, shopping, entertainment, and numerous golf courses as close to West Oahu as they now are to Honolulu. Located in Luvalualei next to Nankuli, on the edge of the picturesque Waianae Valley, Princess Kahanu Estates combines the tranquility of country life with the modern conveniences of a self-contained community.


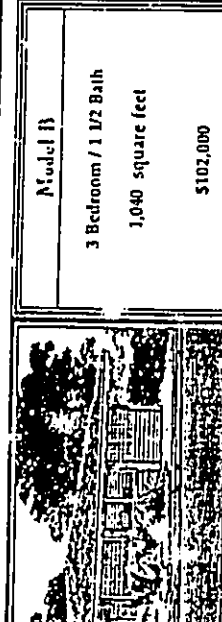

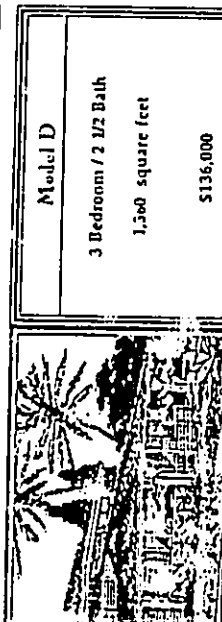
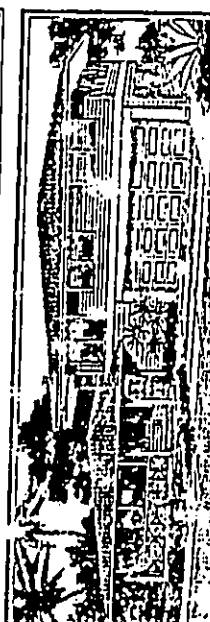




PRELIMINARY
SUBJECT TO CHANGE

1" = 100'
1" = 200'

Princess Kaiulani Estates

<p>Model A 2 Bedroom / 1 Bath 848 square feet \$78,000</p>	
<p>Model B 3 Bedroom / 1 1/2 Bath 1,040 square feet \$102,000</p>	
<p>Model C 3 Bedroom / 2 Bath 1,186 square feet \$125,000</p>	
<p>Model D 3 Bedroom / 2 1/2 Bath 1,360 square feet \$136,000</p>	
<p>Model E 4 Bedroom / 2 1/2 Bath 1,430 square feet \$145,000</p>	

Note: Sites, prices, and architectural details are preliminary and are subject to change. Specifications and drawings will be available.

JOHN WAHNEE
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P O BOX 115, HONOLULU, HAWAII 96810

ROBERT P. TAKUSHI
COMPTROLLER
LLOYD UHERASAKA
DIRECTOR
(P) 509-4

JUN 15 1994

Honorable Hoaliku Drake
Director and Chairperson
Department of Hawaiian Home Lands
State of Hawaii
Honolulu, Hawaii

Dear Ms. Drake:

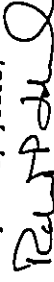
Subject: Nanakuli III Elementary School
EIS Consultation Phase
DAGS Job No. 12-16-6380

Thank you for your May 20, 1994 letter providing more information about the Princess Kaiulani project on TMK 8-7-07:04, which coincides with Candidate Site 1 for the proposed school.

Due to the Department of Hawaiian Home Lands' development plans for 272 residential lots and houses on the property and its short-term construction schedule (commencing in July 1994), the Department of Education has decided to eliminate Site 1 from consideration as a site for the Nanakuli III Elementary School. The draft EIS for the project will evaluate five candidate sites: Sites 2 through 6, as identified in the EIS Preparation Notice/Environmental Assessment. However, the draft EIS will still include a discussion on the identification of Site 1 as a proposed site and the reasons it is being withdrawn from consideration.

We appreciate your input on this project. If you have any questions, please have your staff call Mr. Gary Chong of the Public Works Division at 586-0487.

Very truly yours,



ROBERT P. TAKUSHI
State Comptroller

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3273
HONOLULU, HAWAII 96811



STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3273
HONOLULU, HAWAII 96811

Maria

JOHN C. LEWIN, M.D.
DIRECTOR OF HEALTH

APR 11 1994
FAX
STATE OF HAWAII
DEPARTMENT OF HEALTH
HONOLULU, HAWAII 96811
TO: DIRECTOR OF HEALTH
FROM: [Signature]
SUBJECT: [Signature]

April 6, 1994

94-038/epo

To: The Honorable Robert P. Takushi
State Comptroller
Department of Accounting and General Services

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

Subject: Environmental Impact Preparation Notice/Site Selection Report
New Manakuli III Elementary School
DAGS Job No. 12-16-63
Manakuli, Oahu

Thank you for allowing us to review and comment on the subject project.
We do not have any comments to offer at this time.

MEMORANDUM

TO: THE HONORABLE ROBERT P. TAKUSHI, COMPTROLLER



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

P.O. BOX 621
HONOLULU, HAWAII 96809
In reply, please refer
FILE NO.: 94-533
DOC. ID.: 4309

MAR 29 1994

MEMORANDUM

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

ATTN: Mr. Ralph Moxita
Public Works Division, DAGS

FROM: FRENCH W. AHUE, Chairman
Board of Land and Natural Resources

SUBJECT: Environmental Impact Statement Preparation Notice (EISPN):
New Nānākūlī III Elementary School, Nānākūlī, Oāhu, TNGs:
8-7-07: pars. 4; 8-7-08: pars. 76 and 77; 8-7-09: pars. 3
and 7; 8-7-21: 1, 2, 38, 14, 17, 18, 7-7-22: 1

We have reviewed the EISPN information for the proposed school project transmitted by your letter dated March 3, 1994, and have the following comments:

Historic Preservation Division

Historic Preservation Division (HPD) comments that a review of their records shows that there are no known historic sites at these parcels. The EISPN states that a literature and archival document search is being conducted to identify site expectability within the area. A report of the findings will be included as an appendix to the EIS. HPD looks forward to reviewing the report at that time, so that we can ensure that this project satisfies all requirements specified in Chapter 6E, Hawaii Revised Statutes.

Division of Water and Land Development

The Division of Water and Land Development (DOWALD) comments that State facilities needing new Board of Water Supply connections should coordinate their water requirements with DOWALD.

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 Tagawa at our Office of Conservation and Environmental Affairs, at 587-0377, should you have any questions.

Merita

DEPARTMENT OF LAND AND NATURAL RESOURCES

AGRICULTURE DEVELOPMENT
AQUATIC RESOURCES
BUILDING AND OCEAN RECREATION
CONSERVATION AND
DEPARTMENTAL AFFAIRS
ENVIRONMENTAL PLANNING
RESOURCES MANAGEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
STATE PARKS
WATER AND LAND DEVELOPMENT

Administrative routing stamp with handwritten initials and dates.



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES

JUN 1 1994

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

Dear Mr. Ahue:

Subject: Nānākūlī III Elementary School
EIS Consultation Phase
DAGS Job No. 12-16-6380

Thank you for your March 29, 1994 comments on the subject project. Our responses to your comments are as follows:

1. Historic Preservation Division

The project archaeologist has been in contact with the Historic Preservation Division regarding the archaeological work for this project to ensure that the analysis conforms to minimum standards for an archaeological inventory survey. The archaeological reports have been completed and will be an appendix to the draft EIS.

2. Division of Water and Land Development

Water requirements for the new school will be coordinated with the Division of Water and Land Development once a site is selected.

We appreciate your input on this project. If you have any further questions, please have your staff contact Mr. Gary Chong of the Public Works Division at 586-0487.

Very truly yours,

Robert P. Takushi

ROBERT P. TAKUSHI
State Comptroller

FROM WAHREE
STAFF MEMBER

RECEIVED

MAR 30 8 02 AM '94

DIVISION OF WORKS



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
800 PUNAHONUA STREET
HONOLULU, HAWAII 96813-5087

March 28, 1994

Merit

REX D. JOHNSON
DIRECTOR

COUNTY DIRECTORS
KANEHOEHOE COUNTY
GLENN M. CHANSE
JOYCE T. CHANSE
CALVIN M. TSUDA

JOHN WAHREE
GOVERNOR

IN REPLY REFER TO
STP 8-5577



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 115, HONOLULU, HAWAII 96810

ROBERT P. TAKUSHI
COMPTROLLER
LLOYD UNESASAMI
DEPUTY COMPTROLLER
(P) 1479-4
LETTER NO.

JUN 1 1994

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

Dear Mr. Johnson:

Subject: Nanakuli III Elementary
EIS Consultation Phase
DAGS Job No. 12-16-6380

Thank you for your March 28, 1994 comments on the subject project. A discussion of potential traffic impacts for the candidate sites 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.

We appreciate your input on this project. If you have any further questions, please have your staff contact Mr. Gary Chong of the Public Works Division at 586-0487.

Very truly yours,

Robert P. Takushi

ROBERT P. TAKUSHI
State Comptroller

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

FROM: Rex D. Johnson
Director of Transportation *Rex M. Johnson*

SUBJECT: Environmental Impact Statement Preparation Notice, New Nanakuli III
Elementary School, TMK: 8-7-07: por. 4; 8-7-08: por. 76, 77;
8-7-09: por. 3, por. 7; 8-7-21: 1, 2, 14, 17, 18, 38; 8-7-22: 1

A Traffic Impact Analysis Report should be prepared for the selected site and submitted for our review. It should include recommendations for necessary intersection and related roadway improvements to allow for safe vehicular turning movements at the intersections of Farrington Highway with Hakimo Road and Luahalei Naval Road. Required roadway improvements will be provided at no cost to the State.

We appreciate the opportunity to provide comments.

INVESTIGATION OF PUBLIC WORKS
TOTAL FOR THIS YEAR

State P.W. Eng'g	Approval
P.W. Secy	Sign
Staff Serv. Br.	Info
Planning Br.	File
Proj. Mgmt. Br.	See me
Design Br.	Comments
Ins. Br.	Interest
Qual. Cont. Eng.	Sign
Learning Serv. Br.	

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU HAWAII 96813



March 23, 1994

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

Subject: Your Letter of March 3, 1994 on the Environmental Impact Statement Preparation Notice (EISPN) for the New Nanakuli III Elementary School (Site Selection). Nanakuli. TMK: Various

We are still evaluating the EISPN for the proposed project and will complete our review by April 18, 1994.

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

Very truly yours,

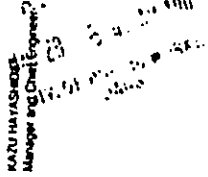
KAZU HAYASHIDA
Manager and Chief Engineer

DIVISION OF PUBLIC UTILITIES
DATE: 3/23/94
BY: [Signature]
Title: [Signature]
Staff: [Signature]
Chief: [Signature]
Manager: [Signature]

Pure Water... man's greatest need - use it wisely

Morita

FRANK FASI Mayor
WALTERO WATSON, JR. Chairman
MAURICE H. TAMASAITO, Vice Chairman
SISTER M. DAVETH ANTHONICKA, D.S.T.
JOHN W. ANDERSON, JR.
REED JOHNSON
MELISSA Y. LUI



BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU HAWAII 96813



May 23, 1994

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

Attn: Mr. Ralph Morita

Dear Mr. Takushi:

Subject: Your Letter of March 3, 1994 on the Environmental Impact Statement Preparation Notice (EISPN) for the New Nanakuli III Elementary School (Site Selection). Nanakuli. TMK: Various

Thank you for the opportunity to review and comment on the EISPN for the proposed Nanakuli III Elementary School.

We have the following comments to offer:

1. Sites 1, 5, and 6 have no existing water services.

Site 2 is served by an existing 5/8-inch water meter.

Site 3 has four (4) existing water services. There is one active 5/8-inch water meter, an inactive 2-inch meter and two inactive 5/8-inch meters. The 2-inch meter and two 5/8-inch meters were ordered off on September 4, 1991, and September 29, 1992, respectively. The developer will have five (5) years from the ordered off dates to reactivate the services; thereafter, the developer will be assessed the applicable Water System Facilities Charges (WSFC).

Site 4 is served by two 2-inch water meters and a 5/8-inch meter.

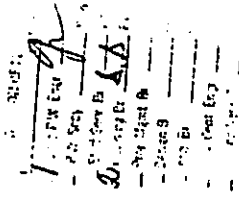
2. The existing off-site water system is presently adequate to accommodate the proposed project at Sites 1, 3, and 4.

However, the existing off-site water system cannot provide adequate fire protection as required by our Water System Standards at Sites 2, 5, and 6. Our standards require a flow of 2,000 gallons per minute (gpm) and a fire hydrant to be located within 125 linear feet (LF) of the site.

Pure Water... man's greatest need - use it wisely

Morita

FRANK FASI Mayor
WALTERO WATSON, JR. Chairman
MAURICE H. TAMASAITO, Vice Chairman
SISTER M. DAVETH ANTHONICKA, D.S.T.
JOHN W. ANDERSON, JR.
REED JOHNSON
MELISSA Y. LUI





JOHN WAIHEE
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P O BOX 119, HONOLULU, HAWAII 96819

ROBERT P TAKUSHI
COMPTROLLER
LLOYD UMEKASANI
DEPUTY COMPTROLLER
LETTER NO. (P) 1508-1

Mr. Robert P. Takushi
Page 2
May 23, 1994

The existing system serving Site 2 can only provide a flow of approximately 1,500 gpm and the nearest fire hydrant is located approximately 550 Lf. away.

At Sites 5 and 6, the fire flow is adequate; however, the nearest hydrant is located approximately 400 Lf. away.

The developer will be required to install the necessary water system improvements to upgrade the fire protection in accordance with our Water System Standards. The construction drawings should be submitted for our review and approval.

3. 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.

4. 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 WSFC for transmission and daily storage.

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

6. 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.

7. The proposed project is subject to our 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

Pure Water... man's greatest need - use it wisely

JUN 9 1994

Mr. Kazu Hayashida
Manager and Chief Engineer
Board of Water Supply
City and County of Honolulu
630 South Beretania Street
Honolulu, Hawaii 96843

Dear Mr. Hayashida:

Subject: Nanakuli III Elementary School
EIS Consultation Phase
DAGS Job No. 12-16-6380

Thank you for your May 23, 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 complied with prior to project construction.

We appreciate your input for this project. If you have any further 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.

DEPARTMENT OF LAND UTILIZATION
CITY AND COUNTY OF HONOLULU
 150 SOUTH KING STREET
 HONOLULU HAWAII 96813 • (808) 933-4437



March 29, 1994

The Honorable Robert P. Takushi, Comptroller
 Department of Accounting and
 General Services
 State of Hawaii
 Kalanimoku Building
 1151 Punchbowl Street
 Honolulu, Hawaii 96813

Dear Mr. Takushi:

Environmental Impact Statement Preparation Notice
 New Nanakuli III Elementary School
 Tax Map Keys 8-7-7: por. 4; 8-7-22: 1;
 8-7-9: por. 3 and 7; 8-7-8: por. 76 and 77;
 8-7-21: 1, 2, 14, 17, 18 and 38

Thank you for the opportunity to review the above-referenced
 Environmental Impact Statement Preparation Notice (EISPN).

We have the following comments:

1. The proposed sites for the new school are zoned AG-1 Restricted Agricultural District, AG-2 General Agricultural District (AG-2), R-5 Residential District (R-5) and/or P-2 General Preservation District. A waiver will be required if the proposed school exceeds the development standards for the zoning district in which the selected school site is located. These standards are listed in the Land Use Ordinance. A copy of these standards are included with this letter.
2. A State Special Use Permit (SUP) will be required if the selected site is located in the State Agricultural District.
3. A Site Plan Review (SPR) will be required if the proposed site is located within the parcels zoned AG-2 and R-5. If the site is within the State Agricultural District, the SPR approval would be contingent upon approval of the SUP.
4. The proposed sites are not within the Special Management Area.

Merith

The Honorable Robert P. Takushi, Comptroller
 Page 2
 March 29, 1994

Please contact the Zoning Adjustments Branch at 523-4135 for further information on applying for a waiver. The Zoning District Changes Branch at 523-5374 can answer questions regarding the SPR and SUP requirements.

Very truly yours,

Donald A. Clegg
 DONALD A. CLEGG
 Director of Land Utilization

DAC:dt
 Encl.

g:\mabull1.djt

DONALD A. CLEGG
 DIRECTOR
 LORRETTA C. CHEE
 DEPUTY DIRECTOR
 94-01416 (DT)

DIVISION OF PUBLIC WORKS
 PUBLIC UTILITIES
 State P.W. Eng. Approval
 - P.W. Secy _____
 - Civil Serv. Br. _____
 - Planning Br. AA _____
 - Proj. Mgmt. Br. _____
 - Design Br. _____
 - Insp. Br. _____
 - Qual. Cont. Eng. _____
 - Support Serv. Br. _____

TABLE 5.3-B
P-2 GENERAL PRESERVATION DISTRICT
DEVELOPMENT STANDARDS

Standards	P-2
Minimum Lot Area	5 acres
Minimum Lot Width and Depth	200 feet
Yards	
Front	30 feet
Side and Rear	15 feet
Maximum Building Area	5 percent of the zoning lot
Maximum Height	15 feet; up to 25 feet is permitted if height setbacks are provided
	<p>Height Setbacks: Any portion of a structure exceeding 15 feet shall be set back from every side and rear buildable area boundary line 1 foot for each 2 feet of additional height above 15 feet (See Figure 5.1)</p>

TABLE 5.4-B
AG-1 RESTRICTED AGRICULTURAL DISTRICT
DEVELOPMENT STANDARDS

Standards	AG-1
Minimum Lot Area	5 acres
Minimum Lot Width and Depth	150 feet
Yards	
Front	15 feet
Side and Rear	10 feet
Maximum Building Area	10 percent of the zoning lot for non-agricultural structures
Maximum Height	15 feet for non-agricultural structures and dwellings. Up to 25 feet is permitted if height setbacks are provided
	<p>Height Setbacks: Any portion of a structure exceeding 15 feet shall be set back from every side and rear buildable area boundary line 1 foot for each 2 feet of additional height above 15 feet (See Figure 5.1)</p>

TABLE 5.5-B

AG-2 GENERAL AGRICULTURAL DISTRICT
DEVELOPMENT STANDARDS

Standards	AG-2
Minimum Lot Area	3 acres for livestock production, major 2 acres for all other uses
Minimum Lot Width and Depth	150 feet
Yards	
Front	15 feet
Side and Rear	10 feet
Maximum Building Area	10 percent of the zoning lot for non-agricultural structures
Maximum Height	15 feet for non-agricultural structures and dwellings. Up to 25 feet is permitted if height setbacks are provided Height Setbacks: Any portion of a structure exceeding 15 feet shall be set back from every side and rear buildable area boundary line 1 foot for each 2 feet of additional height above 15 feet (See Figure 5.1)

TABLE 5.8-B

R-7.5 & R-5 RESIDENTIAL DISTRICTS
DEVELOPMENT STANDARDS

Standards	R-7.5	R-5
Minimum Lot Area	7,500 square feet for one-family detached dwelling and other uses 14,000 square feet for two-family detached dwelling 7,000 square feet per duplex unit	5,000 square feet for one-family detached dwelling and other uses 7,500 square feet for two-family detached dwelling 3,750 square feet per duplex unit
Minimum Lot Width and Depth	65 feet for detached dwelling and other uses 35 feet per duplex unit	50 feet for detached dwelling and other uses 30 feet per duplex unit
Yards		
Front	10 feet for detached dwelling and duplex unit 30 feet for other uses	
Side and Rear	5 feet for detached dwelling For duplex lots, 5 feet for any portion of any structure not located on the common property line; the required side yard is 0 (zero) feet for that portion of the lot containing the common wall 15 feet for other uses	
Maximum Building Area	50 percent of the zoning lot	

ENVELOPE
FOLDER



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 118, HONOLULU, HAWAII 96810

ROBERT P. TAKUSHI
COMPTROLLER
LLOYD I. UKERASANI
DEPUTY COMPTROLLER
LETTER NO. (P) 1480.4

MAY 31 1994

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

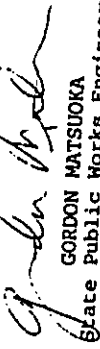
Dear Mr. Clegg:

Subject: Nanakuli III Elementary School
EIS Consultation Phase
DAGS Job No. 12-16-6380

Thank you for your March 29, 1994 comments on the subject project. We appreciate confirmation of the land use plans and policies affecting the candidate sites. This information will be included in the draft EIS.

We appreciate your input on this project. If you have any further 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

GC:jk
cc: DHM, Inc.

Merita

DEPARTMENT OF PARKS AND RECREATION
CITY AND COUNTY OF HONOLULU
850 SOUTH KING STREET
HONOLULU HAWAII 96813

RECEIVED
MAR 24 2 30 PM '94
DIRECTOR'S OFFICE



WALTER M. OZAWA
DIRECTOR
ALVIN K. AU
DEPUTY DIRECTOR

March 22, 1994

- 1 - Public P.M. Dept. Approval
- 1 - P.M. Secy
- 1 - Staff Serv. Div. Info
- 2 - Planning Div. File
- 1 - Eng. Dept. B
- 1 - Design B
- 1 - Eng. B
- 1 - Gen. Serv. Div.

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

Dear Mr. Takushi:

Subject: New Manakuli III Elementary School
EIS Consultation Phase (Preparation Notices)

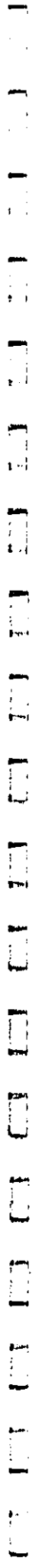
Thank you for the opportunity to review the EIS preparation notice for the new Manakuli III Elementary School.

Development of the new school complex at either of the six alternative sites will not have any detrimental impact on existing recreation facilities in the Manakuli area.

Sincerely,
[Signature]

For WALTER M. OZAWA, Director

WMO:ei



DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU

430 SOUTH KING STREET
HONOLULU HAWAII 96813



RECEIVED
MAY 22 8 14 AM '94
OFFICE OF THE CITY ENGINEER

6c

JOHN WARREN
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES

P. O. BOX 114, HONOLULU, HAWAII 96810

ROBERT P. IANUSH
COMPTROLLER
LLOYD UHEBASAMI
DEPUTY COMPTROLLER
LETTER NO. (P) 1324

March 17, 1994

ENV 94-77

IN CHIEF PUBLIC WORKS
KENNETH E. SPRAGUE
DIRECTOR AND CHIEF ENGINEER
MAY 5 1994

Mr. Ralph Morita
Public Works Division
Department of Accounting and
General Services
State of Hawaii
1151 Punchbowl Street
Honolulu, Hawaii 96813

Dear Mr. Morita:

Subject: Environmental Impact Statement Preparation
Notice (EISP), New Nanakuli III Elementary School
Tax Map Key: Various

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

1. Drainage for each of the proposed school sites must be fully addressed in the Draft Environmental Impact Statement (DEIS).
2. Existing streets used as ingress and egress to the proposed project may need upgrading to accommodate the demands of the new school.
3. Adequate on-site parking should also be provided for the proposed project.
4. Storm water volume and flow rates should be minimized by employing best management practices (BMPs) before being discharged into any City-owned drainage facilities.

