June 23, 1994

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

SUBJECT: EIS - Kapaa Intermediate School

I am pleased to accept the Final Environmental Impact Statement for the Kapaa Intermediate School, Kapaa, Kauai as satisfactory fulfillment of the requirements of Chapter 343, Hawaii Revised Statutes.

This environmental impact statement will be a useful tool in the process of deciding if the action described therein should be allowed to proceed. My acceptance of the statement is an affirmation of the adequacy of that statement under the applicable laws and does not constitute an endorsement of the proposed action.

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

JOHN WAIHEE

c: Bruce S. Anderson
FINAL

ENVIRONMENTAL IMPACT STATEMENT
and
SITE SELECTION STUDY
for the
NEW KAPAA INTERMEDIATE SCHOOL

This environmental document is prepared pursuant
to Chapter 343, Hawaii Revised Statutes and Chapter 200 of Title 11,
Administrative Rules, "Environmental Impact Statement Rules"

LOCATION: Kawaihau and Hanalei Districts
Kaui, Hawaii

PROPOSING AGENCY: Department of Accounting and General Services
State of Hawaii

ACCEPTING AUTHORITY: Governor
State of Hawaii

RESPONSIBLE OFFICIAL: ROBERT P. TAKUSHI, COMPTROLLER
9/20/93

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TABLE OF CONTENTS

PART ONE: DRAFT ENVIRONMENTAL IMPACT STATEMENT

I. INTRODUCTION AND SUMMARY................................................................. 1

II. PURPOSE AND NEED FOR ACTION......................................................... 3
    A. EXISTING CONDITIONS................................................................. 3
    B. FUTURE PROJECTIONS................................................................. 3
    C. COMPLEX REORGANIZATION......................................................... 4

III. PROJECT DESCRIPTION........................................................................... 5

IV. ALTERNATIVES CONSIDERED................................................................. 6
    A. CONTINUE THE EXISTING SITUATION............................................. 6
    B. CHANGE IN SCHOOL SERVICE AREA.............................................. 6
    C. CONSTRUCT A NEW INTERMEDIATE SCHOOL.................................... 6
    D. CONCLUSION.................................................................................. 7

V. ENVIRONMENTAL SETTING....................................................................... 8
    A. REGIONAL OVERVIEW...................................................................... 8
    B. SERVICE AREA.............................................................................. 8
        1. Infrastructure........................................................................... 8
            Water.................................................................................... 8
            Wastewater........................................................................... 8
            Drainage................................................................................ 8
            Utilities................................................................................ 8
            Roads.................................................................................... 9
        2. Service Area Environment.......................................................... 9
            General Description............................................................... 9
            Climate.................................................................................. 9
            Flora..................................................................................... 9
            Fauna.................................................................................... 9
            Hydrology.............................................................................. 10
            Geology/Soils......................................................................... 10
Archaeology/Historical................................................................. 10
Scenic......................................................................................... 10
3. Socioeconomic Characteristics.................................................. 10
   Population................................................................................ 10
   Employment............................................................................. 11
   Public Services....................................................................... 11
C. CANDIDATE SITES...................................................................... 11
   SITE #1: WAILUA, KUHIO HIGHWAY......................................... 11
   SITE #2: KAPAA, OLOHENA ROAD........................................... 12
   SITE #3: KAPAA, APOPO ROAD.............................................. 13
   SITE #4: KEALIA/KUMUKUMU, KUHIO HIGHWAY..................... 14
VI. RELATIONSHIP TO PLANS, POLICIES AND CONTROLS.................. 15
   A. HAWAII STATE PLAN/EDUCATIONAL FUNCTIONAL PLAN..... 15
   B. STATE LAND USE DISTRICT.................................................. 15
   C. COUNTY GENERAL PLAN..................................................... 16
   D. REGIONAL DEVELOPMENT PLAN.......................................... 16
   E. COUNTY ZONING DESIGNATION.......................................... 17
   F. OTHER POLICIES AND CONTROLS........................................ 17
      Special Management Area.................................................... 17
      Flood Hazard Area............................................................. 17
      Department of Health........................................................ 18
   G. LAND USE APPROVALS CHART........................................... 18
VII. PROBABLE IMPACTS............................................................... 19
   A. BENEFICIAL IMPACTS.......................................................... 19
   B. SHORT TERM IMPACTS......................................................... 19
   C. LONG TERM IMPACTS........................................................ 20
   D. SECONDARY, GROWTH INDUCING AND CUMULATIVE IMPACTS.. 20
IX. SHORT TERM USES VERSUS LONG TERM PRODUCTIVITY............. 22
IX. IRREVERSIBLE COMMITMENTS OF RESOURCES.......................... 22
X. UNAVOIDABLE ADVERSE EFFECTS .................................................. 23