Should you have any questions, please contact Mr. Alex Ho, Environmental Engineer, at 523-4150.

Very truly yours,

KENNETH E. SPRAGUE
Director and Chief Engineer

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: Nanakuli III Elementary School
EIS Consultation Phase
DAGS No. 12-16-6380

Thank you for your March 17, 1994 letter regarding the subject project. Your comments on drainage, road improvement, on-site parking, and storm water discharge will be addressed in the draft EIS.

We appreciate your input for this project. If you have any further questions, please have your staff contact Mr. Gary Chong of the Planning Branch at 586-0486.

Very truly yours,

GORDON MATSUOARA
State Public Works Engineer

RM:jk
cc: DHM, Inc.

DEPARTMENT OF TRANSPORTATION SERVICES
CITY AND COUNTY OF HONOLULU

PACIFIC PALMS PLAZA
311 HANOLANI BOULEVARD SUITE 1300
HONOLULU, HAWAII 96813



4-2 N 23 PH 100
A-2 N 23 PH 100

JOHN WAKEE
COUNCILOR

JOSEPH M. MAGALDI, JR.
DIRECTOR
ASST. DIRECTOR

TE-1038
PL94.1.069

March 21, 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:

Subject: New Manakuli III Elementary School
Environmental Impact Statement
Preparation Notice (EISPN)
TMK: 8-7-07: POE. 4: 8-7-22: 1

This is in response to your letter of March 3, 1994 requesting our comments on the proposed elementary school.

Based on our review, we have no specific comments to offer at this time. However, a traffic assessment for each alternative should be included in the Draft EIS.

It should be noted that there are plans to widen Hakimo Road which would affect Site 1 and Site 3 with 10-foot road widening setbacks, and Site 4 with a 2-foot setback.

Once a preferred alternative has been selected, we will be able to provide you with more specific comments.

Should you have any questions, please contact Lance Watanabe of my staff at 523-4199.

Sincerely,

JOSEPH M. MAGALDI, JR.
Director



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 119, HONOLULU, HAWAII 96819

MAY 5 1994

Mr. Joseph M. Magaldi, Jr.
Director
Department of Transportation Services
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Magaldi:

Subject: Nanakuli III Elementary School
EIS Consultation Phase
DAGS Job No. 12-16-6380

Thank you for your March 21, 1994 comments on the subject project. Road widening plans for roads along the candidate sites will be described in the draft EIS. Traffic conditions at each candidate site will also be addressed.

We appreciate your input for this project. If you have any further 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

RM:jk
cc: DHM, Inc.

Merita

Merita

DEPARTMENT OF WASTEWATER MANAGEMENT
CITY AND COUNTY OF HONOLULU
430 SOUTH KING STREET
HONOLULU, HAWAII 96813



March 24, 1994

FRANK F. FARM
WATER

KENNETH M. RAPPOLT
DIRECTOR

FELIX B. LIMTHICO
DEPUTY DIRECTOR

PC 94-0983
DIVISION OF PUBLIC WORKS
PLANNING UNIT

Site Plan, Easement, Approval
P. 505
Site Serv. Br. *AS* Info
Planning Br. *AS* File
Proj. Legal Br. See ME
Design Br. Comments
Inst. Br. Revised P.
Qual. Cont. Eng. Dept
Terrac. Serv. Br.

MEMORANDUM

TO: MR. ROBERT P. TAKUSHI,
STATE COMPTROLLER

FROM: KENNETH M. RAPPOLT, DIRECTOR
DEPARTMENT OF WASTEWATER MANAGEMENT

SUBJECT: NEW NANAKULI ELEMENTARY SCHOOL ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE

As requested in your letter of March 3, 1994, we are providing you, attached, our written comments to the subject report.

Please contact Ed Pier at extension 6665 if you have any further question on this matter.

Kenneth M. Rappolt
KENNETH M. RAPPOLT
Director

Attachment

DEPARTMENT OF WASTEWATER MANAGEMENT
CITY AND COUNTY OF HONOLULU
430 SOUTH KING STREET
HONOLULU, HAWAII 96813



March 23, 1994

FRANK F. FARM
WATER

KENNETH M. RAPPOLT
DIRECTOR

FELIX B. LIMTHICO
DEPUTY DIRECTOR

PC 94-109

MEMORANDUM

TO: MR. EDWIN PIER, PROGRAM COORDINATOR
DEPARTMENT OF WASTEWATER MANAGEMENT

FROM: GEORGE M. UYENA, CHIEF
DIVISION OF PLANNING AND PUBLIC SERVICE

SUBJECT: NEW NANAKULI III ELEMENTARY SCHOOL ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE

The following are our comments in regard to the subject document:

1. The existing interceptor sewer lines on Farrington Highway below the proposed school sites are 24-inch and 30-inch sizes and are connected to the Luaualei Wastewater Pump Station.
2. The existing interceptor sewer is adequate and available to serve the proposed school. However, this is not a confirmation of sewage capacity reservation; reservation is contingent upon submittal and approval of a "Sewer Connection Application" form.
3. It may be possible to connect Sites 1 and 2 to existing sewer lines located in Laiku Street. The other sites would probably require construction of a sewer line from the site to Farrington Highway where they would tie-in to the existing 24-inch or 30-inch interceptor sewer line.

George M. Uyena
GEORGE M. UYENA, Chief
Division of Planning and
Public Service

Attachment



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 111, HONOLULU, HAWAII 96818

ROBERT P. TAKUSHI
COMPTROLLER
LLOYD LINEBASAM
DEPUTY COMPTROLLER
LETTER NO. (P) 1477.4

MAY 26 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 III Elementary School
EIS Consultation Phase
DAGS Job No. 12-16-6380

Thank you for your March 24, 1994 comments on the subject project. We appreciate the information about existing sewer lines in the service area and potential sewer connections for the candidate sites. This information will be included in the draft EIS.

We appreciate your input on this project. If you have any further questions, please have your staff contact Mr. Gary Chong of the Planning Branch at 586-0487.

Very truly yours,

Gordon Matsuoka
GORDON MATSUOKA
State Public Works Engineer

GC:jk
cc: DHM, Inc.



PLANNING DEPARTMENT
CITY AND COUNTY OF HONOLULU
430 SOUTH KING STREET
HONOLULU HAWAII 96813



Honorable Robert P. Takushi
State Comptroller
Department of Accounting and General Services
March 28, 1994
Page 2

White

ROBIN FOSTER
CHIEF PLANNING OFFICER
ROLAND B. LIBBY, JR.
DEPUTY CHIEF PLANNING OFFICER

MH 3/94-3266

March 28, 1994

- IP
- State P.W. Engng. Approval
- P.W. Serv.
- Staff Serv. Bk. Issu
- Planning Bk. File
- Proj. Mgmt. Bk. See ME
- Design B. Comm-112
- Imp. Bk. Insects
- Arch. Dist. Eng.
- Transport. Serv. Pl.

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

Dear Mr. Takushi:

Environmental Impact Statement Preparation Notice
(EISPN) for the New Nanakuli III Elementary School

In response to your request of March 3, 1994, we have reviewed the subject EISPN and offer the following comments:

1. The Draft Environmental Impact Statement (DEIS) should indicate that: Candidate Sites 1 and 5 are designated for Residential use; and Candidate Sites 2, 3, 4 and 6 are designated for Agricultural use on the Waianae Development Plan Land Use Map.
2. The DEIS should also indicate that the Waianae Development Plan Public Facilities Map (DPPFM) shows a symbol for publicly funded improvements to Hakimo Road in the "Beyond 6 Years" category, which is adjacent Candidate Sites 1, 3 and 4. Additionally, the Waianae DPPFM shows a symbol for a publicly funded sewer improvement district, site determined, within six years, adjacent to Candidate Sites 5 and 6.
3. We would favor Candidate Sites 1 and 5 because they are already designated for urban use.
4. We would be concerned about the proximity of Candidate Sites 1-4 to active agricultural uses. Maili Elementary School currently experiences problems of

odors and insects due to nearby livestock farms. Increasing urban uses on or near agricultural areas can cause the eventual removal of agricultural uses.

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

Sincerely,

M. Foster

ROBIN FOSTER
Chief Planning Officer

RF:ft

cc: DHM Planners, Inc.
Office of Environmental Quality Control

POLICE DEPARTMENT
CITY AND COUNTY OF HONOLULU
801 SOUTH BELETANIA STREET
HONOLULU, HAWAII 96813 - AREA CODE (808) 528-3311



FRANK F. FASI
MAYOR

ROBERT P. TARUSHI
COMPTROLLER
LLOYD UMERASALA
DEPUTY COMPTROLLER
LETTER NO. (P) 1323.4



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 115, HONOLULU, HAWAII 96810

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 III Elementary School
EIS Consultation Phase
DAGS Job No. 12-16-6380

Thank you for your March 28, 1994 comments on the subject project. The information you provided regarding site designations on the Waianae Development Plan Land Use Map and planned improvements shown on the Public Facilities Map will be included in the draft EIS.

The evaluation of each site in the site selection process will include consideration of the sites' State and County land use designations and the sites' proximity to agricultural uses. These issues will also be addressed in the draft EIS.

We appreciate your input for this project. If you have any further questions, please have your staff contact Mr. Gary Chong of the Planning Branch at 586-0486.

Very truly yours,
Gordon Matsuoka
GORDON MATSUOKA
State Public Works Engineer

RM:jk
cc: DHM, Inc.

RECEIVED
MAR 17 10 0 AM '94
MICHAEL S. NAKAMURA
CHIEF
HAROLD M. KAWASAKI
DEPUTY CHIEF

March 15, 1994

OUR REFERENCE BS-LK

APPROVED
- P.W. Sect
- Staff Serv. Br.
- Planning
- P.W. Legal Br.
- Insp. Br.
- Comm. Br.
- Const. Eng.

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

Dear Mr. Takushi:

This is in response to your request for comments on a Site Selection Report and EIS Preparation Notice for a new Nanakuli III Elementary School.

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. NAKAMURA
Chief of Police

By *Eugene Uemura*
EUGENE UEMURA
Assistant Chief of Police
Administrative Bureau

CHING, YUEN & MORIKAWA
A Law Partnership Including Law Corporations

Pacific Tower, Suite 2770
1001 Bishop Street
Honolulu, Hawaii 96813

Telephone: (808) 524-8880
Telecopier: (808) 524-7664

March 28, 1994

Via Telescopier No. 586-0482
And Regular Mail

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

Attention: Mr. Ralph Morita, Planning Branch

Subject: New Nanakuli III Elementary School
EIS Consultation Phase

Gentlemen:

This law firm represents PVT Land Company, Ltd. ("PVT"), owner of the major portion of the property identified as Candidate Site 2 and owner of the property identified as Candidate Site 6 in the Environmental Assessment (Environmental Impact Statement Preparation Notice) for the new Nanakuli III Elementary School. PVT requests to be consulted in preparation of the Environmental Impact Statement for the new Nanakuli III Elementary School and submits the following comments.

PVT supports construction of the new Nanakuli Elementary School at Candidate Site 2. PVT opposes construction of the new Nanakuli III Elementary School at Candidate Site 6. Also, PVT believes that Candidate Site 5 would be an inappropriate site for an elementary school.

PVT owns and operates the Nanakuli Landfill on approximately 113 acres of land located mauka of Candidate Sites 5 and 6 on the Makaha side of Luualalei Na'ala Road. The Nanakuli Landfill is the only private permitted sanitary landfill on Oahu and one of only two (along with the City's Waimanalo Landfill) operating on Oahu. The entrance to the Nanakuli Landfill is directly across the street from Candidate Site 6. Approximately 200 hundred trucks enter and leave the Nanakuli Landfill through

State of Hawaii Comptroller
Department of Accounting and General Services
March 28, 1994
Page 2

this entrance on a daily basis. PVT is also planning expand its landfill operations and construct and operate a recycling center on Candidate Site 6. Generally, the recycling center will process recyclable construction and demolition materials and other solid waste received by the Nanakuli Landfill. Enclosed is a preliminary master plan for the planned expansion. PVT will apply for a special use permit to operate the recycling center.

PVT supports construction of the new Nanakuli III Elementary School on Candidate Site 2. Candidate Site 2 is separated from the active portion of the landfill site by Ulewaha Stream and therefore will not be subjected to adverse effects of landfill and recycling operations, such as dangerous traffic conditions and noise.

Candidate Site 2 is also immediately mauka of the "Keystone" property on which the Hawaiian Homes Commission has proposed to construct a major new homestead project. PVT has discussed with the Hawaiian Homes Commission the possibility of constructing a pedestrian connector between the homestead project and the new school.

PVT understands that certain roadway improvements to Hakimo Road and Kuakai Road will be required if the elementary school is located at Candidate Site 2. PVT has obtained a recent cost estimate from Belt Collins Hawaii for such roadway improvements. PVT is willing to discount this anticipated cost from the purchase price of Candidate Site 2. We enclose a copy of the cost estimate.

PVT opposes construction of the new Nanakuli III Elementary School on Candidate Site 5 and Candidate Site 6 as a major landfill and an elementary school are incompatible adjoining land uses. These two Candidate Sites are subject to continuous traffic from large trucks which often line up outside the entrance to the Nanakuli Landfill on Luualalei Naval Road in the early morning hours. In addition PVT would be precluded from developing its recycling center on Candidate Site 6. PVT is opposed to the use of Candidate Site 6 and is not willing to reduce the purchase price for Candidate Site 6.

MLY: CDC date 6400.1 133.008

MLY: CDC date 6400.1 133.008

State of Hawaii Comptroller
 Department of Accounting and General Services
 March 28, 1994
 Page 3

PVT believes that Candidate Site 2 is the most appropriate site for the Manakuli Elementary School III. Please send copies of all notices and reports to us at the above address and to PVT Land Company, Ltd. at:

1210 Queen Street, 2nd Floor
 Honolulu, Hawaii 96813.

Very truly yours,

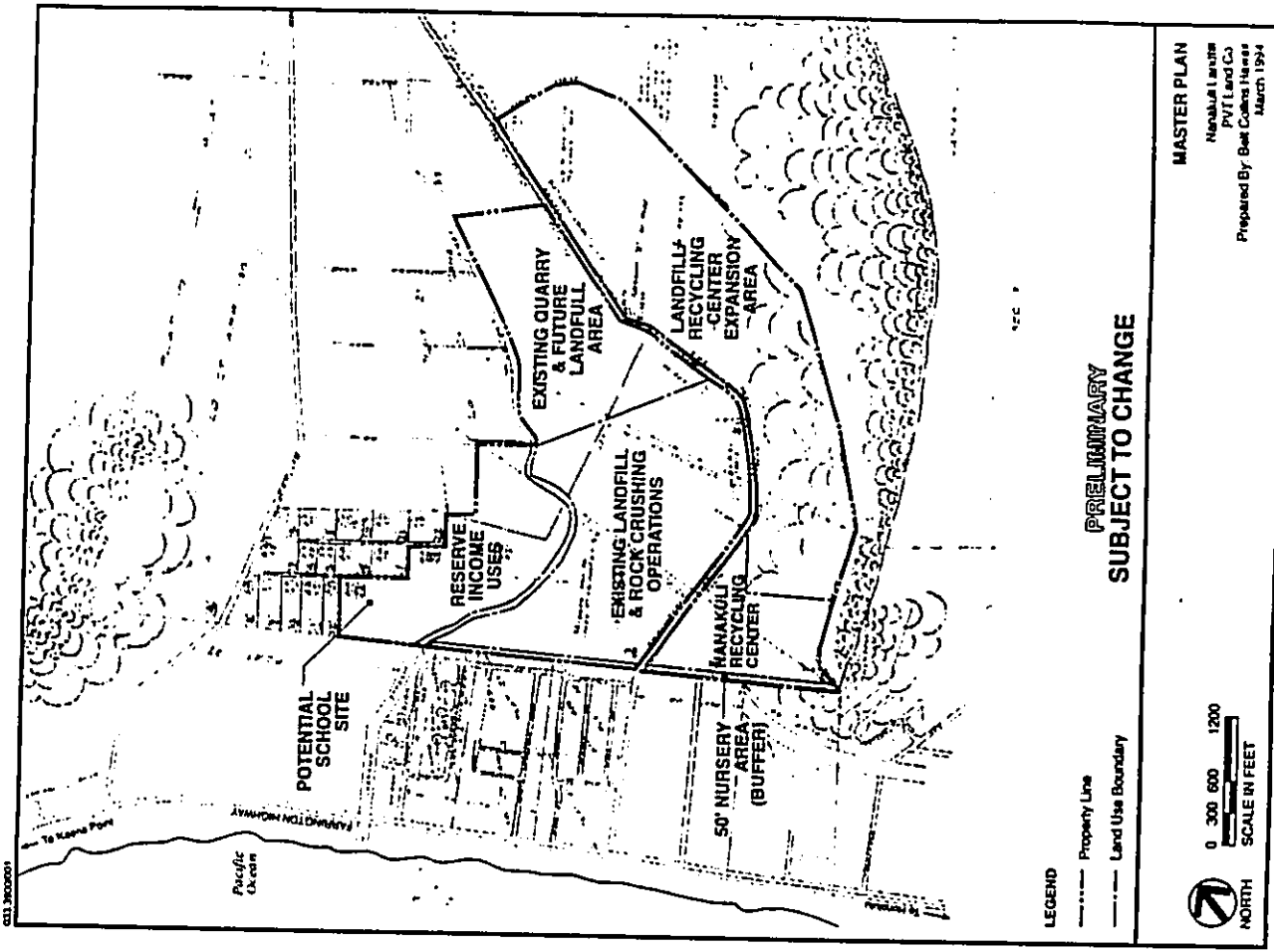
CHING, YUEN & MORIKAWA

William W. L. Yuen

William W. L. Yuen, Attorney at
 Law, A Law Corporation
 Cynthia D. Charlton

cc: /DHM Planners, Inc.
 PVT Land Company, Ltd.
 Belt Collins Hawaii

WLY: CDC date 6400.1 133.008



F A C S I M I L E H E A D E R

BELT COLLINS
H A W A I I

Date Sent : _____
Time : _____

To : Ching. Yuen & Morikawa Job No. : 033.3801

Fax Number : 524-7884

Attention : Mr. William W. L. Yuen

From : Cheryl Palesh

Date : February 9, 1994

Subject : Hakimo Road Improvements

Number of Pages (including header): 2 Original to follow: yes ___ no X

If you do not receive all pages, please call or fax immediately.

Our cost estimate for improvements along Hakimo Road and Kuakai Road is transmitted herewith. The minimum improvements identified for the Elementary School Site No. 2, are summarized as follows:

- 2,950 lineal feet of sidewalk along Hakimo Road from Farrington Highway to Kuakai Road.
- 900 lineal feet of sidewalk along Kuakai Road from Hakimo Road to the School site.
- 12 traffic signs, (2) indicating school crossing and (10) "No Parking" to assure two way traffic flow on Kuakai Road during school hours. Signage was considered in lieu of roadway widening.
- Pavement striping for crosswalks at Hakimo Road and Farrington Highway and at Kuakai Road and Hakimo Road.

Estimates for both asphalt concrete sidewalks with painted face along the traffic lane and concrete sidewalks, curbs and gutters are provided. General observations around Lincoln School, in Makiki, and Radford High School determined that asphalt sidewalks are acceptable, and probably most appropriate for this area.

Please review this information and contact me if there are any questions. The direct dial number is 539-1330. Thank you.

Copy to: PVT Land
Mr. Vernon Chock
593-2220

690 ALA MOANA BOULEVARD, FIRST FLOOR, HONOLULU, HAWAII 96813. TEL: 808-521-5561, FAX: 808-524-7819
ENGINEERING • PLANNING • LANDSCAPE ARCHITECTURE • ENVIRONMENTAL CONSULTING
HAWAII • SINGAPORE • HONG KONG • AUSTRALIA • THAILAND • GUAM

HAKIMO ROAD IMPROVEMENTS

COST ESTIMATE

DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
AC SIDEWALK ON ONE SIDE	1,850	LP	\$24.88	\$95,788.00
MARKING AND REGULATORY SIGNS	1	LS	\$2,456.70	\$2,456.70
PAVEMENT STRIPING	1	LS	\$633.42	\$633.42
COST AC SIDEWALK OPTION =				\$98,878.12
CONCRETE SIDEWALK ON ONE SIDE	1,850	LP	\$17.75	\$68,337.50
MARKING AND REGULATORY SIGNS	1,850	LP	\$24.80	\$95,480.00
PAVEMENT STRIPING	1	LS	\$2,456.70	\$2,456.70
PAVEMENT STRIPING	1	LS	\$633.42	\$633.42
COST CONC SIDEWALK OPTION =				\$166,907.62
TOTAL				

02/08/94



STATE OF HAWAII

DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES

P. O. BOX 118, HONOLULU, HAWAII 96818

ROBERT P. TAKUSHI
COMPTROLLER

LLOYD UMEBAYASHI
DEPUTY COMPTROLLER

LETTER NO. (P)1328.4

HON WABRE
11/1/84

MAY 5 1994

Mr. William W. L. Yuen
Ching, Yuen & Morikawa
Pacific Tower, Suite 2770
1001 Bishop Street
Honolulu, Hawaii 96813

Dear Mr. Yuen:

Subject: Nanakuli III Elementary School
EIS Consultation Phase
DAGS Job No. 12-16-6380

Thank you for your March 28, 1994 comments on the subject project. The information you provided regarding the existing Nanakuli Landfill and PVT Land Company, Ltd.'s expansion plans will be included in the draft EIS. PVT's support for Site 2 and opposition to Site 6 are noted.

PVT's willingness to discount anticipated roadway improvement costs from the purchase price will be noted in the draft EIS and will be considered during the ultimate site selection.

We appreciate your input for this project. If you have any further 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

RM:jk
cc: DHM, Inc.
PVT Land Company, Ltd.