XI. MITIGATION MEASURES ............................................................ 24
   A. CONSTRUCTION ACTIVITY .................................................. 24
   B. VEHICULAR TRAFFIC IMPACTS .......................................... 24
   C. ADJACENT LAND USE ....................................................... 24
   D. HIGH VOLTAGE LINES ...................................................... 24
   E. HIGHWAYS AND ROADS ................................................... 25
   F. DRAINAGE ................................................................. 25
   G. FLORA AND FAUNA ......................................................... 25
   H. ADDITIONAL MEASURES .................................................. 26

XII. UNRESOLVED ISSUES ............................................................ 27
   A. WASTEWATER ............................................................... 27
   B. CULTURAL RESOURCES .................................................. 27
   C. SECONDARY ROAD ACCESS .............................................. 27

XIII. CONSULTATION LIST .......................................................... 29

XIV. COMMENTS AND RESPONSES TO PREPERATION NOTICE .......... 32

XV. COMMENTS AND RESPONSES TO THE DRAFT EIS ...................... 50

PART TWO: SITE SELECTION STUDY
I. INTRODUCTION ............................................................................. 64

II. NEED ASSESSMENT .................................................................... 65
       A. EXISTING CONDITIONS .................................................. 65
       B. FUTURE PROJECTIONS ................................................... 65
       C. COMPLEX REORGANIZATION .......................................... 66
I. INTRODUCTION AND SUMMARY

The State of Hawaii Department of Accounting and General Services in cooperation with the Department of Education is proposing to establish a New Kapaa Intermediate School serving grades 6 through 8 in the northeast section of the Island of Kauai. The school's target opening date is 1995 and enrollment projected for the school opening is 400 with a planned design enrollment of 1,100. Based on criteria established by the Department of Education, four sites were identified and evaluated as potential locations for the New Kapaa Intermediate School - one in Wailua, two in the Kapaa area and one near Kealia. The four candidate sites were selected using a multi-level screening process and a preliminary analysis of site characteristics. One of the candidate sites in Kapaa, Site #3, has been removed from consideration as a location for the New Kapaa Intermediate School due to the possible presence of wetlands at that location. A description of the candidate sites, the site selection process and evaluation results is contained in Part Two of this report, the Site Selection Study. The Site Selection Study is designed to aid in comparing the relative merits of each site and no recommendation as to the most appropriate site is provided.

Three alternatives were considered to accommodate present overcrowding and the projected growth in enrollment in the school service area: continue the existing situation; change the school service area; and construct a new intermediate school. The projected growth in enrollment for the service area cannot be accommodated at the current Kapaa campus. A change in the school service area would not resolve the problems of enrollment growth since the Kauai High and Intermediate School is projected to experience significant growth on a campus with a shortage of classrooms and there is no other secondary school which could accommodate the anticipated increases. Therefore, the most appropriate alternative for meeting the service area needs was determined to be establishment of a new Kapaa Intermediate School.

The proposed project will relieve current and projected overcrowding within the School District and help further the District's commitment to reorganize the school grade structure into three separate levels to remove younger adolescents from the same campus as high school students. The less crowded conditions and reorganized grade structure will result in an enhanced learning environment to the benefit of both students and faculty.

Adverse impacts expected from the project include a temporary increase in dust and noise during construction, an increase in traffic during school opening and closing, an increased demand on community services and facilities, and periodic increases in noise levels during school hours. A potential conflict between school activities and nearby sugar cane operations could exist if a site is selected where sugar cane continues to be cultivated.