DWYER IMANAKA SCHRAFF KUDO MEYER & FUJIMOTO

ATTORNEYS AT LAW • A LAW CORPORATION

1001 PUNAHOU PLAZA • 900 FORT STREET HALL • HONOLULU HAWAII 96813 • POST OFFICE BOX 2727 • HONOLULU, HAWAII 96801
TELEPHONE (808) 534-8000 • FAX (808) 534-8000

DAVID P. HUNTER JR.
GUY W. HUNTER
PAUL A. HUNTER
BENJAMIN A. GIBSON
WILLIAM W. HUNTER III
WALTER M. HUNTER
DANIEL M. HUNTER
JAMES H. HUNTER
KAREN L. HUNTER
STEPHEN HUNTER
D. ROBERT HUNTER JR.

DIV. OF PUBLIC WORKS
DACS

DEAN T. HANAUSSO
SCOTT W. SETTE
DAVID S. TORINAGA
FRANK THORNTON WOOD
LAWRENCE T. KAWASAKI
DOUGLASS H. HODGE
CHRISTINE A. LOW

March 14, 1994

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

Re: Your Letter No. (P)1138.4
New Nanakuli III Elementary School
EIS Consultation Phase (Preparation Notice)

Dear Mr. Takushi:

We are the attorneys for the Mary M. Townsend Trust, the fee owner of that certain property located at 87-1548 through 87-1570 Ulehawa Road, Nanakuli, Hawaii, Tax Map Key No. (1) 8-7-21-18 ("Property"). The Trust presently provides low-income housing to four residents in four single-family dwellings.

We have reviewed the Environmental Assessment for the New Nanakuli III Elementary School dated January 1994 and prepared by DHM Planners, inc. for the State of Hawaii, Department of Accounting and General Services, DAGS Job No. 12-16-6380. We have no comment with regard to the general comments contained within the Environmental Assessment and support its determination that an Environmental Impact Statement (EIS) is required for the subject project.

However, we do object to and will oppose the selection of Site 3, Ulehawa/Kapiki, Tax Map Key Nos. 8-7-21:14, 17, 18 as a potential location for the new Nanakuli III Elementary School for the following reasons:

- 1. The Townsend Trust presently provides low-income housing for four families in individual cottages on its Property. These families will be displaced by the proposed school. It is very difficult for families to find single family dwellings

Mr. Robert P. Takushi
March 14, 1994
Page 2

in which they may five with dignity and privacy at an affordable rent. Through the generosity of the Townsend Trust, four families are able to do so. The school will remove this availability and displace each of these families.

- 2. A large portion of the Property was illegally mined for coral during the late-1980's. The resulting pit was subsequently filled, but the degree of compaction is not known. Soil testing will be necessary to determine whether the ground is suitable for construction.
- 3. The Property, if condemned by the State of Hawaii, will be sold only in an "as is" condition.

We ask that we be placed on your mailing list and that notices relating to the New Nanakuli III Elementary School be sent to the undersigned and to Ms. Mary Townsend, 1144 Hala Drive, Honolulu, Hawaii 96817.

Very truly yours,

DWYER IMANAKA SCHRAFF KUDO
MEYER & FUJIMOTO

Kenn N. Kojima
Kenn N. Kojima

KNK:kk

cc: Ms. Townsend



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 115, HONOLULU, HAWAII 96813

ROBERT P. TAKUSHI
COMPTROLLER
LLOYD I. UKEBASAMI
DEPUTY COMPTROLLER
LETTER NO. (P) 1329.4

Mr. Kenn N. Kojima
Page 2
Ltr. No. (P) 1329.4

We appreciate your input for this project. If you have any further questions, please have your staff contact Mr. Gary Chong of the Planning Branch at 586-0486.

MAY 5 1994

Mr. Kenn N. Kojima
Dwyer Imanaka Schraff Kudo
Meyer & Fujimoto
900 Fort Street Mall, Suite 1800
Honolulu, Hawaii 96813

Dear Mr. Kojima:

Subject: Nanakuli III Elementary School
EIS Consultation Phase
DAGS Job No. 12-16-6380

Thank you for your March 14, 1994 comments on the subject project, including information on previous mining activities on TMK 8-7-21:18. Your opposition to the selection of Site 3 is noted.

Your concern regarding the displacement of families will be considered in the site selection process and during the ultimate selection of the new school site.

During the site selection process, each candidate site is evaluated against established physical, community, and cost evaluation criteria, and each site is rated individually on how it meets the criteria. The displacement of families, farms and businesses is a potential impact that the State hopes to avoid or minimize. The existing use, land ownership, and displacement associated with each candidate site will be addressed through the site evaluation criteria of the site selection process and will be described thoroughly in the draft EIS.

The draft EIS for the subject project will include a description of the site evaluation criteria, as well as the evaluation of each candidate site against the criteria. The draft EIS will be available at selected Oahu libraries (including Waianae Public Library) for public review within the next few months.

Very truly yours,

GORDON MATSUOKA
State Public Works Engineer

RM:jk
cc: DHM, Inc.
Ms. Mary Townsend

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Marta

March 23, 1994

JOHN WAREE
 GOVERNOR
 STATE OF HAWAII
 DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
 P. O. BOX 119, HONOLULU, HAWAII 96810



ROBERT P. TANUSHI
 CLERK OF THE HOUSE
 LYDIA L. NEBESAKI
 DEPUTY CLERK OF THE HOUSE
 (P) 1327.4

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

To whom it may concern:

SUBJECT: New Manakuli III Elementary School
 EIS Consultation Phase (Preparation Notice)

This is in response to your request for comments on the above mentioned project.

As a property owner within the proposed area, it is our belief that site selection for the new school should not displace prime agricultural land. Site 4 is currently owned by 3 separate owners with the entire site fully utilized for agricultural production. Condemnation of the land for the school will displace land owners along with numerous agricultural workers, and 15 acres of prime agriculture land. Site 4 is the only area considered whose soil is fertile, deep and free of stones or coral. Furthermore, being in the heart of a prime agricultural area, the proposed school will be exposed to pesticides, dust, odors from animal manure and slop cooking from pig farms.

Site 4 is farther up the valley than all other considered sites, thus a school on this site will create greater traffic congestion, due to cars and busses driving up and down Hakimo Road.

We feel that sites 5 or 6 will be the best selection due to the following reasons: 1) no displacement is needed since these sites are currently vacant; 2) the sites are not in agriculture production; and 3) traffic congestion will be minimal.

One of the main criteria for site selection according to this EAS is to minimize displacement of families, farms, or business. With this in consideration, selection of site 4 is in direct conflict with the EAS's objectives.

Sincerely yours,

 Nancy Higa
 Ryohei and Nancy Higa
 87-871 Hakimo Road
 Waianae, HI 96792

Mr. Ryohei Higa
 Ms. Nancy Higa
 87-871 Hakimo Road
 Waianae, Hawaii 96792

Dear Mr. and Ms. Higa:

Subject: Nanakuli III Elementary School
 EIS Consultation Phase
 DAGS Job No. 12-16-6380

Thank you for your March 23, 1994 comments on the subject project. All of the concerns you raised will be considered in the site selection process through the site evaluation criteria and will be considered during the ultimate selection of the new school site.

During the site selection process, each candidate site is evaluated against established physical, community, and cost evaluation criteria, and each site is rated individually on how it meets the criteria. Productive agricultural lands are considered a valuable resource in Hawaii and each site is given a rating based on its agricultural productivity. The industrial and agricultural nuisances criterion evaluates each site's proximity to land uses which can cause discomfort and conflict with school activities. The site evaluation criteria also considers your concerns related to the location of each candidate site with respect to the major concentration of students to be served by the school facility, displacement of families and farms, and traffic congestion.

The draft EIS for the subject project will include a description of the site evaluation criteria, as well as the evaluation of each candidate site against the criteria. The draft EIS will be available at selected Oahu libraries (including Waianae Public Library) for public review within the next few months.

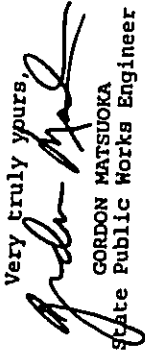
MAY 5 1994

Mr. Ryoei Higa
Ms. Nancy Higa
Page 2

Ltr. No. (P)1327.4

We appreciate your input for this project. If you have any further 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

RM:jk
cc: DHM, Inc.

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KURASHI & KURAHASHI, INC. RECEIVED
Planning and Zoning Consultants
MARUHAZAKI
PULUHANI AVENUE, SUITE 124
HOLOHULU, HAWAII 96810

Mar 15 8 01 AM '94
DIV. OF PUBLIC WORKS
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DIV. OF PUBLIC WORKS			

March 15, 1994

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

Attention: Mr. Ralph Morita
Public Works Division

Dear Mr. Takushi:

Subject: New Nanakuli III Elementary School
EIS Consultation Phase (Preparation Notice)

On behalf of Leeward Hawaii, Inc., the landowner of TMK 8-7-8: por 76, we would like to thank you for providing us with this opportunity to comment and respond to the above mentioned project.

We have completed our review of the proposed project and believe that the proposed Nanakuli III Elementary School should not be located at the Luahualei Site No. 5 for the following reasons:

1. The parcels which make up Luahualei Site No. 5 (TMK's 8-7-8: 76 and 77) as well as the DHHL Site No. 1 are designated Residential on the Development Plan Land Use Map by the City and County of Honolulu. Land acquisition for these parcels would be more expensive than land designated Public Facility or Agriculture. The four other possible sites (Kauai Site No. 2, Ulehuwa/Kapiki Site No. 3, Paakea Site No. 4, and PVT Site No. 6) would be more cost efficient since they are designated Agriculture on the Development Plan.
2. We are in the process of developing a Planned Development Housing Project on this parcel (TMK: 8-7-8: 76). The proposed project will

Mr. Takushi
Page 2
March 15, 1994

develop a mix of low market and affordable housing units on this property. Upon completion of the proposed development the project would provide 188 units of various sizes and designs. Locating the proposed Nanakuli III Elementary School on a portion of this property will eliminate this opportunity to develop this Planned Development Housing project which will provide a significant number of affordable housing units for the community.

Again thank you for the opportunity to comment on the proposed project. Should you have questions, please contact Debra Tom or myself.

Very truly yours,

Keith H. Kurahashi

Keith H. Kurahashi

cc: Ray Tanaka
Leeward Hawaii, Inc.



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 112, HONOLULU, HAWAII 96810

ROBERT P. TAKUSHI
COMPTROLLER
LLOYDI UNEBASAM
DEPUTY COMPTROLLER

LETTER NO. (P)1330.4

MAY 5 1994

Mr. Keith H. Kurahashi
Kusao & Kurahashi, Inc.
Ward Plaza
210 Ward Avenue, Suite 124
Honolulu, Hawaii 96814

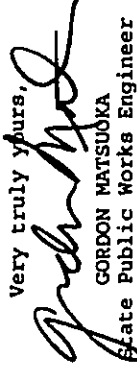
Dear Mr. Kurahashi:

Subject: Nanakuli III Elementary School
EIS Consultation Phase
DAGS Job No. 12-16-6380

Thank you for your March 15, 1994 comments on the subject project. Our responses to your comments are as follows:

1. During the site selection process, each candidate site is evaluated against established physical, community, and cost evaluation criteria, and each site is rated individually on how it meets the criteria. The State and City use designations, existing use, land ownership, and land acquisition costs associated with each candidate site will be addressed through the site evaluation criteria and will be described thoroughly in the draft EIS.
2. The information you provided regarding the proposed development of a portion of Site 5 (TMK 8-7-8:76) will be included in the draft EIS and will be taken into account in the site selection study.

We appreciate your input for this project. If you have any further 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

RM:jk
cc: DHM, Inc.



WAIANAЕ COAST NEIGHBORHOOD BOARD NO. 24

P.O. BOX 869 • WAIANAЕ, HAWAII 96792

March 7, 1994

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

SUBJECT: NANAKULI III ELEMENTARY SCHOOL

To Whom It May Concern:

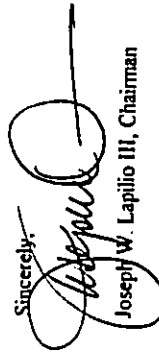
The Wai'anae Coast Neighborhood Board met in its December, 1993 meeting to review sites being proposed for the siting of the new Nanakuli III Elementary School. Based on the sites indicated on page 14 of the Environmental Assessment, the Board took the following positions:

-The Wai'anae Coast Neighborhood Board is *unanimously opposed* to sites 1, 2, 3, and 4 for Nanakuli III Elementary School. The sites proposed are within an agricultural area and would adversely impact existing uses. Second, Hakimo Road is already hazardous and unable to safely accommodate any additional vehicle and pedestrian traffic resulting from the new school.

-The Wai'anae Coast Neighborhood Board *unanimously supported* locating the new school on site 6. Traffic would be better accommodated with the use of the Luualalei Naval Road, and the site is currently unused and would not impact on existing agricultural activity. In addition, the site is not in the tsunami inundation zone.

We appreciate this opportunity to provide comment on this issue and we appreciate being kept informed. If additional information is needed, contact us by calling me at 696-3909.

Sincerely,


Joseph W. Lapilio III, Chairman

cc: Senator James Aki
Representative Henry Peters
Councilman John DeSoto
BOE Member Ron Nakano
DOE Superintendent
Libby Viduya, DOE Leeward District Superintendent



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

JOHN WANEE
CONFERENCE

MAY 5 1994

Mr. Joseph W. Lapilio III
Chairman
Wai'anae Coast Neighborhood Board No. 24
P. O. Box 869
Wai'anae, Hawaii 96792

Dear Mr. Lapilio:

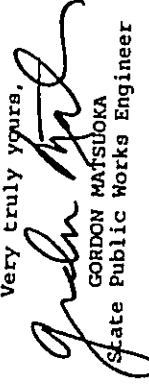
Subject: Nanakuli III Elementary School
EIS Consultation Phase
DAGS Job No. 12-16-6380

Thank you for your March 7, 1994 comments on the subject project. Your support for Site 6 and opposition to Sites 1 through 4 are noted.

The issues of concern to the Wai'anae Coast Neighborhood Board, namely vehicular and pedestrian traffic and the use of agricultural lands, will be addressed through the site evaluation criteria of the site selection process and will be described thoroughly in the draft EIS. The draft EIS will be available at selected Oahu libraries (including Wai'anae Public Library) for public review within the next few months.

We appreciate your input for this project. If you have any further questions, please have your staff contact Mr. Gary Chong of the Planning Branch at 586-0486.

Very truly yours,


GORDON MAFUOKA
State Public Works Engineer

RM:jk
cc: DHM, Inc.



Oahu's Neighborhood Board System - Established 1973

ROBERT P. TANISHI
COMPTROLLER
LLOYD I. UEBASAMI
DEPUTY COMPTROLLER
LETTER NO. (P) 1326.4

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APPENDIX E
EIS Public Review Phase,
Comments and Responses

**APPENDIX E. 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.

A. FEDERAL

Department of the Army, Corps of Engineers

B. STATE

Department of Business, Economic Development and Tourism
Department of Education
Department of Health
Department of Land and Natural Resources
Department of Land and Natural Resources,
State Historic Preservation Division
Department of Transportation
Housing Finance and Development Corporation
Office of Hawaiian Affairs
University of Hawaii at Manoa, Environmental Center

C. COUNTY

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

D. OTHER

Ching, Yuen & Morikawa
Kusao & Kurahashi, Inc.
PVT Land Company Ltd.

The following agencies, organizations, and individuals were provided copies of the Draft EIS during the Public Review Phase, but sent no response.

A. FEDERAL

Environmental Protection Agency
Department of the Navy
Soil Conservation Service

B. STATE

Department of Agriculture
Department of Education
Department of Hawaiian Home Lands
Office of Environmental Quality Control
Office of State Planning

C. COUNTY

Police Department

D. OTHER

American Lung Association
Senator James Aki
Councilmember John DeSoto
Dwyer Imanaka Schraff Kudo Meyer & Fujimoto
Hawaiian Electric Company
Mr. & Mrs. Ryoei Higa
Nanakuli Homestead Association
Representative Henry Peters
Ms. Mary M. Townsend
Waianae Coast Neighborhood Board



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

MYRTLE
ATTENTION OF

October 26, 1994

Planning Division

Office of Environmental Quality Control
State of Hawaii
220 South King Street, Fourth 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 III Elementary School, Oahu. We do not have any additional comments to offer beyond those offered in our previous letter dated March 18, 1994.

Sincerely,

Ray H. Jyo

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

Copy Furnished:

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

Ms. Wendie McAllister
DHM, Inc.
1975 Ualakaa Street
Honolulu, Hawaii 96822



BENJAMIN J. CAYETANO
GOVERNOR

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES

P. O. BOX 115, HONOLULU, HAWAII 96813

LETTER NO. (P) 2009.4

ROBERT P. TANUSHI
COMPTROLLER

DEC 6 1994

Mr. Ray H. Jyo
Director of Engineering
U. S. Army Engineer District, Honolulu
Department of the Army
Building 230
Fort Shafter, Hawaii 96858-5440

Dear Mr. Jyo:

Subject: Nanakuli III Elementary School
EIS Public Review Phase
DAGS Job No. 12-16-6380

Thank you for reviewing the draft EIS for the subject project. Your October 26, 1994 letter indicating that the Department of the Army has no additional comments to offer beyond those offered in your March 18, 1994 letter along with 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 586-0487.

Very truly yours,

Gordon Matsuo
GORDON MATSUOKA
State Public Works Engineer

GC:jk
cc: DHM, Inc.



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

Central Pacific Plaza 270 South King Street, 11th Floor, Honolulu, Hawaii
Mailing Address P.O. Box 2158, Honolulu, Hawaii 96804 Telephone: (808) 586-2423 Fax: (808) 586-2377

Merita
OCT 25 12 17 PM '94
JOHN WALKER GOVERNOR
JAMES K. SCHULTZ DIRECTOR
DEE LEGG DEPUTY DIRECTOR
TAKESHI YOSHIMURA DEPUTY DIRECTOR

DIVISION OF PUBLIC AFFAIRS
1 240 P.M. Eng
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S. Sch
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B. Sch
C. Sch
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October 20, 1994

Mr. Brian Choy
Office of Environmental Quality Control
Office of the Governor
220 South King Street, Suite 400
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 Study for the New Nanakuli III Elementary School.

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,
J. Schult
Jeanne K. Schult

Enclosure

cc: Mr. Ralph Morita
Ms. Wendie McAllaster



STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
LAND USE COMMISSION
Room 184, Old Federal Building
335 Merchant Street
Honolulu, Hawaii 96813
Telephone: 587-3822

October 19, 1994

SUBJECT: Director's Referral No. 94-315-0
New Nanakuli III Elementary School: Draft Environmental Impact Statement (DEIS) and Site Selection Study (SSS)

We have reviewed the DEIS and SSS for the subject Project, and have the following comments:

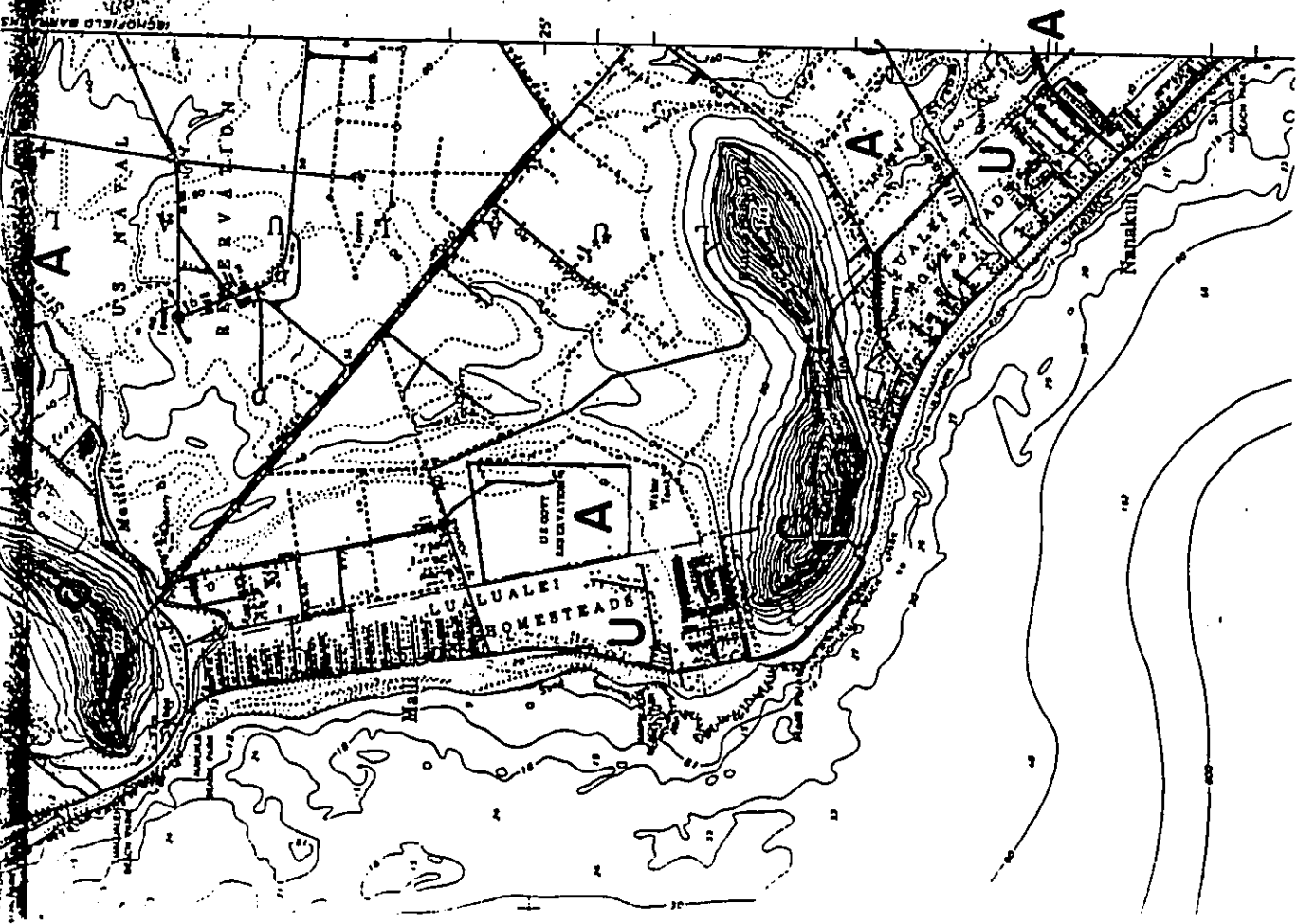
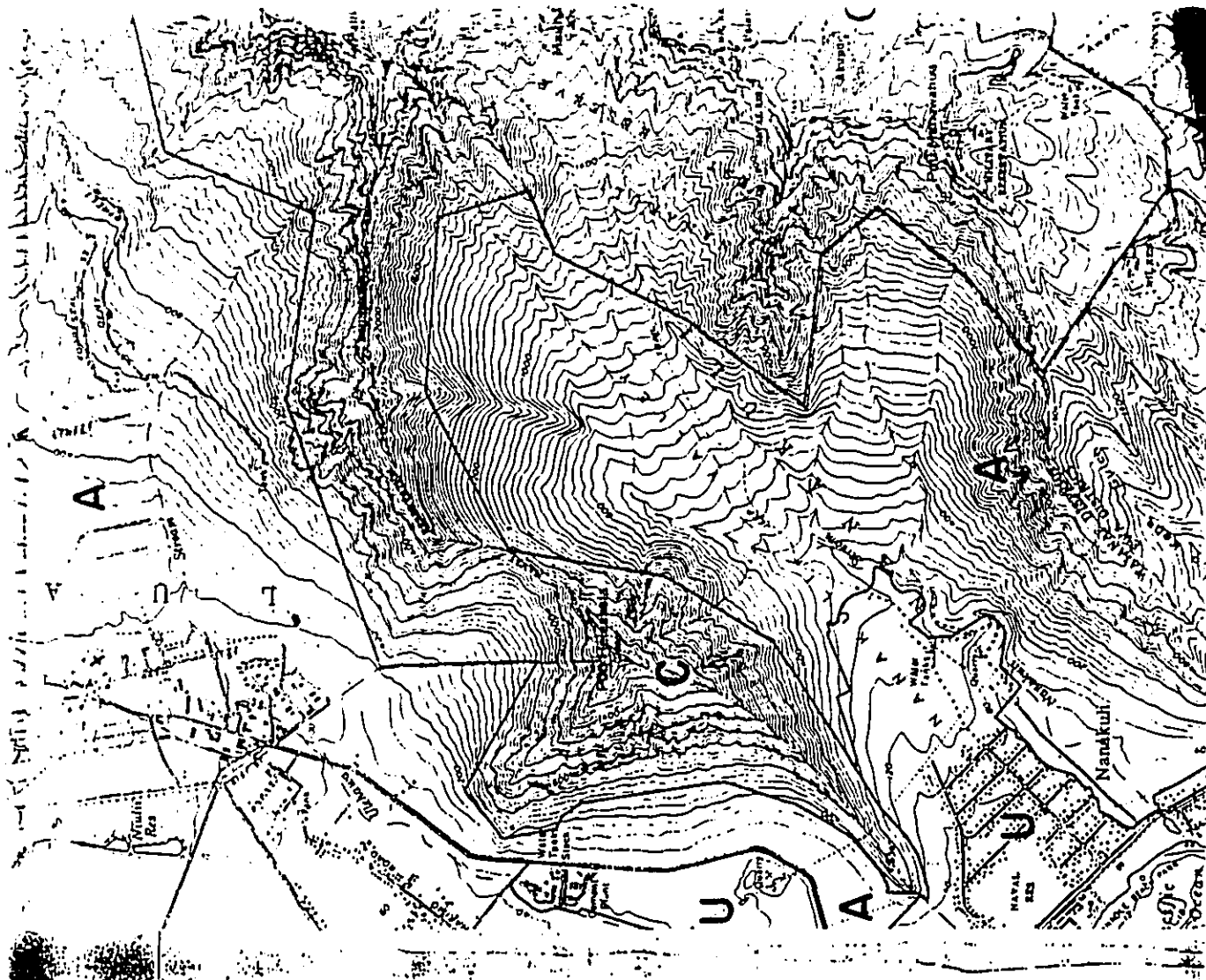
- 1) We confirm that Candidate Sites 2, 3, 4, and 6, as shown on Exhibit V-1, are designated within the State Land Use Agricultural District, and that Candidate Site 5, also as shown on Exhibit V-1, is located within the State Land Use Urban District.
- 2) Exhibit V-1 appears to incorrectly represent the State Land Use District boundaries in certain areas. For your reference, we have attached copies of the Commission's official maps, portions of O-2 (Waianae) and O-5 (Schofield Barracks), on which we have highlighted in yellow the corresponding areas which are incorrectly represented on Exhibit V-1.

We have no other comments to offer at this time.

att.

EU:bks:fl





BENJAMIN J. CAYETANO
GOVERNOR



ROBERT P. TAKUSHI
COMPTROLLER

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 116, HONOLULU, HAWAII 96819

LETTER NO. (P) 2010.4

DEC 13 1994

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

Dear Ms. Schultz:

Subject: Manakuli III Elementary School
EIS Public Review Phase
DAGS Job No. 12-16-6380

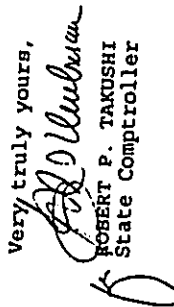
Thank you for your October 20, 1994 letter forwarding comments from the State Land Use Commission (LUC) on the draft EIS for the subject project. We offer the following responses to their comments:

1. We appreciate confirmation of the Land Use District designation for each candidate site as shown on Exhibit V-1 in the draft EIS.
2. Exhibit V-1 was prepared based on information gathered at the City and County of Honolulu, Department of Land Utilization. We will revise the exhibit to reflect the corrections to the State Land Use District boundaries which LUC provided.

This response letter and your October 20, 1994 comment letter will be included in the final EIS.

We appreciate your department's input for this project. If you have any questions, please have your staff contact Mr. Gary Chong of the Planning Branch at 586-0486.

Very truly yours,


ROBERT P. TAKUSHI
State Comptroller



STATE OF HAWAII
DEPARTMENT OF EDUCATION
P. O. BOX 2196
HONOLULU, HAWAII 96810

DATE OF THE SUBMITTANCE

November 7, 1994

HONORABLE JOHN MAIHEE, GOVERNOR

DEPARTMENT OF EDUCATION



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 118, HONOLULU, HAWAII 96810

EUGENE S. IMAI
COMPTROLLER
MARY PATRICIA WATERHOUSE
DEPUTY COMPTROLLER

LETTER NO (P) 1039.5

JAN 24 1995

MEMO TO: Honorable John Maihee, Governor
State of Hawaii

F R O M: Herman M. Aizawa, Ph.D., Superintendent
Department of Education

SUBJECT: Draft Environmental Impact Statement and Site
Selection Study for Nanakuli III Elementary School

We have reviewed the subject document and have no additional comment on the draft. Our previous concerns about high-voltage transmission lines and hazardous waste materials in relation to proposed school sites have been addressed in this draft.

Should there be any questions, please call the Facilities Branch at 737-4743.

HMA:hy

cc: A. Suga, OBS
A. Maeda, LDO
R. Morita, DAGS
W. McAllister, DHR, Inc.

TO: The Honorable Herman Aizawa, Superintendent
Department of Education

SUBJECT: Nanakuli III Elementary School
EIS Public Review Phase
DAGS Job No. 12-16-6380

Thank you for reviewing the draft EIS for the subject project. We acknowledge your letter of November 7, 1994 which indicates you have no additional comments on the draft EIS and that your previous concerns have been addressed.

This response letter and your November 7, 1994 letter will be included in the final EIS.

If you have any questions, please have your staff contact Mr. Gary Chong of the Public Works Division at 586-0486.

Eugene S. Imai
EUGENE S. IMAI
State Comptroller

STATE OF HAWAII
DEPARTMENT OF EDUCATION



STATE OF HAWAII
DEPARTMENT OF EDUCATION
P. O. BOX 2389
HONOLULU, HAWAII 96810

DATE OF THE SUPERINTENDENT

November 7, 1994

HONORABLE M. AIZAWA, Ph.D.
SUPERINTENDENT

WILLIAM J. CATTANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 115, HONOLULU, HAWAII 96810

EUGENE S. IMAI
COMPTROLLER
KARY PATRICKA WALTERHOUSE
DEPUTY COMPTROLLER

LETTER NO. (P) 1029.5

JAN 24 1995

MEMO TO: Honorable John Waihee, Governor
State of Hawaii
FROM: Herman M. Aizawa, Ph.D., Superintendent
Department of Education
SUBJECT: Draft Environmental Impact Statement and Site
Selection Study for Nanakuli III Elementary School

TO: The Honorable Herman Aizawa, Superintendent
Department of Education
SUBJECT: Nanakuli III Elementary School
EIS Public Review Phase
DAGS Job No. 12-16-6380

We have reviewed the subject document and have no additional comment on the draft. Our previous concerns about high-voltage transmission lines and hazardous waste materials in relation to proposed school sites have been addressed in this draft.

Thank you for reviewing the draft EIS for the subject project. We acknowledge your letter of November 7, 1994 which indicates you have no additional comments on the draft EIS and that your previous concerns have been addressed.

Should there be any questions, please call the Facilities Branch at 737-4743.

This response letter and your November 7, 1994 letter will be included in the final EIS.

HMA:hy
cc: A. Suga, OBS
A. Maeda, LDO
R. Morita, DAGS
W. McAllister, DHN, Inc.

If you have any questions, please have your staff contact Mr. Gary Chong of the Public Works Division at 586-0486.

Eugene S. Imai
EUGENE S. IMAI
State Comptroller

AN AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY EMPLOYER



RECEIVED
DEC 23 2 52 PM 1994
BENJAMIN J. CAYETANO
OFFICE OF THE GOVERNOR



STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 328
HONOLULU, HAWAII 96813

December 5, 1994

PLEASE EXAMINE THIS
Command/communication (routing)
Direct reply (cc: to: Governor)
Your information file
Brief reply for Governor's signature
Follow up/report
Send copy of response (if any)
Send attachment(s)
Return enclosure(s)
Other

If some writing copy from DEC 13 1994
If copy is enclosed in another envelope
etc., please write by return (inserting)
a reply, please refer to: 44-3,604

To: The Honorable Benjamin J. Cayetano
Governor, State of Hawaii
c/o Director, Office of Environmental
Quality Control
220 South King Street, 4th Floor
Honolulu, Hawaii 96813

From: Peter A. Sybinsky, Ph.D.
Director of Health

Subject: Draft Environmental Impact Statement (DEIS) and
Site Selection Study
Manakuli III Elementary School
Leeward, Oahu

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

Wastewater

Both Site 5 and 6 are within the County sewer service system and can be connected. Sites 2, 3 and 4 are a distance away from the sewer service system and would require construction of on-site individual wastewater treatment system. Because of this, we do not recommend these sites.

All wastewater plans must conform to applicable provisions of the Department of Health's Administrative Rules, Chapter 11-62, "Wastewater Systems" and we reserve the right to review the detailed wastewater plans.

Should you have any questions on this matter, please contact Ms. Lori Kajiwara of the Wastewater Branch at 586-4290.

Solid Waste

Site 6 is located across Lualualei Naval Road from an active construction and demolition landfill. The subject document understates the issues of locating a school close to such a landfill facility. The landfill provides essential disposal and debris recycling for the construction industry in Honolulu.

The Honorable Benjamin J. Cayetano
December 5, 1994
Page 2

It is the only construction and demolition landfill serving the Honolulu area, and it processes over 2000 tons per day. Large vehicles travel on Lualualei Naval Road to unload construction and demolition debris at the landfill.

The landfill's activities and planned recycling expansion are considered an essential element of solid waste management for the county and state. Recycling and reuse of construction and demolition materials are two solid waste management strategies discussed in the Integrated Solid Waste Management Plan for the State of Hawaii and the City and County of Honolulu. The facility recycles concrete to produce crushed gravel.

In addition, the site provides the only site for asbestos disposal in Honolulu and is one of only three petroleum contaminated soil remediation sites in the Honolulu area. These activities would not be compatible with school activities.

As indicated in the DEIS, the land proposed as Site 6 has been designated by the landfill owners for future development as a recycling park. The location of a recycling park across from an active landfill would be a compatible use, as well as a necessary tool in the State's quest to reduce and recycle solid waste by 50% by the year 2000.

The location of a school directly across from the landfill would appear to be an inconsistent land use. If there are any questions on this matter, please contact Ms. Carrie McCabe of the Office of Solid Waste Management at 586-4240.

Noise

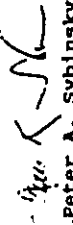
1. Noise from heavy vehicles going to and from the landfill will adversely affect the school environment if the school is located at either Site 5 or 6.

2. Noise from activities associated with the recreational areas of educational institutions may adversely impact any nearby residences.

The Honorable Benjamin J. Cayetano
December 5, 1994
Page 3

In summary, the Department of Health does not recommend the use
of sites 2, 3, 4 and 6.

Sincerely,


Peter A. Sybinsky, Ph.D.
Director of Health

C: MWB
OSWH
NERB



BENJAMIN J. CAYETANO
GOVERNOR

RODNEY S. MAUI
COMPTROLLER
MARY PATRICIA WATERHOUSE
DEPUTY COMPTROLLER

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

LETTER NO (P)1030.5

JAN 24 1995

TO: The Honorable Lawrence Milke, Director
Department of Health

SUBJECT: Manakuli III Elementary School
EIS Public Review Phase
DAGS Job No. 12-16-6380

Thank you for your December 5, 1994 comments on the subject
draft EIS. We offer the following responses to your comments:

1. Wastewater

According to the City and County of Honolulu, Department of Wastewater Management, it may be possible to connect to existing sewer lines located in Laiku Street, 200 feet makai of Candidate Site 2. The draft EIS states this, as will the final EIS.

2. Solid Waste

We appreciate the information you provided regarding the existing landfill. The final EIS will expand on descriptions of the services provided by the landfill, as well as the potential impacts resulting from a school near such a facility.

3. Noise

The section on long-term noise impacts will be revised for the final EIS to include the impact of off-site noise on the school in addition to school related noise impacts to off-site land uses. Landfill and traffic related noise are also discussed in Chapter IV, Evaluation of Candidate Sites, in the draft EIS.

This response letter and your December 5, 1994 letter will be included in the final EIS.

The Honorable Lawrence Milke
Page 2

Ltr. No. (P)1030.5

If you have any questions, please have your staff contact
Mr. Gary Chong of the Public Works Division at 586-0486.


EUGENE S. IMAI
State Comptroller

BENJAHIN J. CAYETANO
DIRECTOR OF PLANNING



OFFICE OF PLANNING
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

P. O. BOX 621
HONOLULU, HAWAII 96809

REF: OCEA:SKK

In reply, please refer
to: FILE NO.: 95-193a
DOC. NO.: 5177

DEC 13 1994

MEMORANDUM

TO: Interim Director
Office of Environmental Quality Control

FROM: KEITH W. AHUE, Chairperson
Board of Land and Natural Resources

SUBJECT: Draft Environmental Impact Statement (DEIS) and Site Selection
Study: New Nanakuli III Elementary School, Nanakuli, Oahu,
TMKs: 8-7-08: por. 76, 77; 8-7-09: por. 7; 8-7-21: 1, 2, 14,
17, 18, 38; 8-7-22: 1

The following are our additional comments on the subject project which supplement those forwarded by our previous letter dated November 15, 1994:

Division of Land Management

The Division of Land Management comments that: 1) necessary funding by Capital Improvement Program appropriations must be obtained on a timely basis to insure proper land acquisition and tenant relocation; 2) proposed facilities of the school expansion be adequate to meet the projected school attendance for the next twenty to forty year period; 3) all documentation and recordation of any acquired properties for the proposed facilities be properly done; and 4) all appropriate laws, ordinances and administrative rules be complied with in the site selection and land acquisition.

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 Tagawa at our Office of Conservation and Environmental Affairs, at 587-0377, should you have any questions.

OFFICE OF PLANNING
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES



OFFICE OF PLANNING
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

P. O. BOX 621
HONOLULU, HAWAII 96809

REF: OCEA:SKK

FILE NO.: 95-193
DOC. ID.: 5116

NOV 15 1994

MEMORANDUM

TO: Dr. Bruce Anderson, Interim Director
Office of Environmental Quality Control

FROM: Keith W. Ahue, Chairperson
Board of Land and Natural Resources

SUBJECT: Draft Environmental Impact Statement (DEIS) and Site Selection
Study: New Nanakuli III Elementary School, Nanakuli, Oahu,
TMKs: 8-7-08: por. 76, 77; 8-7-09: por. 7; 8-7-21: 1, 2, 14,
17, 18, 38; 8-7-22: 1

We have reviewed the DEIS for the proposed project and have the following comments:

Historic Preservation Division

The Historic Preservation Division (HPD) comments that the DEIS correctly incorporates the findings of an archaeological reconnaissance survey and a historical literature search that there are no known historic sites at any of the proposed elementary school 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 the Nanakuli III Elementary School at any of the six proposed locations will have "no effect" on historic sites.

We have no other comments to offer at this time. Please feel free to call Steve Tagawa of our Office of Conservation and Environmental Affairs at 587-0377, should you have any questions.

GOVERNOR
STATE OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
23 SOUTH KING STREET, 4TH FLOOR
HONOLULU, HAWAII 96813

October 28, 1994

Governor, State of Hawaii
c/o Office of Environmental Quality Control
220 South King Street, Fourth Floor
Honolulu, Hawaii 96813

SUBJECT: Draft Environmental Impact Statement and Site Selection
Study: Nanakuli III Elementary School
Nanakuli, Wai'anae, O'ahu
TMK: 8-7-7:por.4; 8-7-22:1,7-9,por.3; 8-7-21:14,17,18;
8-7-21:1,2,39; 8-7-8:por.76,77; 8-7-9:por.7

LOG NO: 12992
DOC NO: 9410EJ07

*Please refer to photographs
for photos.* 096

DEPT. OF LAND AND NATURAL RESOURCES

- DEPUTY
- CHIEF SUPERVISOR
- SONIA L. MANAKI
- AGRICULTURE DEVELOPMENT PROGRAM
- AGRICULTURE RESOURCES
- CONSERVATION AND ENVIRONMENTAL AFFAIRS
- CONSERVATION AND RESOURCES DEVELOPMENT
- COUNTY AFFAIRS
- FORESTRY AND WILDLIFE
- HISTORIC PRESERVATION DIVISION
- LAND MANAGEMENT
- PLANNING AND DEVELOPMENT
- WATER AND LAND DEVELOPMENT

BRUNO L. CAVETANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES

P. O. BOX 175, HONOLULU, HAWAII 96810

LETTER NO (P) 1027.5

ELIZABETH M. HAN
COMPTROLLER
MARY PATRICIA WATKINS
DEPUTY COMPTROLLER

JAN 24 1995

TO: The Honorable Michael Wilson, Chairperson
Department of Land and Natural Resources

SUBJECT: Nanakuli III Elementary School
EIS Public Review Phase
DAGS Job No. 12-16-6380

Thank you for reviewing the draft EIS for the subject project. We acknowledge your department's letters of November 15, 1994 and December 13, 1994.

We appreciate the Historic Preservation Division's comment (November letter) that the draft EIS correctly incorporates the findings of the archaeological reconnaissance survey and that construction at any candidate site would have "no effect" on historic sites.

We offer the following response to comments by the Division of Land Management (December letter):

1. All efforts will be made to obtain funding by CIP appropriations on a timely basis.
2. The Department of Education is trying to limit the size of elementary schools throughout the State. If Nanaikapono Elementary School in Nanakuli is closed due to the high rent (refer to draft EIS pp. 1 and 2), Nanakuli Elementary School and the proposed Nanakuli III Elementary School will not be able to handle projected enrollments for the near future. Another new school will be required in Nanakuli to handle enrollments from Nanaikapono and projected population growth. Providing adequate facilities at Nanakuli III Elementary to meet projected attendance for the next 20 to 40 years, as you suggest, would require an extremely large elementary school and would not be in the best interest of the students or faculty.

The DEIS correctly incorporates the findings of an archaeological reconnaissance survey and an historical literature search that there are no known historic sites at any of the proposed elementary school 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, we believe that construction of the Nanakuli III Elementary School at any of the six proposed locations will have "no effect" on historic sites.

Sincerely,

Don Hibbard, Administrator
State Historic Preservation Division

EJ:jk

3. All efforts will be made to properly document and record any acquired properties for the proposed school.
 4. All appropriate laws, ordinances and administrative rules will be complied with.
- The response letter and your November 15, 1994 and December 13, 1994 letters will be included in the final EIS.

If you have any questions, please have your staff contact Mr. Gary Chong of the Public Works Division at 586-0486.


EUGENE S. IMAI
State Comptroller

UNRECORDED COPY

BENJAMIN J. CAYETANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
180 FURNACE STREET
HONOLULU, HAWAII 96813

January 23, 1995

KAZU HAYASHIDA
DIRECTOR

DEPUTY DIRECTOR
KAZU HAYASHIDA
GLENN A. CHAMBERS
JOYCE T. O'NEILL

BY REPLY REFER TO:
STP 8.6560

BENJAMIN J. CAYETANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 111, HONOLULU, HAWAII 96813

LETTER NO (P)1066, 5

EUGENE S. IMAI
COMPTROLLER

MARY PATRICIA WATKINS
DEPUTY COMPTROLLER

FEB 7 1995

TO: The Honorable Benjamin J. Cayetano, Governor
c/o Office of Environmental Quality Control

FROM: Kazu Hayashida
Director of Transportation

SUBJECT: NEW NANAKULI III ELEMENTARY SCHOOL
DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS)
TMK: 8-7-07: por. 4; 8-7-08: por. 76, 77; 8-7-09: por. 3, 7;
8-7-21: por. 1, 2, 14, 17, 18, 38; 8-7-22: 1

TO: Honorable Kazu Hayashida, Director
Department of Transportation

SUBJECT: Nanakuli III Elementary School
EIS Public Review Phase
DAGS Job No. 12-16-6380

Thank you for your January 23, 1995 comments on the subject draft EIS. We offer the following responses to your comments:

- Thank you for your transmittal requesting our comments on the subject DEIS. We have the following comments on the proposed new elementary school:
1. The developer should participate with other proposed developers in the area in the funding and construction of required roadway and intersection improvements along Farrington Highway.
 2. All plans for work within the State highway right-of-way must be submitted for our review and approval.
 3. The developer should continue to coordinate with the Department of Transportation on the proposed development as it progresses.

We appreciate the opportunity to provide comments.

c: DAGS
DHDM, Inc.