Use of dust abatement techniques and limitations on the hours of construction activities will minimize adverse impacts during the construction phase. Other mitigation measures to be provided if necessary include improvements to roadways and water systems, provision of drainage facilities, sidewalks, walls, fencing and landscaping, and connection to the County sewer system or provision of an on-site wastewater treatment facility. If a site is selected where sugar cane continues to be cultivated, school facilities can be located and designed to minimize conflicts with sugar cane operations, and it is anticipated that many sugar cane activities can be scheduled during times when school is not in session.
Unresolved issues include the method of wastewater disposal and the availability of a secondary vehicular access to some of the potential school sites. An archaeological inventory survey of the selected site will be conducted and a traffic impact analysis may be required.

If Site #1 is selected, a State Land Use District (SLUD) Boundary Amendment, General Plan Amendment (GPA), Zoning Amendment (ZA) and Class IV Zoning Permit will be required. If Site #2 is selected a SLUD Boundary Amendment, a Zoning Amendment and a Class IV Zoning Permit will be required. If Site #4 is selected a SLUD Boundary Amendment, Zoning Amendment, and Class IV Zoning Permit will be required, and a General Plan Amendment may be required for a portion of the school site. As noted above, Site #3 has been removed from consideration as a potential School location. A petition may be filed for a State Land Use Special Permit in lieu of a SLUD Boundary Amendment. The County Planning Director can determine that an application for a Use Permit and Class IV Zoning Permit may be filed in lieu of General Plan Amendment and Zoning Amendment applications.
II. PURPOSE AND NEED FOR ACTION

A. EXISTING CONDITIONS - The service area for the proposed new Kapaa Intermediate School includes the northeast portion of the Island of Kauai from the Wailua River in the Kawaihau District north to Haena in the Hanalei District (see Exhibit A: Service Area Location). According to the 1990 Census, the population of the service area was 20,258 with an estimated 15,627 or approximately 77% residing between the Wailua River and Anahola. The service area is currently served by four public elementary schools which include grades Kindergarten (K) through 6 located in Hanalei, Kilauea, Kapaa and Hanamaulu (see Exhibit B: Elementary School Locations). Kapaa High and Intermediate School which includes grades 7 through 12 is located adjacent to the Kapaa Elementary campus at the north end of Kapaa town (see Exhibit C: Kapaa High and Intermediate School Location).

Currently all students in grades K through 6 attending the elementary schools in Hanalei, Kilauea and Kapaa are expected to attend Kapaa High and Intermediate. At this time the recently opened King Kaumualii Elementary School serves both the Hanamaulu area and a portion of the Wailua Homesteads. Some students attending King Kaumualii are currently designated to attend Kapaa High and Intermediate while the remainder will be attending Kauai High and Intermediate in Lihue.

Kapaa High and Intermediate School currently contains 51 permanent classrooms and 7 portable classrooms with a total capacity of 1,319 students. Enrollment at Kapaa High and Intermediate School rose from 1,126 students in 1980 to 1,315 students in 1989 and the school is currently operating beyond capacity. The Kapaa High and Intermediate School campus adjoins the Kapaa Elementary School campus and the two schools together had a combined total enrollment of 2,813 students in 1989. The establishment of King Kaumualii Elementary in Hanamaulu in September of 1990 relieved some overcrowding in the elementary grade portion of the Kapaa school complex, however population growth anticipated in the service area will continue to strain the campus capacity.

B. FUTURE PROJECTIONS - The number of students in the Kapaa High and Intermediate School service area is projected to continually increase through the year 2010 due to increased population growth and continued residential development in the area. The North Shore of Kauai also is one of the fastest growing regions in the State. There are approximately 75 acres of vacant residentially zoned, "U" Urban State Land Use District lands in the study and service area which could theoretically qualify for 3,289 additional dwelling units. Additional growth can also be expected in the "R" Rural and "A" Agricultural State Land Use Districts which make up a significant portion of the service area. Exhibit D identifies the projected enrollment for Kapaa High and Intermediate School as compared with school capacity through the year 1995 at which time the enrollment is expected to reach 1,897. By the year 2010 enrollment in grades 7 through 12 is projected to reach 2,200 with 750 students in grades 7 and 8 and 1,450 students in grades 9 through 12.

As noted above the Kapaa High and Intermediate School is adjacent to the Kapaa Elementary School. The elementary school is projected at 1,372 in 1985 for a total enrollment for the combined campus complex of 3,269. A second elementary school for the Kapaa area is expected to be opened in 1996 to help relieve the crowding on the Kapaa campus. However, combined enrollment projected for the Kapaa campus for the year 2010 will still be excessive at 3,100. Based on these existing enrollments, population projections, anticipated future developments and
other factors, DOE has determined that the current Kapaa High and Intermediate School facilities are inadequate.

C. COMPLEX REORGANIZATION - As noted above the elementary schools in the Kapaa High and Intermediate School service area currently serve grades Kindergarten through 6 and the Kapaa High and Intermediate School serves grades 7 through 12. The Kuual School District has committed to reorganizing the school grade structure into three separate levels to remove younger adolescents from the same campus as high school students: the elementary level for grades Kindergarten through 5; the intermediate or middle school level for grades 6 through 8; and the high school level for grades 9 through 12. The proposed new Kapaa Intermediate School will include grades 6 through 8 and therefore will help implement this plan.

With the establishment of the new Kapaa Intermediate School, students in grades 9 through 12 will attend Kapaa High School. Kapaa Elementary, the new Kapaa Elementary II and King Kaumualii will serve grades K through 5. Hanalei and Kilauea Elementary will serve grades 1 through 5 with students in grade 6 having the option of attending Kapaa Intermediate or remaining at their elementary schools. The existing feeder complex for the project area and the proposed feeder complex for the new Kapaa Intermediate School are illustrated in Exhibit E.
III. PROJECT DESCRIPTION

To relieve current and anticipated overcrowding within the School District, DOE is proposing to establish a new Kapaa Intermediate School to serve grades 6 through 8 within the area currently served by the existing Kapaa High and Intermediate School. The existing Kapaa High and Intermediate School which currently serves grades 7 through 12 is proposed to be utilized exclusively as a High School for grades 9 through 12. The existing elementary schools within the District and the proposed new Kapaa Elementary School will serve grades K through 5, although enrollment in grade 6 at Hanalei and Kilauea Elementary will be optional. The target opening date for the new Kapaa Intermediate School is September of 1995 and enrollment projected for the school opening is 400. The school's planned design enrollment is 1,100 students with an anticipated peak enrollment\(^1\) of 1,300.

The proposed new Kapaa Intermediate School will consist of forty four (44) permanent Classrooms, four (4) permanent Special Education Classrooms, an Administration Building, a Library, and a Food Service Building with a conventional kitchen and student/staff dining area. Space for ten (10) Portable Classrooms will also be provided to accommodate the peak enrollment. Integrated with the Classroom Buildings will be a two-room Computer Resource Center, a Language Lab, and a three-room Faculty Center. Also proposed is a Boys and Girls Physical Education Building with lockers and showers, a Boys and Girls Physical Education Playfield and a Paved Playcourt. A minimum of eighty four (84) parking stalls are proposed with additional stalls to be provided if needed to meet County of Kauai Planning Department requirements.

Funds for site selection, EIS, master planning and land acquisition for the new Kapaa Intermediate School have been appropriated through Act 296/91, Executive Budget, Capital Improvement Projects, which has been signed by the Governor. Once the site is selected, funds will be made available for project design and construction on an incremental basis.