1. Once a school site is selected and the design phase has begun, the Department of Transportation will be consulted regarding necessary roadway improvements. Funding issues may be addressed at that time.
2. Any plans for work within the State highway right-of-way associated with the proposed school will be submitted to your department for review and approval.
3. The Department of Education will continue to coordinate with the Department of Transportation as the proposed school project progresses.

This response letter and your January 23, 1995 letter will be included in the final EIS. If you have any questions, please have your staff contact Mr. Gary Chong of the Public Works Division at 586-0487.

EUGENE S. IMAI
State Comptroller

JOHN WAINI
EXECUTIVE DIRECTOR



STATE OF HAWAII
DEPARTMENT OF BUDGET AND FINANCE
HOUSING FINANCE AND DEVELOPMENT CORPORATION
371 QUEEN STREET, SUITE 300
HONOLULU, HAWAII 96813
TEL: (808) 927-6000

October 26, 1994

JOSEPH K. CONANT
EXECUTIVE DIRECTOR

IN REPLY REFER TO:
94: PPE/5554

BENJAMIN J. CAYETANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P.O. BOX 111, HONOLULU, HAWAII 96811

LETTER NO. (P)2011-4

DEC 6 1994

TO: The Honorable John Waihee
City Office of Environmental Quality Control

FROM:
Joseph K. Conant
Executive Director

SUBJECT: Draft EIS for the New Nanakuli III Elementary School

Thank you for the opportunity to review the subject draft EIS.

We have no comments to offer.

c: Mr. Ralph Morita, DAGS
✓ Ms. Wendie McAllaster, DHM, 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: Nanakuli III Elementary School
EIS Public Review Phase
DAGS Job No. 12-16-6380

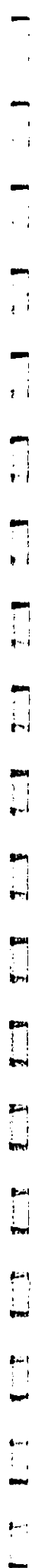
Thank you for reviewing the draft EIS for the subject project. Your October 26, 1994 letter indicating that the Housing Finance and Development Corporation has no comments to offer along with this response letter will be included in the final EIS.

If you have any questions, please have your staff contact Mr. Gary Chong of the Planning Branch at 586-0487.

Very truly yours,

GORDON MATSUOKA
State Public Works Engineer

GC:jk
cc: DHM, Inc.





THE
STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
711 Kapolei Blvd, 6th Fl, 500
HONOLULU, HAWAII 96813
PH: (808) 596-3777
FAX: (808) 596-3799

HELEALUOIA CAUTIANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 111, HONOLULU, HAWAII 96819

BURDESS MAN
COMPTROLLER
MARY PATRICK WATERHOUSE
DEPUTY COMPTROLLER

LETTER NO (P) 1028.5

JAN 24 1995

November 21, 1994

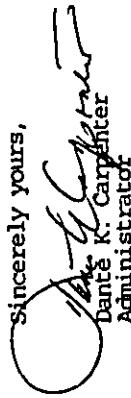
Governor, State of Hawaii
c/o Office of Environmental Quality Control
220 South King Street, 4th Floor
Honolulu, HI 96813

Dear Sir/Madam:

Thank you for the opportunity to review the Draft Environmental Impact Statement (DEIS) and site selection study for the Nanakuli III Elementary School, Island of Oahu.

We find the DEIS sufficient and have no objections to the State's proposal to build the Nanakuli III Elementary School. Please contact me or Linda Delaney, Land and Natural Resource Officer, at 594-1938, should you have any questions on this matter.

Sincerely yours,


Dante K. Carpenter
Administrator

LM:lm
cc BOT

Mr. Dante K. Carpenter
Administrator
Office of Hawaiian Affairs
State of Hawaii
Honolulu, Hawaii 96813

Dear Mr. Carpenter:

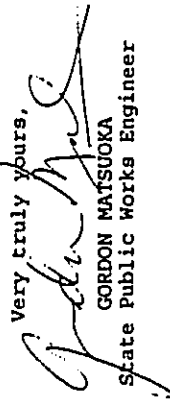
Subject: Manakuli III Elementary School
EIS Public Review Phase
DAGS Job No. 12-16-6380

Thank you for reviewing the draft EIS for the subject project. We acknowledge your letter of November 21, 1994 which indicates you find the draft EIS sufficient and have no objections to the proposed school development.

This response letter and your November 21, 1994 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 585-0486.

Very truly yours,


GORDON MATSUOKA
State Public Works Engineer

GC:jk
cc: DHM, Inc.

RECEIVED

Nov 23 1 26 PM '94



University of Hawaii at Manoa

Environmental Center
A Unit of Water Resources Research Center
Crawford 317 - 2550 Campus Road - Honolulu, Hawaii 96822
Telephone: (808) 956-7361 - Facsimile: (808) 956-3990

Governor, State of Hawaii
November 22, 1994
Page 2

school. Small school and schools-within-a-school research suggest that efficiencies of large size are achieved at the expense of school effectiveness. It is possible, however, that size barriers to effectiveness in learning can be properly addressed through utilization of schools-within-a-school organization and governance.

November 22, 1994

RE: 0656

INVESTING IN PUBLIC QUALITY
Site P.K. Eng Approved
P.W. Secy
Staff Serv. R. Info
Z Planning B. AA File
Prof. Mgmt. B. See file
Design B.
Arch R.
Publ. Cont. Eng.
11/22/94 Serv. B. Rec'd

Governor, State of Hawaii
c/o Office of Environmental Quality Control
220 South King Street, Fourth Floor
Honolulu, Hawaii 96813

Dear Governor:

Draft Environmental Impact Statement (EIS)
New Nanakuli III Elementary School
Waianae, Oahu

The State of Hawaii Department of Education is proposing to build a new elementary school on approximately 12 acres of land to meet the education demands of an increasing population in the Nanakuli area. An enrollment of 775 students in grades K to 6 is planned, with opening scheduled for September 1998. Although six candidate sites were selected, one was eliminated, because the parcel has been designated for residential development by the Department of Hawaiian Home Lands (DHHL). Sites 2, 3, and 4 are privately owned and used for various residential and agricultural purposes. Should one of these agriculturally zoned sites be chosen, a Special Use Permit (SUP) or State Land Use District (SLUD) Boundary Amendment would have to be obtained from the City and County Planning Department. Sites 5 and 6 are adjacent to the Nanakuli Landfill and exposed to heavy truck traffic related to landfill operations. No final site has been selected as yet; however, physical and community criteria evaluated in the draft EIS favor Sites 5 and 6.

We have reviewed this draft EIS with the assistance of Paul Ekern, Emeritus; Ralph Stueber, Emeritus; and Malia Akutagawa of the Environmental Center.

Enrollment Projections

Incremental development as recommended in this draft EIS has evoked concerns as to the eventual enrollment of the elementary

No Final Site Selection

Although we appreciate the approach of examining all alternatives on an equal basis, it is difficult to make a proper assessment of environmental and social impacts of the project without knowing which candidate site will be selected. This approach leads to an incomplete, almost cursory look at potential social and environmental consequences arising from the development of each site. At the draft EIS stage, a final site should have been selected, and appropriate studies and surveys should be available for review. The present document lacks appendices describing air quality studies, flora and fauna inventories, and traffic impact studies, among other items. In addition, discussions of climate conditions, water needs and availability, and soils are either non-existent or superficial at best. Without such information included in the draft EIS, there will be no opportunity for public review of more thorough studies specific to the selected site, if such studies even are conducted.

Conflicting Land Uses and Displacement of Existing Owners

In weighing the feasibility of building a new school on one of the six candidate sites, it is important to balance the interests of current owners and land users within and surrounding these sites. Those who grow crops on a large scale basis or raise pigs, chickens, and other animals may stand to lose their livelihood as a consequence of relocation.

Air Quality and Noise

Air quality and noise studies are particularly important, considering that Sites 5 and 6 are next to the Nanakuli Landfill. Considering only short-term air quality and noise impacts related to school construction is not sufficient. Potential long-term problems arising from dust from the landfill, including possible health hazards to students and staff with allergies need to be addressed. In addition, airborne dust may leave a dirty film on school buildings, in classrooms, and on sensitive equipment such as computers. Proposed mitigation measures for dust and noise impacts include "solid and/or landscape buffers along perimeters of [the]

11/26/94

site and air-conditioned buildings". However, such measures fail to mitigate health hazards to people outside on the school grounds, and low level background noise from landfill operations may cause chronic hearing loss to school users.

Water Availability and Needs

No information of groundwater in this area was discussed, and no pan evaporation rates were given. What are the water needs for landscaping? Since the Manakuli region is dry, and much of the groundwater supply is taken up by phreatophytes such as the kiawe, will xeriscaping be considered as an alternative to more water-intensive forms of landscaping?

Soils

The discussion of soils and their geomorphology was incomplete. No alluvial effects on drainage patterns were analyzed. Where is the 25-foot sea stand characteristic of this historic drop in sea level? What are the soil properties of this area? Are alluvial soils subject to groundwater movement? How far inland do brackish groundwater traces extend?

What are the consequences to the engineering properties of existing soils at the candidate sites? Are existing soils at each site amenable to construction of building foundations, septic tanks, and other structures needed for this school project?

Climate

The draft EIS failed to include discussion of wind regimes. Since the candidate sites are within the Waianae Coast land-seabreeze zone, will salt spray carried on the seabreeze pose the threat of damage to certain building materials? What are the effects of this sea breeze on human comfort; will it serve to enhance comfort? A comfort index representing wind, relative humidity, and temperature should be incorporated into the site selection criteria.

Solar Energy

The State should consider use of solar panels for water heating in view of the high irradiance levels in this area. This energy alternative could benefit the proposed school by supplying hot water to P.E. shower rooms, the cafeteria, and science labs.

Hurricane Storm Surge Hazards

A discussion of tsunami hazards was included; however, an assessment of hurricane storm hazards should also be made, since hurricane storm surge may exceed tsunami inundation levels. Estimates may be derived from storm surge created by Hurricane Iniki.

Site Recommendation

Given the document's generalized analysis of the candidate sites, and absent any detailed studies and surveys into existing environmental conditions, it is difficult to arrive at an informed choice of the preferred school site. However, on the basis of the information provided in this document, we would rank the candidate sites differently. Our reviewers place primary emphasis on overall safety and health, environmental concerns, and effects on adjacent and/or displaced land users. Following these criteria, our ranking of first through fifth choice would be Site 2, 3, 4, 6, and 5, respectively.

Site 2 is ranked first, because the existing owners are willing to sell their land to the State; thus, the issue of displacement of unwilling residents is not a problem. Despite location of this site in a flood zone area due to its proximity to Ulehawa Stream, confining school buildings and playfields to the 13.47 acres outside of this flood zone provides an effective mitigation proposal. To further insure safety, we recommend that a fence or wall be built to prevent access from the school grounds to the stream. Remaining issues of concern related to surrounding agricultural land uses are unresolved, since these activities are undefined. Does agricultural use mean solely the growing of crops, or does it also mean the raising of livestock such as pigs and chickens? Are these large-scale operations or just small-scale undertakings for home consumption? Is there an odor problem?

We ranked Site 3 second because its selection would result in displacement of people living in eight dwelling units. Surrounding agricultural activities again are inadequately defined to allow reasoned decisionmaking.

Site 4 is ranked third because of ongoing active cultivation of truck crops. Because the neighboring Ulehawa Stream may be an important water source for these crops, it may be too burdensome on the owners to relocate, especially if replacement sites lack comparable unoccupied acreage, soil, and irrigation conditions. In addition, site 4 is surrounded by land in active agriculture, and two pig farms are located on the southern boundary of this site.

which may result in a serious odor problem. Providing air conditioning for every classroom is impractical if the other candidate sites can avoid this problem without this added expense.

Site 6 is ranked fourth, because it is near the Nanakuli Landfill and is planned for landfill expansion and for the construction of a recycling center. Both the landfill and the recycling center may accept hazardous waste which could, in turn, pose a health hazard to students and staff. Current use of the landfill includes the receiving of safely contained asbestos, demolition debris, concrete, rock, dirt and grub.

Although there is no problem of exposure to asbestos and no odor problem, there is still a problem of dust and noise exposure coming from landfill operations. In addition, the landfill experiences heavy truck traffic which will conflict with buses and other vehicles transporting students to and from the proposed school on Luualalei Naval Road. The fact that the Navy is willing to donate the road to the State has no bearing on the potential traffic problems resulting from the presence of a new school at Site 6. This heavy traffic also may pose a greater risk of danger to students crossing the street. While it is difficult for buses to negotiate the right-hand turning lane to Hakimo Road from Farrington Highway to get to Sites 2, 3, and 4, this will be mitigated by highway improvements to be in effect within six years.

Site 5 is last because it is not only adjacent to the Nanakuli Landfill, but is currently occupied by many dwelling units, and the remaining owner of a vacant parcel on the site is planning a 188-unit affordable housing development.

Under the State's criteria, Sites 6, 5, 2, 3, and 4 emerge as the best to the worst alternative. It is unclear whether the State will actually choose according to these results; however, this seems the most plausible outcome. It appears that these rankings are largely based on monetary considerations, since the results are nearly identical to the order of least expensive to most expensive improvements for each site. Our reviewers question the long-term propriety of a choice based solely on economic considerations.

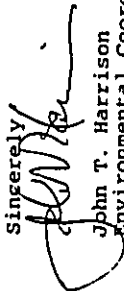
Conclusion

We believe it would be premature to accept this Draft EIS as is without a final site selection determination and a thorough assessment of environmental and social impacts unique to that site alone.

Attached is a list of references which will be helpful in the State's assessment of climate, water, and soil conditions in the Nanakuli-Waianae region.

Thank you for the opportunity to review this Draft EIS.

Sincerely,



John T. Harrison
Environmental Coordinator

cc: OEOC
DAGS, Planning Branch ✓
Roger Fujioka
Paul Ekern
Ralph Stueber
Malia Akutagawa



Governor, State of Hawaii
November 22, 1994
Page 7

References

1. Ekern, P.C. Water resources of the radio transmitting facility, Lualualei, Oahu, Hawaii. (unpublished)
2. Ekern, P.C., T. Yoshihara (1977). Hawaii solar radiation summary. *Alternative Energy Sources: An International Compendium*, Vol. 1, 69-90.
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7. Zones, C.P. (1963) Preliminary report on the ground water resources of the Waianae area, Oahu, Hawaii. DLMR Circ. C16. 12 pp.
8. Zones, C.P. (1961) Discharge of ground water by phreatophytes in the Waianae district, Oahu, Hawaii. *Geological Survey Research*, Art. 377, D240-D242.

BERNARD J. CATE/MD
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 118, HONOLULU, HAWAII 96810

ELaine S. Hall
COMPTROLLER
MARY PATRICKA WATERHOUSE
DEPUTY COMPTROLLER

LETTER NO (P) 1031.5

JAN 24 1995

Mr. John T. Harrison
Environmental Coordinator
Environmental Center
University of Hawaii at Manoa
2550 Campus Road, Crawford 317
Honolulu, Hawaii 96822

Dear Mr. Harrison:

Subject: Nanakuli III Elementary School
EIS Public Review Phase
DAGS Job No. 12-16-6380

Thank you for your November 22, 1994 comments on the subject draft EIS. Attached are our responses to your comments.
Your November 22, 1994 letter and this response letter will be included in the final EIS.

We appreciate your input for this project. If you have any questions, please have your staff contact Mr. Gary Chong of the Planning Branch at 586-0486.

Very truly yours,

Gordon Matsuo
GORDON MATSUOKA
State Public Works Engineer

GC:jk
Attachment
cc: DHM, Inc. w/attachment

4. Air Quality and Noise

Industrial and agricultural nuisances impacting each candidate site are discussed in Chapter VI, Evaluation of Candidate Sites of the draft EIS. Chapter VII of the EIS will be revised to expand on long-term noise impacts and to add a section discussing long-term air quality impacts for the candidate site, particularly Sites 5 and 6 with respect to the landfill. The advantages and limitations of the proposed mitigation measures will also be included.

Air quality and noise studies may be required for Site 5 or 6 if either is selected as the new school site due to their proximity to the landfill.

5. Water Availability and Needs

A discussion of groundwater in the Nanakuli area will be included in the final EIS.

Due to the inherent uses of an elementary school site, most of the non-impervious areas will be grassed to allow for outdoor play space. Trees, shrubs and groundcovers will primarily be planted near the buildings and in the parking lot. Drought-tolerant, low water use plants and grasses, as identified by the Board of Water Supply, will be used at the school to minimize water use for landscape purposes.

6. Soils

Once a site is selected, the design consultant will identify existing drainage patterns and develop a drainage plan which provides adequate drainage for the school site with no adverse impact to surrounding lands or waters.

Predominate soils within the Nanakuli coastal area are described on Pages 26 and 27 of the draft EIS. The specific soil properties of each candidate site are described in Chapter VI based on the Soil Survey of Oahu published by the Soil Conservation Service.

With the exception of revising the EIS to include any construction limitations which may result from the existing soils at the candidate sites, the soil information provided in the EIS is adequate for the site selection study and impact assessment.

1. Enrollment Projections

The Department of Education (DOE) shares your concern about the size of elementary schools. The purpose of the proposed Nanakuli III Elementary School is to reduce the enrollment at Nanaikapono Elementary School and to avoid overcrowding at Nanakuli Elementary School. Please refer to Chapter I of the draft EIS.

Nanakuli III Elementary School is proposed to be developed in three increments due to budget restrictions. The planned design enrollment for the school, 775 students, will not be increased due to incremental development.

2. No Final Site Selection

The draft EIS is written to provide the necessary information for each candidate site from which the environmental and social impacts can be assessed. In addition to providing as much information as possible to aid the DOE in the selection of the most appropriate site for the proposed school, the draft EIS provides information on each candidate site as if each site was the selected site.

The Department of Accounting and General Services (DAGS) recognizes that certain specialized studies or surveys may be necessary for the selected site, but such studies are not necessary, practical, or economically feasible to conduct for each candidate site, and therefore are not a part of the draft EIS. DAGS is committed to conducting all necessary and appropriate studies and surveys for the selected site, and such studies/surveys will be available for review by public agencies during various permit and approval processes.

3. Conflicting Land Uses and Displacement of Existing Owners

It is DAGS' policy that site selection studies and their accompanying EISs do not attempt to identify a preferred site or to weigh or rank the site evaluation criteria or candidate site. This weighing/ranking is done by the user of the project facility, which in this case is the DOE. The DOE will certainly consider the interests of current landowners and users of the various sites and surrounding properties in their final site selection.

7. Climate

Since all five of the candidate school sites are within about a mile of each other in Nanakuli, the "land-seabreeze" you refer to, and its salt spray effects and effects on comfort will be essentially the same at each site. Therefore, it does not impact the site selection process. Seabreeze conditions in the region and the potential effects on building materials and human comfort will be taken into consideration during the master plan and design phases of the project.

8. Solar Energy

We appreciate your suggestion regarding the use of solar panels for water heating at the proposed school. This will be taken under consideration during the design phase.

9. Hurricane Storm Surge Hazards

The tsunami inundation zone line depicted on Exhibit III-2 (Page 18) of the draft EIS is also an evacuation guide used by the Civil Defense for hurricanes. Candidate Sites 2, 3, 4 and 6 are outside the evaluation area, and the low portion of Site 5, if selected, would be filled to be out of the evacuation area.

10. Site Recommendation

Your ranking of the candidate sites and supporting rationale will be considered during the final site selection.

We share your concerns regarding traffic problems on Lualualei Naval Road and these will be stressed in the final EIS.

The Summary Evaluation Tables in the EIS (Pages 81 to 83) serve as a quick reference. They do not represent a ranking and will not be used alone for site selection purposes. The DOE will weigh the criteria based on the information provided in the EIS/site selection document and information provided through comment letters such as yours. In the final site selection, the DOE will place emphasis on many considerations rather than simply economics.



BENJAMIN J. CAYETANO
GOVERNOR



ROBERT P. TANIUSHI
COMPTROLLER

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 111, HONOLULU, HAWAII 96810
LETTER NO (P) 2012-4

November 14, 1994

DEC 8 1994

The Honorable John Waihee, Governor
State of Hawaii
c/o Office of Environmental Quality Control
220 South King Street, Fourth Floor
Honolulu, Hawaii 96813

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

Dear Governor Waihee:

Subject: Draft Environmental Impact Statement (DEIS) for the New Nanakuli III
Elementary School (Site Selection), Nanakuli. TMK: 8-7-Various

Dear Mr. Hayashida:

Subject: Nanakuli II Elementary School
EIS Public Review Phase
DAGS Job No. 12-16-6380

Thank you for the opportunity to review and comment on the DEIS for the proposed elementary school project.

Thank you for your November 14, 1994 comments on the subject project. We offer the following responses to your comments:

We have the following comments to offer:

1. Our comments of May 23, 1994 regarding the Environmental Impact Statement Preparation Notice are still applicable and should be addressed in the Final EIS.
2. Page 31: The existing distribution waterlines along Farrington Highway are 12-inch and 8-inch, rather than 6-inch.

1. The information you provided in your May 23, 1994 letter regarding the existing water systems was included in the draft EIS. The water-related development requirements you referred to will be complied with once a school site is selected and prior to project construction.
2. Page 31 of the EIS will be revised to indicate that the existing distribution waterlines along Farrington Highway are 12-inch and 8-inch rather than 6-inch.

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

This response letter and your November 14, 1994 letter will be included in the final EIS.

Very truly yours,

KAZU HAYASHIDA
Manager and Chief Engineer

cc: Ralph Morita (Department of Accounting and General Services)
Wendie McAllister (DHM, Inc.)

Very truly yours,

GORDON MATSUOKA
State Public Works Engineer

GC:jk
cc: DHM, Inc.

BENJAMIN J. CAYETANO
GOVERNOR



ROBERT P. JARUSH
DIRECTOR

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES LETTER NO. (P) 2013.4
P. O. BOX 119, HONOLULU, HAWAII 96819

DEC 9 1994

PB 94-1142

October 24, 1994

Honorable John Waihee, Governor
State of Hawaii
c/o Office of Environmental Quality Control
220 South King Street, Fourth Floor
Honolulu, Hawaii 96813

Dear Mr. Waihee:

Subject: Nanakuli III Elementary School Draft Environmental
Impact Statement and site selection study

We have reviewed the subject document and have no comments to offer. Thank you for allowing us to be part of the review process.

Very truly yours,

W. F. REMULAR
Acting Director and
Building Superintendent

//DC:ln
cc: Dept. of Accounting and
General Services - Ralph Morita
DHM, Inc. - Wendie McAllister

Mr. Randall K. Fujiki
Director and Building Superintendent
Building Department
City and County of Honolulu
650 South King Street
Honolulu, Hawaii

Dear Mr. Fujiki:

Subject: Nanakuli III Elementary School
EIS Public Review Phase
DAGS Job No. 12-16-6380

Thank you for reviewing the draft EIS for the subject project. The October 24, 1994 letter indicating that the City and County of Honolulu, Building Department has no comments to offer along with 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 586-0487.

Very truly yours,

GORDON MATSUOKA
State Public Works Engineer

GC:jk
cc: DHM, Inc.

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 3RD FLOOR
HONOLULU, HAWAII 96813
PHONE: (808) 525-4227 • FAX: (808) 527-3400



JEREMY MARRIS
-11000

BENJAMIN J. CAYETANO
GOVERNOR



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

ROBERT D. TANIISHI
COMPTROLLER

LETTER NO. (P)2014.4

GAIL M. KAITO
Acting Director
RONALD S. LIM
Acting Deputy Director

DEC 9 1994

October 18, 1994

Honorable John Waihee
Governor

c/o Office of Environmental Quality Control
220 South King Street, Fourth Floor
Honolulu, Hawaii 96813

Dear Governor Waihee:

Subject: New Hanakuli III Elementary School
Site Selection and Draft EIS

Thank you for the opportunity to review the subject document. We have no substantive comments to offer at this time and request to be notified of the site eventually selected for the school.

Sincerely,

GAIL M. KAITO
Acting Director

cc: DAGS
DHM, Inc.

Mr. Ronald Lim
Director
Department of Housing and
Community Development
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Lim:

Subject: Nanakuli III Elementary School
EIS Public Review Phase
DAGS Job No. 12-16-6380

Thank you for reviewing the draft EIS for the subject project. We acknowledge the letter of October 18, 1994 which indicates there are no substantive comments to offer at this time. Per your department's request, you will be notified of the site eventually selected for the school.

This response letter and the October 18, 1994 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.

DEPARTMENT OF LAND UTILIZATION
CITY AND COUNTY OF HONOLULU
630 SOUTH KING STREET
HONOLULU, HAWAII 96813 • PHONE 523-4177



BENJAMIN J. CAVETANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P O BOX 118, HONOLULU, HAWAII 96818

ROBERT P. TARULISHI
COMPTROLLER

LETTER NO. (P)2015.4

DONALD A. CLEGG
DIRECTOR
LORETTA K. CHEE
DEPUTY DIRECTOR

94-07737 (MAR)

November 4, 1994

DEC 9 1994

Director
Office of Environmental Quality Control
State of Hawaii
220 South King Street, Fourth Floor
Honolulu, Hawaii 96813

Dear Sir:

Manakuli III Elementary School
Draft Environmental Impact Statement
Thank you for the opportunity to review the Draft Environmental Impact Statement for Manakuli III Elementary School.

Please identify all permits that will be required for each proposed site. We have no other comments at this time.
Please contact the Environmental Review Branch at 523-4077 if you have any questions.

Very truly yours,

[Signature]
DONALD A. CLEGG
Director of Land Utilization

DAC:fm
cc: DAGS
DHM, Inc.
c:manakuli.sar

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

Dear Mr. Clegg:

Subject: Manakuli III Elementary School
EIS Public Review Phase
DAGS Job No. 12-16-6380

Thank you for reviewing the draft EIS for the subject project. We acknowledge your letter of November 4, 1994 which requests that the EIS identify all permits that will be required for each proposed site. A List of Necessary Approvals is in Chapter XI of the draft EIS (page 99). This list will be reviewed and expanded as necessary prior to publishing the final EIS.

This response letter and your November 4, 1994 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 586-0487.

Very truly yours,

[Signature]
GORDON MATSUOKA
State Public Works Engineer

GC:jk
cc: DHM, Inc.

DEPARTMENT OF PARKS AND RECREATION
CITY AND COUNTY OF HONOLULU
830 SOUTH KING STREET
HONOLULU HAWAII 96813



OFFICE HOURS
8:00 AM - 5:00 PM

BENJAMIN J. CAVETANO
GOVERNOR



ROBERT P. TAKUSHI
COMPTROLLER

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 115, HONOLULU, HAWAII 96810

LETTER NO. (P) 2016.4

WALTER M. OZAWA
DIRECTOR
ALVIN K. AU
DEPUTY DIRECTOR

October 26, 1994

DEC 9 1994

Governor
State of Hawaii
c/o Office of Environmental
Quality Control
220 South King Street, Fourth Floor
Honolulu, Hawaii 96813

Ms. Dona Honaika
Director
Department of Parks and Recreation
City and County of Honolulu
650 South King Street
Honolulu, Hawaii

Dear Governor Waihees:

Dear Ms. Honaika:

Subject: Draft Environmental Impact Statement (EIS)
For the New Nanakuli III Elementary School

Subject: Nanakuli III Elementary School
EIS Public Review Phase
DAGS Job No. 12-16-6380

Thank you for the opportunity to review the draft EIS for the proposed Nanakuli III Elementary School.

Thank you for the October 26, 1994 comments on the draft EIS for the subject project.

We do not have any reservations on the selection of any of the five alternative sites. However, since there is a deficiency in active recreation parks in the Nanakuli area, we hope that adequate recreation facilities will be provided on the grounds of the new school site.

We acknowledge your department's concern for adequate recreation facilities in the Nanakuli area. Within the 12-acre site which is ultimately selected for the new school, the DOE will be providing physical education and recreational facilities per DOE's specifications.

Sincerely,

For WALTER M. OZAWA, Director

WHO:ei

cc: Dept. of Accounting & General Services (Ralph Morita)
DHM, Inc. (Wendie McAllister)

This response letter and the October 26, 1994 letter will be included in the final EIS.

We appreciate your department's input for this project. 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.

W. A. J. N. B. r. 14

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU

830 SOUTH KING STREET
HONOLULU HAWAII 96813

John Waihee

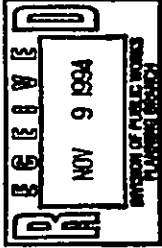


STREMY HARRIS
MAYOR

EDMUND E. SPERDUE
DIRECTOR AND CHIEF ENGINEER

PRO 94-267

November 3, 1994



The Honorable John Waihee
Governor
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)
New Nanakuli III Elementary School Site Selection
TMK: Various

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

1. A drainage report which would address as to how the large quantity of runoff be retained on site for Sites 3, 5 and 6 should be submitted to the Drainage Section, Division of Engineering, for review and comment.
2. Provide minimum 20-ft wide pavement to the main access road.
3. Provide frontage improvements wherever applicable.
4. All roadway improvements should be in accordance with the City Standards as well as Americans with Disabilities Act (ADA) guidelines.
5. Minimize storm water runoff increase at all sites by utilizing retention/detention ponds or other engineering controls.

The Honorable John Waihee
November 3, 1994
Page 2

Should you have any questions, please contact Mr. Alex Ho, Environmental Engineer, at 523-4150.

Very truly yours,

Kenneth E. Spardue
KENNETH E. SPARDUE
Director and Chief Engineer

cc: DAGS (Ralph Morita)
DHM, Inc. (Wendie McAllaster)

BENJAMIN J. CAYETANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 111, HONOLULU, HAWAII 96819

ROBERT P. TAKUSHI
COMPTROLLER

LETTER NO. (P)2017.4

Mr. Kenneth E. Sprague
Page 2
LET. NO. (P)2017.4

This response letter and your November 3, 1994 letter will be included in the final EIS.

We appreciate your input for this project. If you have any questions, please have your staff contact Mr. Gary Chong of the Planning Branch at 586-0487.

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

Very truly yours,

GORDON MATSUOKA
State Public Works Engineer

Dear Mr. Sprague:

Subject: Nanakuli III Elementary School
EIS Public Review Phase
DAGS Job No. 12-16-6380

GC:jk
cc: DHM, Inc.

Thank you for your November 3, 1994 comments on the subject project. We offer the following responses to your comments:

1. Once a final site is selected, a drainage plan and/or report will be prepared to address storm runoff. The document will be submitted to your department for review and comment.
2. On-site vehicular roads or driveways connecting with the main access road will have minimum 20-foot wide pavements which will accommodate two-way traffic.
3. Roads fronting the selected school site will be improved to meet County standards wherever applicable.
4. All roadway improvements will be in accordance with the County standards as well as Americans with Disabilities Act guidelines.
5. As stated in the draft EIS (Pages 75 and 92), increased storm runoff at the selected site will be contained within the property boundaries in accordance with County requirements. Sites without access to an existing drainage channel will require on-site retention/detention ponds.

BENJAMIN J. CAYETANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 119, HONOLULU, HAWAII 96818

ROBERT P. TAKUSHI
COMPTROLLER

LETTER NO. (P) 2018.4

Mr. Frank J. Doyle
Page 2

Ltr. No. (P) 2018.4

We appreciate your input for this project. If you have any questions, please have your staff contact Mr. Gary Chong of the Planning Branch at 586-0487.

DEC 6 1994

Mr. Frank J. Doyle
Chief
Division of Refuse Collection
and Disposal
Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, Hawaii

Dear Mr. Doyle:

Subject: Nanakuli III Elementary School
EIS Public Review Phase
DAGS Job No. 12-16-6380

Thank you for your November 22, 1994 comments on the subject project. We offer the following responses to your comments:

1. Your concerns regarding the difficulties in siting and developing solid waste disposal facilities and the need to support existing facilities are well taken and will be incorporated into the final EIS along with a more detailed description of PWT's development plans for their property.
2. The need for a recycling center on the island will also be expressed in the final EIS.
3. Your opposition to locating the proposed school on Site 6 is noted and will be taken into consideration during the final site selection.

Your November 22, 1994 letter and this response letter will be included in the final EIS.

Very truly yours,

GORDON MATSUOKA
State Public Works Engineer

GC:jk
cc: DHM, Inc.

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU
DIVISION OF REFUSE COLLECTION AND DISPOSAL
854 SOUTH KING STREET, 5TH FLOOR
HONOLULU, HAWAII 96813



ARMY HARRIS
CHIEF OF BUREAU
NOV 22 1994

HEMETH E. SPRAGUE
DIRECTOR
FRANK J. DOYLE
ENGINEER

IN REPLY REFER TO
RE 94-199

November 22, 1994

Governor
State of Hawaii
c/o Office of Environmental Quality Control
220 South King Street, Fourth Floor
Honolulu, Hawaii 96813

Dear Sir:

Subject: Draft Environmental Impact Statement and
Site Selection Study for Nanakuli Elementary School

Public opposition makes the siting and development of solid waste disposal facilities difficult. For this reason, the Refuse Division encourages private-sector initiatives to increase Oahu's refuse disposal and waste reduction capacities. PVT Land Company, owner and operator of the Nanakuli Landfill, whose entrance is directly across Luualaei Naval Road from Site 6, proposes to construct and operate a recycling center on Site 6.

Beside the obvious incompatibilities of locating a school so close to a landfill entrance, we believe the public interest would be better served by a recycling center on Site 6. There are few local outlets for recovered materials, and shipping costs and weak markets have hindered recycling efforts here. We also understand that PVT has offered Site 2 as an alternative to Site 6.

Therefore, the Refuse Division opposes locating Nanakuli III Elementary School on Site 6, and recommends the selection of a more appropriate parcel farther away from the landfill entrance.

Sincerely,

Handwritten signature of Frank J. Doyle in cursive script.

FRANK J. DOYLE

cc: Dept. of Accounting and General Services
DHM, Inc.

DEPARTMENT OF TRANSPORTATION SERVICES
CITY AND COUNTY OF HONOLULU

PACIFIC PARK PLAZA
311 HANOLANI BOULEVARD SUITE 1200
HONOLULU HAWAII 96813



JOSEPH M. MAGALDI, JR.
DIRECTOR

BENJAMIN J. CAYETANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P O BOX 119, HONOLULU, HAWAII 96818

ROBERTO IANUSHI
COMPTROLLER

LETTER NO. (P)2019-4

November 18, 1994

DEC 3 1994

The Honorable John D. Waihee
Governor
c/o Office of Environmental
Quality Control
State of Hawaii
220 South King Street, 4th Floor
Honolulu, Hawaii 96813

Dear Governor Waihee:

Subject: New Nanakuli III Elementary School
Draft Environmental Impact Statement (DEIS)
THK: 8-7-8: Por. 76, 77; 8-7-9: Por. 3 and 7;
8-7-21: 1, 2, 14, 17, 18, 38; 8-7-22: 1

This is in response to the DEIS submitted to us for review by the
Office of Environmental Quality Control.

Based on our review, we generally concur with the findings
contained in the DEIS with regard to the sections pertaining to
Traffic, Roadways and Off-site Improvements.

Upon our review of the traffic impact analysis for the selected
site, we will be able to provide more specific comments on the
type of improvements necessary to support the project.

Preliminary construction plans for all off-site work should be
submitted to our department for review and approval.

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.

Mr. Joseph M. Magaldi, Jr.
Director
Department of Transportation Services
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Magaldi:

Subject: Nanakuli III Elementary School
EIS Public Review Phase
DAGS Job No. 12-16-6380

Thank you for reviewing the draft EIS for the subject
project. We acknowledge your letter of November 18, 1994 which
indicates your concurrence with the findings contained in the
draft EIS regarding traffic and roadway issues.

Once a final site is selected, the need for a traffic
impact analysis will be determined. If such a study is neces-
sary, it will be submitted to you and the State Department of
Transportation for review.

As you suggest, preliminary construction plans for all off-
site work will be submitted to your department for review and
approval.

This response letter and your November 18, 1994 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
586-0487.

Very truly yours,

GORDON MATSUOKA
State Public Works Engineer

GC:jk
cc: DHM, Inc.

DEPARTMENT OF WASTEWATER MANAGEMENT
CITY AND COUNTY OF HONOLULU
880 SOUTH KING STREET
HONOLULU, HAWAII 96813



HERBERT HARRIS
MAYOR

BENJAMIN J. CAYETANO
GOVERNOR

FELIX B. LIMTIACO
ACTING DIRECTOR



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 115, HONOLULU, HAWAII 96810

ROBERT P. TAKUSHI
COMPTROLLER

LETTER NO. (P) 2020-4

MPP 94-455

October 28, 1994

OCT 9 1994

The Honorable John Waihee, Governor
Office of Environmental Quality Control
220 South King Street, Fourth Floor
Honolulu, Hawaii 96813

Dear Governor Waihee:

Subject: New Manakuli III Elementary School
Draft Environmental Impact Statement

We have reviewed the subject document and find that the statements concerning the municipal wastewater system facilities are valid under the current conditions. We have no additional comments to offer at this time.

We appreciate the opportunity to review this draft environmental impact statement. Should you have any questions, please call me at 527-6664.

Very truly yours,

Felix B. Limtiaco
FELIX B. LIMTIACO
Acting Director

cc: State DAGS
DHM, Inc.

Mr. Felix B. Limtiaco
Acting Director
Department of Wastewater Management
City and County of Honolulu
650 South King Street
Honolulu, Hawaii

Dear Mr. Limtiaco:

Subject: Nanakuli III Elementary School
EIS Public Review Phase
DAGS Job No. 12-16-6380

Thank you for reviewing the draft EIS for the subject project. Your October 28, 1994 letter which confirms that the statements in the EIS concerning the municipal wastewater system facilities are valid under the current conditions along with 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 Matsuoaka
GORDON MATSUOKA
State Public Works Engineer

GC:jk
cc: DHM, Inc.

FIRE DEPARTMENT
CITY AND COUNTY OF HONOLULU
3375 KOAPAKA STREET SUITE 4025
HONOLULU HAWAII 96819



October 24, 1994

RICHARD SETO MOOK
FIRE CHIEF
ERNEST BUEHOLD
FIRE DEPARTMENT

BENJAMIN J. CAYETANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 115, HONOLULU, HAWAII 96818

LETTER NO (P) 2021-4

ROBERT P. JARUWIM
COMPTROLLER

UEC 3 1994

Office of Environmental Quality Control
220 South King Street, Fourth Floor
Honolulu, Hawaii 96813

Dear Sir:

SUBJECT: New Nanakuli III Elementary School Site Selection/EIS
TMK: 8-7-22:1 and 8-7-9:por.3; 8-7-21:14, 17, 18
8-7-21:1, 2, 38; 8-7-8:por. 76, 77; 8-7-9:por. 1, 2

We have reviewed the subject material provided and foresee no adverse impact in Fire Department facilities or services. Fire protection services provided from Nanakuli and Waianae engine companies with ladder service from Waianae are adequate.

In March of 1995, a new fire station, with engine and ladder services, will open in the Campbell Industrial Park area. This new station will also service the Nanakuli area.

Access for fire apparatus, water supply and building construction shall be in conformance to existing codes and standards.

Should you have any questions, please call Assistant Chief Attilio Leonard of our Administrative Services Bureau at 831-7775.

Sincerely,

Richard R. Seto-Mook
RICHARD R. SETO-MOOK
Fire Chief

AKL:ny
Copy to: Sta's Dept. of Acctg. & General Services (Attention: Ralph Morita)
DHM, Inc. (Attention: Wendie McAllister)
EIS Draft attached

Mr. Richard R. Seto-Mook
Fire Chief
Fire Department
City and County of Honolulu
3375 Koapaka Street, Suite H425
Honolulu, Hawaii 96819-1869

Dear Mr. Seto-Mook:

Subject: Nanakuli III Elementary School
EIS Public Review Phase
DAGS Job No. 12-16-6380

Thank you for your October 24, 1994 comments on the draft EIS for the subject project. The fact that you foresee no adverse impact in Fire Department facilities or services as a result of the project will be stated in the final EIS. The information you provided regarding the new fire station in the Campbell Industrial Park area will also be included in the final EIS.

This response letter and your October 24, 1994 letter will be included in the final EIS.

We appreciate your input for this project. If you have any questions, please have your staff contact Mr. Gary Chong of the Planning Branch at 586-0486.

Gordon Matsuoaka
Very truly yours,
GORDON MATSUOKA
State Public Works Engineer

GC:jk
cc: DHM, Inc.

PLANNING DEPARTMENT
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET
HONOLULU HAWAII 96813



HEBIME HAPER

BENJAMIN J. CAVETANO
GOVERNOR



ROLAND D. LIBBY, JR.
ACTING CHIEF PLANNING OFFICER
CAROL TAKASHI
STATE CHIEF PLANNING OFFICER

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 118, HONOLULU, HAWAII 96810

ROBERT P. TAKUSHI
COMPTROLLER

LETTER NO. (P) 2022-4

MH 10/94-4489

November 21, 1994

DEC 8 1994

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

Mr. Roland D. Libby, Jr.
Acting Chief Planning Officer
Planning Department
City and County of Honolulu
650 South King Street
Honolulu, Hawaii

Dear Mr. Takushi:

Dear Mr. Libby:

Draft Environmental Impact Statement (DEIS)
and Site Selection Study for the
Nanakuli III Elementary School

Subject: Nanakuli III Elementary School
EIS Public Review Phase
DAGS Job No. 12-16-6380

Thank you for the opportunity to review and comment on the subject DEIS. We do not have any comments beyond those in our previous letter of March 28, 1994 on the subject Environmental Impact Statement Preparation Notice.

Thank you for reviewing the draft EIS for the subject project. Your letter of November 21, 1994 indicating that the City and County of Honolulu, Planning Department has no additional comments to offer beyond those offered in your March 28, 1994 letter and this response letter will be included in the final EIS.

Should there be any questions, please contact Matthew Higashida of our staff at 527-6056.

If you have any questions, please have your staff contact Mr. Gary Chong of the Planning Branch at 586-0487.

Sincerely,

Very truly yours,

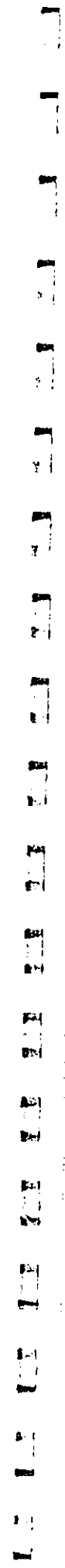
ROLAND D. LIBBY, JR.
Acting Chief Planning Officer

GORDON MATSUOKA
State Public Works Engineer

RDL:ft

GC:jk
cc: DHM, Inc.

cc: DHM Planners, Inc.
Office of Environmental Quality Control



CHING, YUEN & MORIKAWA
A Law Partnership Including Law Corporations

Pacific Tower, Suite 2770
1001 Bishop Street
Honolulu, Hawaii 96813

Telephone: (808) 574-8880
Telecopier: (808) 574-7664

November 22, 1994

Via Telecopier No. 586-0482
And Regular Mail

Mr. Robert P. Takushi,
State Comptroller
Department of Accounting and General Services
P.O. Box 119
Honolulu, Hawaii 96810
Attention: Mr. Ralph Morita, Planning Branch

RE: Comments on Nanakuli III Elementary School Draft
Environmental Impact Statement and Site Selection Study

Dear Mr. Takushi:

This law firm represents PVT Land Company, Ltd. ("PVT"), owner of approximately 10 acres of land comprising a portion of Oahu Tax Map Key No. 8-7-9:3, the major portion of the property identified as Site 2, and of a 12 acre portion of Oahu Tax Map Key No. 8-7-9:7, identified as Site 6 in the Nanakuli III Elementary School Draft Environmental Impact Statement and Site Selection Study (the "DEIS") for the new Nanakuli III Elementary School. Thank you for the opportunity to review and comment on the DEIS.

PVT supports construction of the Nanakuli III Elementary School on Site 2 and opposes construction of the Nanakuli III Elementary School at Site 6. PVT also believes that Site 5, the 12 acre property identified as Oahu Tax Map Key Nos. 8-7-8:76 and 77 would also be an inappropriate site for an elementary school.

PVT owns and operates the Nanakuli Landfill on approximately 113 acres of land located mauka of Sites 5 and 6 on the Makaha side of Luualalei Naval Road. The Nanakuli Landfill is the only privately-owned, fully permitted construction and demolition waste landfill on Oahu. The Nanakuli Landfill is one of only two (along with the City's Waimanalo landfill) presently operating on Oahu.