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\(^1\)Peak enrollment is a temporary situation where enrollment exceeds the design enrollment.
IV. ALTERNATIVES CONSIDERED

Three alternatives were considered to accommodate present overcrowding and the projected growth in enrollment in the school service area:

A. CONTINUE THE EXISTING SITUATION - The DOE on the Island of Kauai is currently experiencing a classroom shortage based on recently revised mandatory student to teacher ratios. As well, Kapaa High and Intermediate will continue to grow in enrollment if the existing campuses, service area and grade structure are maintained. Enrollment at the school is projected to increase from 1,315 in 1989 to 1,897 in 1995 with an ultimate design enrollment of 2,200 by the year 2010. This growth cannot be accommodated at the current school complex site which is shared with Kapaa Elementary since there is not sufficient space for an adequate number of portable or permanent classrooms without sacrificing other school facilities such as playfield areas. The elementary school is also experiencing a large enrollment growth with a projected enrollment of 1,372 students in 1995. Although the proposed development of a second elementary school in Kapa will reduce the design enrollment of the elementary school from 1,450 to 900, total enrollment on the campus will still be excessive at 3,100 by the year 2010.

Merely adding classrooms to the existing school campus would create a negative atmosphere for student achievement. A recent study in the Leeward Oahu School District indicated 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. Finally, continuing the existing situation without an adequate number of additional classrooms would create crowded conditions with unacceptably high student to teacher ratios.

B. CHANGE IN SCHOOL SERVICE AREA - Kauai High and Intermediate School, located in the adjacent service area to the south, is also experiencing significant increases in enrollment with a shortage of classrooms and this trend is expected to continue. Enrollment at that school is expected to increase from 1,454 in 1989 to 2,003 in 1995, with an anticipated design enrollment for the year 2010 at 2,300. There is no other secondary school which could accommodate students from Kapaa High and Intermediate and therefore a change in service area would not solve the problem of overcrowding at the Kapaa complex campus.

C. CONSTRUCT A NEW INTERMEDIATE SCHOOL - The establishment of a new Kapaa Intermediate School will relieve the overcrowding on the current Kapaa campus and create two manageable secondary schools in the service area. Construction of the proposed School will help implement the District plan to organize the complex into a three level grade structure, as well as conform to the School District objective to remove younger adolescents from the same campus as high school students. Removal of the Intermediate School from the current Kapaa High and Intermediate School campus will also permit expansion of the High School facilities to accommodate anticipated growth in enrollment in grades 9 through 12.

\[2\]Design enrollment is the stabilized number of students to be served by a school based on the service area grade organization and future housing construction.
D. CONCLUSION - The projected growth in enrollment for the service area cannot be accommodated at the current Kapaa campus. A change in the school service area also would not resolve the problems of enrollment growth since the Kauai High and Intermediate School is projected to experience significant growth on a campus with a shortage of classrooms and there is no other secondary school which could accommodate the anticipated increases. Therefore, the most appropriate alternative for meeting the service area needs as discussed above is the establishment of a new Kapaa Intermediate School.
V. ENVIRONMENTAL SETTING

A. REGIONAL OVERVIEW - Kauai is the northernmost and fourth largest island in the State of Hawaii, being 33 miles long and 25 miles wide with a land area of 355,000 acres. Kauai is considered the Garden Island due to its lush vegetation, coral sand beaches and scenic mountain vistas. Mount Waialeale at an elevation of 5,148 feet is known as the wettest spot on earth with average annual rainfall of 451 inches.

Tourism and sugar are the principal industries of Kauai. Visitor centers include Poipu Beach on the south shore, Lihue and Wailua/Kapaa on the east and Hanalei and Princeville on the north shore. Currently cultivated sugar cane fields can be found from Kapaa on the east to Kekaha on the west with operating sugar mills located between Lihue and Kekaha.

According to the 1990 census the island had a resident population of 51,177. The town of Lihue with a 1990 population of 5,279 is the Island's government and commercial center and is the location of the major airport and primary port facility.

B. SERVICE AREA - Exhibit A identifies the service area for the proposed new Kapaa Intermediate School which includes the northeast portion of the Island of Kauai from the Wailua River in the Kawaihau District north to Haena in the Hanalei District. The service area stretches over 25 miles along the Kauai coast and up to nearly four miles inland at some locations.

1. Infrastructure:

Water - The majority of domestic water supply for the school service area is derived from wells while irrigation water is generally supplied through surface water flows. The County of Kauai Department of Water provides domestic water throughout much of the service area. The Department of Water operates and maintains the Kapaa-Wailua Water System, the Molaa Water System, the Kiluaea-Kalihiwai Water System, the Hanalei Water System, and the Haena-Wainiha Water System. Individual and private water systems also operate within the service area including the Princeville Resort water system and Lihue Plantation Company's system at Kauila.