WLY 112294 10710.1 JEL 133.205

State of Hawaii Comptroller
Department of Accounting and General Services
November 22, 1994
Page 2

PVT plans to expand its landfill operations and construct and operate a recycling center on Site 6 in accordance with the attached Master Plan. The recycling center will process recyclable construction and demolition materials, wood, glass, aluminum and other recyclable materials for sale and shipment to industrial users. PVT has commenced composting operations in preparation for landscaping on Site 6 and anticipates filing its applications for a special use permit and other permits with the City and County of Honolulu and the State Department of Health in December, 1994.

The entrance to the Nanakuli Landfill is directly across Luualalei Naval Road from Site 6. Approximately 200 trucks enter and exit the Nanakuli Landfill daily using this entrance.

PVT is concerned that the evaluation presented in the DEIS is flawed, and will result in a poor decision being made regarding the siting of the proposed Nanakuli III Elementary School. PVT also believes siting a school on Site 6 will constrain both PVT's existing landfill operations and future related uses of the portion of PVT's land not taken for school purposes. Although PVT is a privately-owned and operated landfill, PVT is the only privately-owned landfill on Oahu presently permitted to accept construction and demolition waste, asbestos containing materials, and to remediate petroleum contaminated soil. As such, PVT serves a public benefit that could not easily be replaced if constraints on its operation were imposed due to the siting of a school in close proximity. PVT is also seriously concerned about potential impacts not only to its business but to school children if the school should be sited adjacent to the Nanakuli Landfill.

Site 6 lies at the makai-Makaha corner of a 398.4 acre property owned entirely by PVT. Approximately 179.1 acres of this property are in the State Land Use Agricultural District and the remaining 219.3 acres, which consist principally of Pali lands, are in the State Land Use Conservation District. PVT plans to develop a 40 acre recycling center on Site 6 and surrounding lands and to use the remaining portion of its property in the State Land Use Agricultural District for landfill and recycling center expansion areas. As there is only presently one other permitted sanitary landfill on the island of Oahu, permitted landfill expansion space on the island is critical. PVT has long planned to enter the recycling business as a way of preserving the capacity of the landfill for future generations. While PVT also owns land on the Makaha side of Ulehaha Stream, including Site 2, the flow of this stream makes it impossible to expand landfill operations to the Makaha side of PVT's property. Therefore, PVT is willing to encourage the Department of Education to locate its school on the Makaha side of the Ulehaha Stream rather than adjacent to the existing landfill operations. Even if the State is successful in acquiring Site 6, PVT will

WLY 112294 10710.1 JEL 133.205

continue development of a recycling center and expansion of its landfill across Luualalei Naval Road. PVT has already cleared a 50 foot buffer strip along the boundary between Site 5 and Site 6 and will shortly begin to compost materials for planting the buffer strip. PVT will be filing applications for a special use permit and a conditional use permit with the City Department of Land Utilization for the Nanakuli Recycling Center in December, 1994. PVT anticipates that in the five year time frame it would take to design and construct the Nanakuli III Elementary School, PVT would already have commenced operation of the Nanakuli Recycling Center and will be required to expand landfill operations across Luualalei Naval Road. Thus what now appears to be a vacant and unused site will be a recycling center that will surround the new school when it is finally opened. Even if the State were to acquire 12 to 15 acres for a school site, PVT would merely move its operations mauka by the amount of area that is lost to the school and the main entrance for the recycling center would be immediately adjacent to the Nanakuli III Elementary School site.

In order to encourage the Department of Education to locate the Nanakuli III Elementary School on Site 2, PVT is willing to sell its 10 acre portion of Site 2 to the State for \$250,000, resulting in an average price of \$25,000 per acre. PVT will oppose all efforts to condemn Site 6 by contesting valuation, public use and the appropriateness of the taking. Thus, any plans to design and construct the Nanakuli III Elementary School on Site 6 would be delayed by the length of time to complete acquisition. PVT also emphasizes that the acquisition cost analysis contained in the DEIS or Site 6 is overly simplistic. The DEIS takes the total assessed value of Oahu Tax Map Key No. 8-7-9:7 by the total 180 acres to determine an average land value of \$26,600 per acre. In fact, the portion of the property designated for the Nanakuli III Elementary School will command a higher per acre value than the remaining portion of the property which is characterized by steeper slopes and expansive soils. Even using an agricultural per acre value of \$50,000 per acre (which is roughly equivalent to the \$54,600 per acre value of Site 2), the comparative land value for a 12 acre site would be \$600,000. This rough approximation does not include severance damages for loss of the best portion of the property and increased cost to relocate access and utilities to the recycling center.

The DEIS does not adequately address these impacts and is thus deficient. Our comments are presented below and are organized into three categories: General deficiencies, problems with criteria, and cost evaluation errors.

WLY 112294 10710.1 JEL 131205

I. GENERAL

The DEIS does not adequately investigate potential health risks related to the siting of an elementary school next to a landfill or a cement plant. No discussion is presented on existing schools located adjacent to landfills or other intensive industrial uses.

The DEIS does not adequately address the incompatibility between industrial traffic and school traffic. Because the DEIS does not suggest the possible improvements that could be made to address this incompatibility, the cost evaluations are flawed.

The DEIS does not adequately address and compare the access to the five sites. For example, while the Navy has indicated a willingness to turn over Luualalei Naval Road to the City and County of Honolulu, the DEIS contains no serious discussion of associated costs or conditions. Without this information, which is discussed in detail below, the assumption that the road could be acquired at no cost is naive.

No discussion on the likelihood of acquisition for the various sites or needed right-of-ways has been presented, therefore delays and costs associated with simple acquisition or those associated with condemnation proceedings have not been taken into account.

The chart presented in Chapter XI of the DEIS is incorrect. For example:

Sites 5 and 6 would require permits to conduct work within the County right-of-way since the point of water line connection is within a street under County Jurisdiction (Mohihi Street);

If the State proposes to acquire a 12 acre site, portion of a larger parcel subdivision will be required and costs associated with the subdivision, including provision of alternative access, should be included in the cost evaluations; and

A permit to conduct work within the State right-of-way for Site 6 will be required if a sewer connection to the trunk line in Farrington Highway is necessary as stated in the DEIS.

The DEIS does not discuss the decision making process or how the cost evaluations and the site characteristics will be integrated to reach an unbiased decision.

WLY 112294 10710.1 JEL 131205

II. CRITERIA

In general, there are two problems with the Site Evaluation Criteria used to assess the characteristics of each site: the criteria are not independent resulting in unintentional double counting or weighting of certain criteria, and the stated criteria were not properly applied in the assessment of each site. Occasionally, incorrect information regarding the sites is presented. The following analysis applies the Site Evaluation Criteria described in Appendix A to the DEIS to the evaluation process described in Chapter VI of the DEIS.

A. Physical Criteria

1. Size

The size rating criteria is inconsistently applied to the various Sites. Sites that involve only a portion of a larger tax map key parcel, such as Site 2, Site 3, Site 4 and Site 6 should all be rated "poor" according to the criteria for Size of a Site. The DEIS rates only Sites 3 and 4 as poor because their acreage is more than 10% larger than the required 12 acres. Sites 2 and 6 are also part of larger parcels more than 10% above the minimum 12 acres requirement, that have not been subdivided.

2. Shape

Although this criteria states that rectangularity is an important shape characteristic, the rating criteria depends only on length to width ratios. This criteria was neither defined clearly, nor applied consistently in the site evaluations. We also note several errors in the ratios presented in the DEIS. Applying the stated criteria to the corrected ratios results in the following ratings for this factor:

	Ratio	Disregard Shape	Consider Shape
Site 2	1.5:1	Good	Good
Site 3	1.25:1 - 1.5:1	Good	Fair
Site 4	1.8:1	Fair	Fair
Site 5	1.9:1	Fair	Fair
Site 6	0.74:1 - 1.35:1	Good	Fair

3. Soil and Foundation

Based on preliminary geotechnical engineering explorations performed by Geolabs Hawaii (preliminary Geotechnical Engineering Exploration, Nanakuli Land Development, Nanakuli, Oahu, November 18, 1991), Site 6 is composed of 1/3 to 1/4 clay soils and 2/3 to 3/4 silty soils. This description of Site 6, which received a rating of "Fair," is strikingly similar to a description of the soils located on Site 2 which received a rating of "poor" in the DEIS. If the stated criteria were

WLY 112294 10710.1 JEL 133.205

consistently applied, these two sites should have equal ratings with respect to Soil and Foundation.

4. Aesthetic Qualities

While the criteria describe various natural features that are desirable characteristics of a good school site, the assessment of each site only presents information on views from each site. Furthermore it appears that the DEIS considered views in different directions for certain sites and not for others. This failure to apply all criteria and inconsistency in applying one of the stated criteria results in an erroneous evaluation of the sites for aesthetic qualities.

5. Roadways

While the DEIS states that Luualalei Naval Road is owned by the U.S. Navy and access is restricted to licensees, the DEIS treats Luualalei Naval Road as a public road when applying the evaluation criteria to the sites. The DEIS incorrectly equates the willingness of the U.S. Navy to turn over the ownership of the road to Sites 5 and 6 as having access to a publicly owned road. We have been informed that the U.S. Navy will not consent to use of Luualalei Naval Road for school traffic unless the roadway is acquired by the State of Hawaii or the City and County of Honolulu.

In order for the City and County of Honolulu to accept dedication of the roadway, it must be improved to City and County of Honolulu Subdivision Code Standards. Because the Navy is not willing to bear this cost, the cost of constructing a school on Site 5 or Site 6 must include the cost of improving the roadway from Farrington Highway to the Naval Ammunition facility, not just to the Nanakuli III Elementary School site. The DEIS should present adequate information regarding this possible transfer of ownership in order to assess related costs and conditions, if any, imposed by the Navy. Until such a time that costs and conditions of this possible transfer are known, the DEIS should rate Sites 5 and 6 as "poor" in accordance with the criteria. No other site is rated on future conditions and thus, to rate Sites 5 and 6 as "Fair" is another inconsistency in applying the stated criteria.

6. Sewer

Using the stated criteria for this factor, Site 2 should be rated "Good" since Department of Wastewater Management has indicated that it is possible to connect to an 8 inch sewerline located approximately 200 feet from Site 2. The DEIS has no explanation for rating Site 2 as "poor". We assume this rating stems from an uncertainty about whether the State can acquire an easement to connect to the sewerline. If DEIS makes such an assumption, all sites which would require acquisition of

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land for right-of-ways, access, and easements should be evaluated consistently by assuming an alternate scenario that precludes the need for the acquisition. This rating is another example of inconsistent application of the stated rating criteria.

7. Vehicular Safety

Based on the incompatibility between industrial traffic and school traffic, the location of the landfill entrance to Nanakuli Landfill directly across the street from and the likelihood that access to the PVI Recycling Center on the remainder of the land will be adjacent to Site 6, and the potential conflict between peak hours for the landfill, the school, the Naval Magazine, Site 6 should be rated as "poor". The criteria presented in the DEIS for rating this sites are deficient, because it does not allow for safety considerations due to incompatibility of traffic types.

8. Pedestrian Access

While the DEIS states that road improvements would be required on Luahalei Naval Road to mitigate adverse effects from the existing Nanakuli Landfill and Navy truck traffic and to ensure vehicular and pedestrian safety, it does not describe these road improvement or the impact they would be designed to mitigate. We agree with the DEIS that vehicular and pedestrian safety are of concern when considering Site 6 as a school site, but we note that the DEIS rated all sites as "Fair" with regard to this factor. The DEIS presents no technical description of mitigation measures and does not discuss either effectiveness, or costs, it does not adequately address the safety of pedestrians and vehicles. Rating criteria for this factor also do not consider safety due to incompatibility of traffic types. Site 6 should be rated as "poor".

B. Community Criteria

1. Land Ownership

The DEIS acknowledges that negotiations can increase costs and create delays, but the rating criteria measures only the number of land owners and whether they are private, State, or Department of Hawaiian Home Lands. This Site Evaluation Criteria is irrelevant because there is no attempt to compare the owners' willingness to sell their property. For example, would the State prefer to negotiate with multiple cooperative landowners or a single recalcitrant owner? As described above, PVT would encourage State acquisition of site 2 and discourage State acquisition of Site 6, and we believe the Sites should be rated accordingly.

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2. Displacement and Existing Use

This Site Evaluation criteria is an illustration of unintentional double counting because of the interdependence of the ratings. For example, if a site's Existing Use is rated as "Good" (i.e. vacant) then Displacement will automatically be rated as "Good" since there will be no need to relocate businesses or individuals. Furthermore the Displacement criteria is unclear. A rating of "Fair" is indicated when the site can be acquired without relocating farms or businesses or more than five families and living units. A rating of "poor" is indicated when the site cannot be acquired without the relocation of farms, or businesses, or more than five families. If there is a business located on a desired site, does it receive a rating of "poor" or "Fair"?

The DEIS states that Site 2 is occupied by PVT and an owner with a single residence and pig farmer who is characterized as willing to relocate. However, Site 2 is rated "poor" for both existing use and displacement. On the other hand, Site 6 is rated "Good" in both of these categories, notwithstanding the owner's stated intention to expand an ongoing business to the property regardless of whether the State were to acquire a portion of the property for a school.

3. Public Bus Service

The Site Evaluation Criteria used to assess Public Bus Service is flawed because it is unclear whether the distance from an existing bus stop or the time interval between scheduled trips is more important. None of the proposed sites have immediate access (under 1/4 mile) to bus service at appropriate time intervals (30 minutes) therefore no site received a rating of "Good". However Sites 2, 3, and 4 along or adjacent to Hakima Road have immediate access to bus service at 50 minute intervals. No bus service is or will be available to Sites 5 and 6, because the U.S. Navy does not permit MTL bus travel on Luahalei Naval Road. Thus, the resultant site ratings do not distinguish between sites that have no bus service and sites that have bus service, albeit not every 30 minutes. This criteria should be reevaluated. Based on our evaluation of bus service, Sites 2, 3 and 4 should be rated as "Fair" with the exception of Sites 5 and 6 which should receive a rating of "poor".

4. Commercial Attractions

The DEIS applies strict distance criteria when rating the attractiveness of a site to commercial areas. Site 5 and Site 6 are adjacent to each other and the DEIS has given Site 5 a "Poor" rating and Site 6 a "Fair" rating because they determined that the school was within a quarter mile of a commercial attraction while Site 6 was not. It should be noted that a school could be placed on Site 5 in such a fashion as to exceed

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the 1/4 mile boundary from the commercial attraction. Therefore until the school is sited, it is difficult to make this judgement. In reality, these two sites are adjacent and it is unlikely that the distance between any two facilities located on either site would be sufficient to merit a different rating with respect to the proximity of commercial areas to either site.

III. COST EVALUATIONS

Retention basins envisioned for those Sites with no access to a drainage system must be adequate for projected storm water run-off and conform to accepted design standards. These design standards have not been adequately considered during the preparation of the DEIS. The DEIS assumes that \$50,000 will be adequate regardless of the site. A preliminary review by PVT's engineers indicates that for Site 6, a 3-acre retention basin will be required and its cost is estimated to be construction cost of approximately \$290,000 plus the cost to acquire an additional 3 acres for a drainage basin. The DEIS should present the basis for the cost evaluations, discuss size requirements for the three sites that will require retention basins, and describe the impact on the acreage requirement of each site.

As described above, the cost estimate for acquiring Site 6 in the DEIS is only the pro rata cost for the 12-acre portion of the 179 acre total parcel (Oahu TMK 8-7-9:7). This property contains only 40 prime useable acres on which PVT proposes to create the Nanakuli Recycling Center. The potential constraint to use of this property imposed by locating a school will severely reduce the use of the remaining acreage, resulting in the cost to acquire the school site being increased by severance damages to the remainder of the parcel. Severance damages will increase the cost of acquiring the 12 acres that are desired by the Department.

The DEIS should adequately address the cost of improving and acquiring ownership of Luualalei Naval Road, rather than understating the cost as previously discussed.

In evaluating Site 5, the DEIS indicates that approximately 3.8 acres of fill will be required in order to provide useable area outside the "tsunami zone". This conclusion is based on the location of the site within the tsunami boundary as shown in the DEIS Exhibit III-2. The boundary shown on this exhibit appears to depict the tsunami evacuation zone displayed in the front of the Oahu telephone directory, not the tsunami inundation zones.

Tsunami inundation zones are normally defined as areas located in Zones V or VE of the special flood hazard areas as depicted in the Flood Insurance Rate Maps (FIRM). According to FIRM map panel 150001-0100C, Site 5 is located well outside this

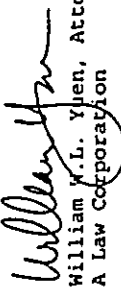
boundary and would not require any fill to comply with the criteria. Costs associated with this fill should be deleted from the evaluation prepared for this site.

IV. SUMMARY

While PVT fully supports the community in locating an appropriate site for a much needed elementary school, PVT has serious concerns about the wisdom of selecting Site 6. We feel that the DEIS is deficient in addressing these concerns. We hope these comments are helpful in preparing a proper DEIS, and ultimately in selecting the best site for the Nanakuli III Elementary School. For that reason, we attach as an exhibit a "Revised Physical Community Criteria Summary Evaluation Table," comparable to the table found on pages 81 and 82 of the DEIS. Please feel free to contact us if we can provide any information that will assist you.

Very truly yours,

CHING YUEN & MORIKAWA


William K.L. Yuen, Attorney at Law,
A Law Corporation

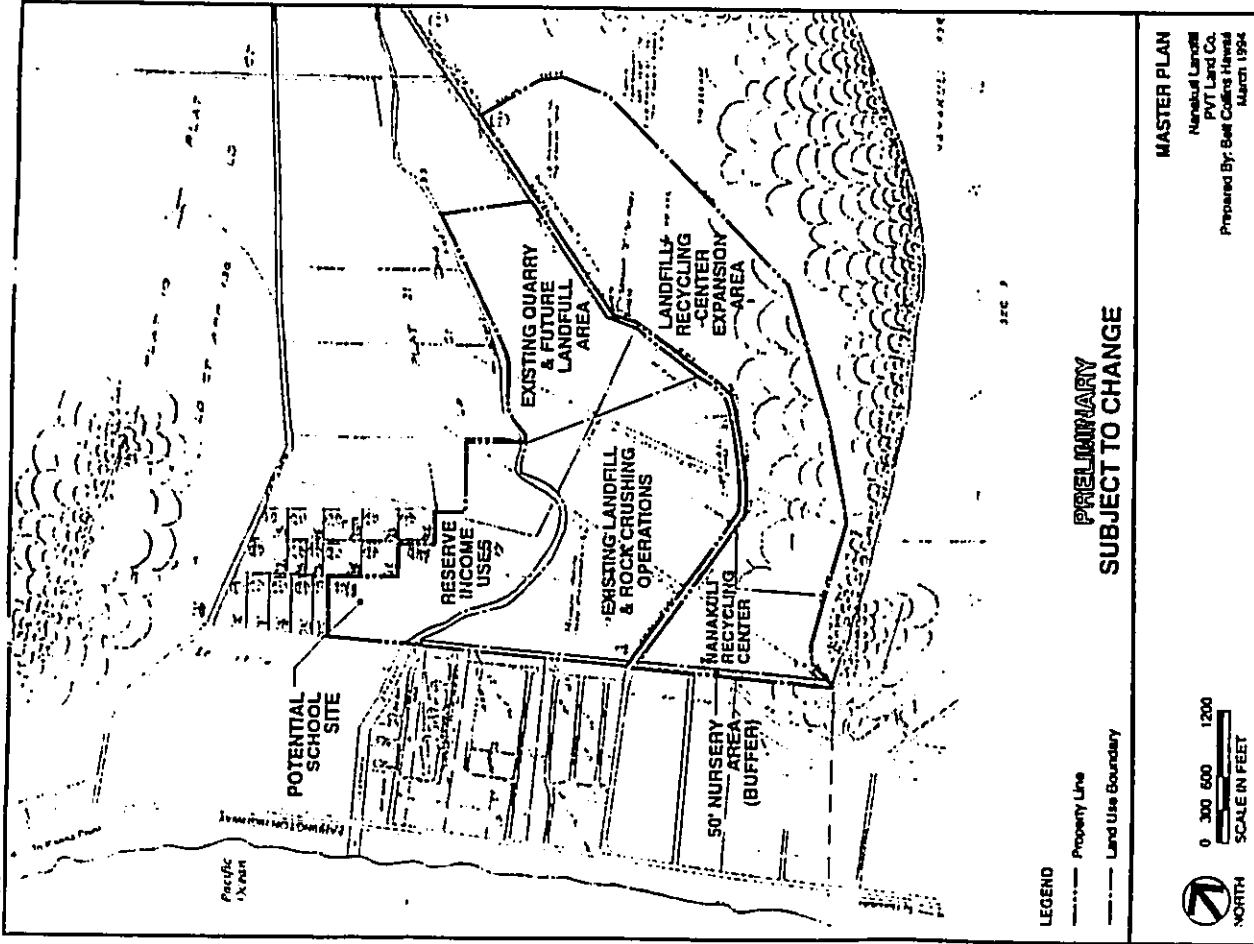
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Enclosure

cc: OHM Planners, Inc.
PVT Land Company, Ltd.
Belt Collins Hawaii

REVISED PHYSICAL AND COMMUNITY CRITERIA
SUMMARY EVALUATION TABLE

	Site 2	Site 3	Site 4	Site 5	Site 6
Size	G/P	P	P	G	G/P
Slope	F/G	F	F	F	G/F
Soil and Foundation	P	P	P	F	F/P
Artistic Qualities	F	P	P	F	F
Highways	P	P	P	F/P	F/P
Water	P	G	G	F	P
Sewer	F/G	P	P	F	F
Drainage	F	P	F	P	P
Pedestrian Access	P	G	F	F	P
Vehicular Circulation	P	F	F	F	P
Vehicular Safety	P	F	F	F	F/P
Public Bus Service	P/F	P/F	P/F	P	F/P
Commercial Attractions	G	G	G	P	F/P
State Land Use District	F	P	F	G	F
City and County Development Plan	P	P	P	P	P
Land Ownership	F	P	P	P	F
Existing Use	P	P	P	P	G
Displacement	P	P	P	P	G
Agricultural Lands	G	G	P	G	G
Location	F	P	P	P	P
scenic Value	G	G	G	G	F
Industrial and Agricultural Interferences	P/F	P/F	P/F	P/F	P
Pedestrian Safety	F	F	F	F	F/P
Total	6	5	3	4	3
Good	8	8	8	10	8
Fair	10	12	11	9	14
Poor	23	23	23	23	23

Note: The entry indicates as P/F means a site originally rated "P" should be rated as "F"



BERNARD J. CAYEJANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 111, HONOLULU, HAWAII 96819

ROBERT S. MAU
COMPTROLLER
MARY PATRICKA WATSON
DEPUTY COMPTROLLER

LETTER NO. (P)1034.5

Attachment to Ltr. No. (P)1034.5

RESPONSE TO COMMENTS
NANAKULI III ELEMENTARY SCHOOL
EIS PUBLIC REVIEW PHASE

Pages 1 to 3 of your letter

We appreciate the information you provided regarding the existing operations at the Nanakuli Landfill and proposed expansion plans. The final EIS will incorporate any new and updated information that was not in the draft EIS, including a discussion of the public benefit of the existing landfill and the need for a recycling center on Oahu.

PVT Land Company, Ltd.'s willingness to sell its 10-acre portion of Site 2 is acknowledged and appreciated. This offer is stated in the draft EIS and will be emphasized in the final EIS.

The Department of Accounting and General Services (DAGS) and the Department of Education (DOE) recognize that the tax office assessed value used in the EIS/site selection document for acquisition cost analysis may not reflect market value or private appraisal value and is used only for general comparative purposes. The final EIS will be revised to emphasize this. The information you provided regarding acquisition costs for Site 6 will be considered during the final site selection. It is also noted that in accordance with the Hawaii Revised Statutes, the actual purchase price will be based on an independent appraisal done for the State.

I. General (Page 4)

The final EIS will expand its discussion on potential health risks related to siting a school near a landfill. Particular issues to be addressed include air quality, noise and traffic. The DOE is researching whether there are, or have been, schools located adjacent to landfills or other intensive industrial uses. Their findings will be presented in the final EIS.

The conflict between industrial traffic and school traffic on Luualaei Naval Road is identified in the draft EIS and possible mitigation measures are identified on Page 89. The traffic concerns and potential mitigation measures will be expanded on in the final EIS. The DOE will be involved in identifying preferable mitigation measures and cost evaluations for Sites 5 and 6 will be modified accordingly.

Access to each candidate site is described in the site's respective evaluation in Chapter VI under the following criteria: Roadways, Pedestrian Access, Vehicular Circulation, Vehicular

Mr. William W. L. Yuen
Ching, Yuen & Morikawa
Pacific Tower, Suite 2770
1001 Bishop Street
Honolulu, Hawaii 96813

Dear Mr. Yuen:

Subject: Nanakuli III Elementary School
EIS Public Review Phase
DAGS Job No. 12-16-6380

Thank you for your November 22, 1994 comments on the subject draft EIS and the "Revised Physical and Community Criteria Summary Evaluation Table" enclosure dated November 30, 1994. Attached are our responses to your comments (numbered to correspond with your letter).

Your November 22, 1994 letter and this response letter will be included in the final EIS.

We appreciate your input for this project. If you have any questions, please contact Mr. Gary Chong of the Planning Branch at 586-0487.

Very truly yours,

GORDON MATSUOKA
State Public Works Engineer

CC:jk
Attachment
cc: DHM, Inc. w/attachment

Safety and Public Bus Service. Described under these criteria are all roadways adjoining and indirectly serving the candidate sites; the type, physical condition, and adequacy of the roads; rights-of-way dimensions; ownership status; etc. Access and the roads providing access are also described on Pages 32 to 34, Chapter IV of the draft EIS. The acquisition of Luualalei Naval Road is discussed below.

Delays and costs associated with the acquisition of the various sites are indirectly taken into account through three site evaluation criteria: Land Ownership, Existing Use and Displacement. Specific costs have been assigned for site acquisition, including costs for land, improvements, relocation and replacement housing. (Refer to Pages 69 to 73 of the draft EIS.) Costs for right-of-way acquisition have also been estimated (Pages 75 to 77). The costs for condemnation proceedings are not given a dollar value and all sites could potentially require condemnation. Therefore, it is not a significant criterion (or cost factor) for comparing the sites. The fact that the landowner for a portion of Site 2 is willing to sell is mentioned in the EIS and will be considered in the final site selection.

Thank you for pointing out needed corrections to the List of Necessary Approvals in Chapter XI. It will be revised as follows:

- Sites 5 and 6 would require work within a County right-of-way.
- Site 6 would require subdivision/consolidation approval. (Subdivision/consolidation costs are not included in the EIS because all sites would require such action.)
- Site 6 would require work within a State right-of-way.

It is DAGS' policy that site selection studies and their accompanying EISs do not attempt to identify a preferred site or to weigh or rank the site evaluation criteria or candidate sites. This is done by the DOE in making the final site selection and pending the Governor's approval of the selected site. The DOE will review all information provided in the final EIS document, including evaluation criteria, ratings, impact assessment and consultation phase/public review phase comment letter. The DOE will decide whether to weigh the evaluation criteria and cost factors and if so, they will do so according to their priorities and experience in siting and developing new schools.

II. Criteria (Pages 5 to 9)

A.1. Size

The description of the size criterion in Appendix A will be clarified in the final EIS to avoid misunderstandings similar to yours. The "site" referred to in the criterion description and ratings is the "candidate site" (the actual proposed area of the school ground) as delineated on Exhibits III-2 and IV-1 through IV-5. When the EIS refers to a tax map parcel that describes a candidate site, the term "parcel" (the piece of land where the proposed school ground area is carved out of) is used.

A.2. Shape

Site 2: The ratio and rating in the final EIS will be revised to read 1.6:1, "Good."

Site 3: The east-west leg of the site has a ratio of 2.2:1 and the north-south leg has a ratio of 1.8:1. Because each leg consists of 10 acres which is 80 percent of the desired school site and is rectangular, a "Fair" rating is appropriate.

Site 4 and 5: No change.

Site 6: As stated on Page 17 of the draft EIS, the boundaries of Site 6 (and three other sites) are conceptual in nature. Because of its location within a large parcel, the shape of Site 6 can be refined or modified to accommodate the desired school facilities layout. Since the average ratio for Site 6 is 1:1 and the site shape is flexible, a "Good" rating is appropriate.

A.3. Soil and Foundation

As you can see by reading the criteria for the Good, Fair and Poor ratings (Page A-3), considerably more information was used to rate the sites' soils than simply "clay" or "silty." Numerous soil properties and features identified by the U. S. Department of Agriculture, Soil Conservation Service, in their Soil Survey of the Island of Oahu, were used. The stated criteria in Appendix A have been consistently applied to the sites based on the Soil Conservation Service's data.

A.4. Aesthetic Qualities

All site descriptions for this criterion mention the existence or lack of "attractive natural characteristics," as well as views. If a site had attractive natural characteristics, they would have been described. Unfortunately, all sites lack attractive features such as shade trees, attractive plants, or rock formations and so states the EIS. Views in all directions were considered for each site and pleasant as well as unsightly views are included in the written description. If no view was described for a particular direction, it was because there was no view (blocked by vegetation or buildings), or it was an insignificant view common to all or most sites.

A.5. Roadways

The rating of Sites 5 and 6 for the Roadways criterion will be revised to reflect the current status of road ownership as you suggest. Sites 5 and 6 will be rated "poor" due to the restricted use of federally-owned Lualualei Naval Road.

The draft EIS presents as much information about the possible transfer of ownership as is available at this time. The Navy has indicated that any cost associated with transfer of ownership of the road would be nominal and dependent on regulatory requirements. In addition, the "potential sale, exchange or release" of Navy lands in Lualualei has been identified in a recent study.

The roadway improvement costs attributed to Sites 5 and 6 (Page 77 of the draft EIS) will not be revised to include improvements from Farrington Highway to the Naval facility, as the State will incur costs only to the school site. Improvements to the road mauka of the candidate school sites are an unresolved issue related to ownership of the road and will be included in Chapter X, Summary of Unresolved Issues, of the final EIS.

A.6. Sewer

The information you present under this heading is incorrect. Site 2 was rated "Fair" in the draft EIS (based on the possibility of connecting to sewer lines in Laiku Street), not "Poor" as you state. However, we agree with your point made above regarding Roadways and that ratings

should reflect existing conditions. Therefore, Site 2 will be rated "Poor" for the Sewer criterion because it is unknown at this time whether there will be adequate capacity in the sewer lines in Laiku Street to accommodate the project, and the site is over 2,000 feet from the existing sewer line on Hakimo Road. Rating it "Good," as you suggest, because it may be possible to connect to Laiku Street in the future, contradicts your criticism of the Roadways rating above: "No other site is rated on future conditions and thus, to rate Sites 5 and 6 as 'Fair' is another inconsistency in applying the stated criteria." We revised the rating for Roadways to reflect existing conditions (as you requested) and will rate Site 2 based on existing sewer conditions. Nevertheless, the potential to connect to the system in Laiku Street is clearly stated in the EIS.

Your assumption regarding where a "Poor" rating would stem from is incorrect. The draft EIS makes no assumptions related to uncertainty about acquiring easements, right-of-way or access. Site 2 receives a "Poor" rating simply based on the rating criteria spelled out in Appendix A.

A.7. Vehicular Safety

The potential conflict between landfill and Navy truck traffic and school-related traffic is a legitimate concern and one which is presented in the EIS impact assessment in Chapter VII.

A.8. Pedestrian Access

Your comments under this heading appear to refer to the Pedestrian Safety criteria, not Pedestrian Access. As stated above, descriptions of traffic and safety concerns for all sites are found in Chapter VII of the draft EIS and these will be expanded on in the final EIS. The final EIS will also be revised to include a more thorough discussion of the potential mitigation measures. Specific mitigation measures for any site will not be known until a site has been selected. At that time, the City and County of Honolulu Department of Transportation Services will evaluate the traffic and safety conditions for the selected site and will recommend appropriate mitigative measures to ensure pedestrian and vehicular safety. DOE will comply with all requirements.

B.1. Land Ownership

At this state in the planning process, the willingness of all landowners to sell their property is unknown; and for all practical purposes, a landowner's willingness could conceivably change between the project planning phase and the actual site acquisition phase. Furthermore, a landowner's willingness alone does not determine the ultimate cost of a parcel to the State. The Land Ownership criterion, as described in the draft EIS, is a relative measure of the degree of difficulty involved in land acquisition based on the number and type of landowners. It is not as difficult to negotiate with fewer landowners as with multiple landowners.

Where landowners have indicated a willingness to sell, such as PVT Land Company, Ltd. for Site 2, this is stated in the EIS.

B.2. Displacement and Existing Use

Although the two criteria are related, a site's rating for Displacement does not indicate the same rating for Existing Use, as you infer. The two criteria are not an example of "unintentional double counting." Rather, they reflect the State's desire to minimize disruption to the pattern of living within the community and neighborhood within which a public service project is built.

If there is a business on the desired site, it would rate "poor." The "poor" rating will be clarified by using the singular form of "farm" and "business" as follows: "The site cannot be acquired without the relocation of any farm, business, or more than five families."

An owner's willingness to sell is not a factor in either of these criteria. Regarding PVT Land Company Ltd.'s "intention to expand an ongoing business," we are again dealing with a future condition and we agree with your position taken earlier that for consistency, future conditions should not be considered in the ratings. The EIS does identify planned future land uses for candidate sites where such uses have been made known to us and this information will be considered during the site selection.

B.3. Public Bus Service

The "Fair" and "Poor" ratings for this criterion will be revised to read:

Fair - The site is served by a public bus line passing by the site at intervals greater than 30 minutes; or a public bus line running at intervals of 30 minutes or less passes within 1/2 mile of the site.

Poor - No public bus service is available; or a bus line is located further than 1/2 mile from the site.

All sites rate "Fair" as a result.

B.4. Commercial Attractions

Your point is well taken. The final EIS will reflect a "Poor" rating for both Sites 5 and 6 in terms of their proximity to commercial attractions.

III. Cost Evaluations (Pages 9 to 10)

The cost assigned to sites for a retention basin is provided as a guide for comparison purposes only and is not reflective of any site-specific engineering calculations. This is clearly explained in the draft EIS (Page 69). The need for an on-site retention basin will not affect the size requirement of any site. The proposed 12-acre school site will consist of eight acres for the school and four acres for the playfield. The playfield can be designed to accommodate a retention basin if necessary.

The information you provide regarding costs associated with acquiring Site 6 will be considered by the DOE as your letter will be included in the final EIS.

The cost of improving and acquiring Lualualei Naval Road is discussed in Item A.5. above.

Since schools are used as shelters during emergency situations, it is DOE's policy that they be located outside the tsunami evacuation zone as determined by Civil Defense and as shown on Exhibit III-2. For purposes of this EIS and site selection study, the terms "tsunami inundation zone" and "tsunami evacua-

tion zone" are interchangeable. This will be pointed out in the final EIS.

Summary

We would like to emphasize that the DOE will consider all information provided in the EIS and site selection document, including consultation phase and public review phase comment letters, prior to making a site selection. They will not limit their review to the evaluation criteria, ratings, and subsequent Summary Evaluation Table. The Summary Evaluation Tables are imply a general reference for their use.

KUSAO & KURAHASHI, INC.
Planning and Zoning Consultants
MARUICAZA
PUNAHONA AVENUE, SUITE 124
HONOLULU, HAWAII 96814

PHONE: 808-538-8833
FAX: 808-531-4202

Mr. Robert P. Takushi
Page 2

November 15, 1994

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

Dear Mr. Takushi:

Subject: Nanakuli III Elementary School Draft Environmental
Impact Statement and Site Selection Study

On behalf of Leeward Hawaii, Inc., the landowner of Tax Map Key 8-7-8: 76, we would like to thank you for this second opportunity to comment on the above mentioned project.

As we stated in our earlier comments during the EIS Consultation Phase (Preparation Notice), dated March 15, 1994:

"We have completed our review of the proposed project and believe that the proposed Nanakuli III Elementary School should not be located at the Lualualei Site No. 5 for the following reasons:

1. The parcels which make up Lualualei Site No. 5 (TMK's 8-7-8: 76 and 77) as well as the DIIHL Site No. 1 are designated Residential on the Development Plan Land Use Map by the City and County of Honolulu. Land acquisition for these parcels would be more expensive than land designated Public Facility or Agriculture. The four other possible sites (Kaukai Site No. 2, Ulehawa/Kapiki Site No. 3, Paakea Site No. 4 and PVT Site No. 6) would be more cost efficient since they are designated Agriculture on the Development Plan.

2. We are in the process of developing a Planned Development Housing Project on this parcel (TMK 8-7-8: 76). The proposed project will develop a mix of low market and affordable housing units on this property. Upon completion of the proposed development the project would provide 188 units of various sizes and designs. Locating the proposed Nanakuli III Elementary School on a portion of this property will eliminate this opportunity to develop this Planned Development Housing project which will provide a significant number of affordable housing units for the community."

On July 15, 1994, we submitted an application for rezoning of the subject parcel to allow development of a cluster development with about 144 townhouse units. The project has been scaled back since our earlier comments. In this as in all neighborhoods around the island, there is a strong demand for affordable housing, and this project will do its part in providing affordable units as required by the City Council.

We further understand that another consideration and concern with the subject site, Site 5, is the land ownership and title claim dispute between the State of Hawaii and the State Department of Hawaiian Home Lands for parcel 77. This dispute could affect the development of the school and the timetable for development pending resolution of the dispute.

We understand the need for the additional school facility planned for this community, but given the fiscal situation in the State, it is prudent that the selection criteria consider the cost of acquiring the proposed school site. We hope that the final selection will take advantage of lands not planned for higher value residential use, focusing on less expensive, unproductive agricultural lands.

We understand that the assessed value was utilized to provide a simple method of comparing land values. In the instance of our portion of Site No. 5, however, our recent purchase price reflects a per acre value of \$167,000 which increases land value from your estimate of \$962,400 for Site No. 5 to \$2,004,000 (the neighboring parcel, 77, being similarly designated on the Development Plan is projected to have the same per acre value as our parcel). When this new land value is factored in, the total cost of the project's cost consideration described on

Mr. Robert P. Takushi
Page 3

page 83 of the Draft EIS would now be \$5,650,220, making Site No. 5 the most costly to develop.

We hope that this additional information will be considered in your deliberations and selection of a site for the proposed Nanakuli III Elementary School. Should there be questions, please contact me.

Very truly yours,

Keith H. Kurahashi

Keith H. Kurahashi

cc: vDHM Inc.
Leeward Hawaii, Inc.



WILLIAM J. CAYTANO
GOVERNOR

ELDER'S BAY
COMPTROLLER
MARY PATRICIA WATERHOUSE
DEPUTY COMPTROLLER

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P. O. BOX 118, HONOLULU, HAWAII 96819

LETTER NO (P) 1026.5

JAN 24 1995

Mr. Keith H. Kurahashi
Kusao and Kurahashi, Inc.
210 Ward Avenue, Suite 124
Honolulu, Hawaii 96814

Dear Mr. Kurahashi:

Subject: Nanakuli III Elementary School
EIS Public Review Phase
DAGS Job No. 12-16-6380

Thank you for your November 15, 1994 comments on the subject draft EIS. We offer the following responses to your comments:

1. The final EIS will be revised to reflect the most current information you provided regarding the planned development housing project for TMK 8-7-8:76, a portion of Site 5.
2. A settlement agreement was approved December 1, 1994 by the Task Force on Department of Hawaiian Home Lands Land Title and Related Claims and the Hawaiian Homes Commission. This agreement applies to Parcel 77 of Site 5. The agreement proposal will be presented to the 1995 Legislature for action. Action by the Legislature will determine whether the title claim dispute would affect a school development on Site 5 and the timetable for development.
3. The Department of Education (DOE) must consider a number of factors in the selection of a new school site. The EIS and site selection study consists of diverse site selection criteria, many of which take cost into account in the rating scale, as well as direct cost considerations (in dollars). Site acquisition costs are only one selection criteria. (Refer to Chapter VI of the draft EIS.)

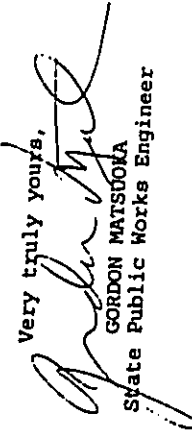
The Department of Accounting and General Services and DOE recognize that the tax office assessed value used

in Chapter VI, Section B.1. of the draft EIS may not reflect the most recent purchase price, market value, or private appraisal value. As you note, it is used for comparative purposes. The final EIS will be revised to emphasize this and to state that residential lands typically have greater acquisition cost associated with them.

Your November 15, 1994 letter and this response letter will be included in the final EIS. As a result, your concerns regarding the actual value of Site 5 will be considered during the final site selection.

We appreciate your input for this project. 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.





PVT LAND COMPANY LTD.

January 30, 1995

Mr. Ralph Morita
Section Head
Department of Accounting and General Services
P. O. Box 119
Honolulu, HI 96810-0119
Facsimile: 586-0482

RE: Nanakuli III Elementary School and Site Selection

Dear Mr. Morita:

PVT is the owner and operator of the Nanakuli Landfill. It is also the owner of the adjacent properties identified as Site 2 and Site 6 in the Draft Environmental Impact Statement (DEIS) for the above referenced project. Both factors make us extremely interested in the outcome of the site selection process for the proposed Nanakuli III Elementary School. This interest led us to ask our planning and engineering consultants, who are working on our expansion plans, to contact you regarding the sites currently under consideration, and we want to thank you for speaking to them last week over the telephone.

As indicated during the telephone conversation with our consultants, PVT is most anxious to discuss with you and/or the Department of Education (DOE) our offer to further explore the advantages of Site 2 as identified in the DEIS. We appreciate your cooperation and were disappointed that the DOE was unwilling to meet to discuss the matter further. This is a continuation of a pattern that raises serious concerns about the thoroughness and objectivity of the site selection process. For example, during a site visit the DEIS consultant spoke only briefly and informally to our landfill manager, who's duties are limited solely to landfill operations. Planning and policies regarding the sites are handled through the corporate office, which was not contacted by the DEIS consultant. Therefore, it is difficult to understand how the site selection evaluation could be either comprehensive or accurate.

The site located on our property west of Uiehawa Stream offers significant advantages over other alternatives that we believe were not accurately described in the DEIS. More importantly, we believe that use of Site 2 would result in the lowest

Page 2
Mr. Ralph Morita
January 30, 1995

costs to the State and avoid the serious impacts on our ability to continue providing solid waste processing and disposal services that would result from development of a school on Site 6.

We have offered a substantial financial incentive to the DOE for consideration when evaluating Site 2. This offer was made on our behalf by our attorney, William W.L. Yuen, in a March 28, 1994 letter to Mr. Robert Takushi, State Comptroller, Department of Accounting and General Services (DAGS). While the offer was preliminary in nature, we expected that we would be afforded the opportunity to discuss any issues or concerns that the DOE or DAGS might have. To date, we have not received a response to this offer. The DOE's refusal to meet with us has made it impossible to pursue further what we strongly believe could be a mutually satisfactory agreement.

It is very important to us that the additional discussions take place before the DEIS is finalized. This is the only means of insuring that the Final EIS contains all of the information that decision makers at the DOE and at DAGS will need when evaluating the sites. Consequently, I would very much appreciate it if you would call Perry White at 521-5361 to arrange a meeting as soon as possible.

If you have any questions, please call me at 593-9191. I look forward to meeting with you in the near future.

Sincerely,

Vernon N. K. Chock
President

BERNARD J. CAVALANO
DIRECTOR



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

ELIZABETH S. HAN
COMPTROLLER
MARY PATRICIA WATERHOUSE
DEPUTY COMPTROLLER

LETTER NO. (P) 1095.5

FEB 14 1995

Mr. Vernon N. K. Chock
President
PVT Land Company, Ltd.
1210 Queen Street, 2nd Floor
Honolulu, Hawaii 96813

Dear Mr. Chock:

Subject: Nanakuli III Elementary School
EIS Public Review Phase
DAGS Job no. 12-16-6380

Thank you for your January 30, 1995 comments on the subject draft EIS. Your interest in the outcome of the site selection process for the proposed school is acknowledged. The written information that was provided by your attorney on March 28, 1994 and your planning and engineering consultants has been incorporated into the draft EIS. Your letter of January 30, 1995 and our written responses will be included in the final EIS.

The financial incentives you have offered regarding Candidate Site 2 are appreciated and will certainly be taken into consideration during the site selection.

We appreciate your input for this project. If you have any questions, please have your staff contact Mr. Gary Chong of the Planning Branch at 586-0487.

Very truly yours,

Gordon Matswoka
GORDON MATSWOKA
State Public Works Engineer

GC:jk
cc: DHM, Inc.