Wastewater - Wastewater generated throughout most of the school service area is disposed of by means of individual wastewater treatment systems such as cesspools or septic tanks or through private individual wastewater treatment works. The Wailua Sewage Treatment Plant, operated and maintained by the County of Kauai Department of Public Works, serves development along the Kuhio Highway corridor within the school service area between Wailua and Kapaa. The Princeville Resort area is served by a private secondary sewage treatment plant.

Drainage - Storm drainage facilities within the service area generally consist of systems of channels, ditches, culverts and catch basins which discharge into rivers, streams and cane lands. The County Department of Public Works maintains the majority of public drainage facilities within the school service area. Lihue Plantation Company which owns the sugar cane operations within the school service area maintains drainage and irrigation facilities on cultivated sugar cane lands.

Utilities - Electric power for residential and commercial use within the service area is provided by Citizens Utilities Company, Kauai Electric Division. GTE Hawaiian Tel provides telephone service and natural gas is delivered by truck by private companies.
Roads: Kuhio Highway, a State Highway, is the principal roadway in the school service area. The highway runs near and parallel to the shoreline through the Wailua-Kapa area where it is two lanes wide with a center left hand turn lane. The highway runs along the coast north to Hanalei and Haena where it narrows to a single lane at some locations. County roads, private streets and cane haul roads run both mauka and makai connecting Kuhio highway with residences, resorts, commercial centers, agricultural lands and recreational areas. Kuhio Highway is currently undergoing improvements in the Wailua-Kapa area and the State Department of Transportation is studying the feasibility of alternative long-term solutions to alleviate current and projected highway congestion, including a Wailua-Kapa bypass alignment.

2. Service Area Environment:

General Description: The school service area is relatively rural in character with a mix of land uses including residential, commercial, resort, public facilities, recreation, and a small amount of light industry. Agricultural activities include sugar cane cultivation, dairy farming, cattle and buffalo ranching, taro farming, guava and papaya orchards, flower cultivation and production of a variety of other fruit and vegetable crops. Much of the service area is in Forest Reserve. Two National Wildlife Refuges and several County and State Parks are also located within the service area. The Wailua to Kapaa area is the main commercial and population center within the school service area. Other smaller centers are located in Anahola, Kilauea, Princeville and Hanalei. Much of the community of Anahola is under the Administration of the Department of Hawaiian Home Lands.

Climate: Located on the windward side of the island, annual rainfall within the service area is approximately 43 inches for Kealia, 67 inches for Kilauea, 85 inches for Princeville Ranch and 122 inches at the higher elevations in the north for the Wainaha powerhouse. Average annual recorded temperatures range from near 73°F at Kealia, Anahola and Hanalei to approximately 72°F at Kilauea. Average monthly recorded temperatures within the service area range from a low of approximately 69°F for January at Kilauea to a high near 79°F for August at Kealia.

Flora: Due to the large amount of land area and variations in climate and topography, a wide variety of botanical species are present in the school service area. As with most of the island's inhabited lowlands, vegetation in the school service area consists primarily of non-native species introduced beginning with the first Polynesian explorers and continuing to this day, although some examples of native flora such as the hala and beach naupaka continue to survive. Typical vegetation observed throughout the service area include several types of palms, ironwood, norfolk pine, papaya, guava, banana, mango, avocado, lantana, koa haole, hau, sugarcane, taro, java plum, and numerous grass species.

Fauna: Domestic pets, feral animals, livestock and rodents make up the majority of the non-human mammals inhabiting the service area. The Hawaiian hoary bat, the only native land mammal can be found in the service area, while the endangered marine mammal, the monk seal, occasionally visits the area's shoreline.

A wide variety of introduced bird species can be found throughout the service area such as the Common Myna, Japanese White-eye, White-rumped Shama, Northern Cardinal, Red Crested Cardinal, Northern Mockingbird, Spotted Dove, Barred Dove, Western Meadowlark, Cattle Egret and Chicken. Several endemic bird species listed as "endangered" under the Federal Endangered Species Act, inhabit the school service area including the Hawaiian Coot, Hawaiian Stilt, Hawaiian Gallinule, and Koloa. Several indigenous marine birds can be found along or near the shoreline of the service area including the Laysan Albatross, Red-tailed Tropicbird, White-tailed Tropicbird, Brown Booby and Great Frigate. The endemic marine species. Newell's Shearwater, listed as
"threatened" under the Federal Endangered Species Act, nests in the interior mountains above the service area. Other waterbirds in the service area include the indigenous Black-crowned Night-Heron, and migratory species such as the Wandering Tattler, Golden Plover, Ruddy Turnstone and Sanderling.

The U.S. Fish and Wildlife Service operates two wildlife refuges within the school service area. The Hanalei National Wildlife Refuge, provides wetlands habitat for waterbirds while the Hanalei National Wildlife Refuge is famed for its abundant variety of shorebirds.

Hydrology - Several rivers and numerous perennial streams cross the school service area, some of the most prominent of which are the Wailua River, Kapaa Stream, Anahola River, Kilauea River, Kalihiwai River, Hanalei River, Lumahai River, Wainiha River and Limahuli Stream. Several bays and estuaries also are scattered along the shoreline including the bays at Wailua, Kealia, Anahola, Papau, Moloaua, Kilauea, Kalihiwai, Hanalei, and Wainiha. Wetlands are distributed throughout the school service area from the Wailua River to the Hanalei valley and as far north as Haena. The majority of the domestic water supply for the school service area is derived from wells tapping basal groundwater, while surface water diversions meet the majority of the area's irrigation needs.

Geology/Soils - The Waimea Canyon volcanic series, which consists almost entirely of olivine rocks, formed the major volcanic shields of the island of Kauai. The Napali formation of the Waimea Canyon volcanic series, contributes the major portion of the series. The Koloa volcanic series occurred later and covered many eroded areas. These two formations constitute the bedrock of the region. Soil associations found in the school service area include Lilue-Puali, Kapaa-Pooku-Huli-Makapili, Hanalei-Kolokolo-Pakala, and Jaucus-Mokuleia. Elevations within the school service area generally range from approximately 1,500 feet along ridges to sea level, with the majority of the inhabited areas located below 800 feet.

Archaeology/Historical - Many sites of archaeological, cultural and historic significance are located within the school service area including several heiau, petroglyphs, historic churches and plantation era buildings. Archaeological and cultural resources such as habitation sites, burials and pre-contact artifacts continue to be discovered within the service area, particularly along the shoreline.

Scenic - The school service area contains numerous splendid examples of the spectacular scenery that keeps travelers from around the world returning to the Garden Island of Kauai. The natural landscape maunau of the highway offers sweeping vistas of lush, majestic mountains with rainbow-tinted waterfalls pouring into sweeping, green valleys. Looking makai, golden coral beaches are highlighted by aqua crescent bays and jutting rocky outcrops. Abundant scenic overlooks and vista points offer all who take the time the opportunity to savor the visual treasures of this long dormant volcano rising out of the Pacific.

3. Socioeconomic Characteristics:

Population - According to U.S. Bureau of the Census data, the project service area population increased from 13,165 in 1980 to 20,258 in 1990, an increase of 7,093 or 54%. The area between the Wailua River and Anahola (Kawaihau district) had a population of 10,497 in 1980 and 15,627 in 1990, an increase of 5,130 or 49%. The area north of Anahola (Hanalei district) increased from 2,668 in 1980 to 4,631 in 1990, an increase of 1,963 or 74%.

In 1980 approximately 80% of the service area population lived between the Wailua River and Anahola, with 77% residing between the Wailua River and Anahola in 1990. In 1990 the service
area consisted of 6,566 occupied households with 4,938 or approximately 75% located in the Kauai District and a total of 599 unoccupied housing units with 326 or 54% located in the Kauai District. Student population growth projections for the service area are identified above in Section II. Purpose and Need for Action.

**Employment** - Civilian employment in Kauai County in 1990 was approximately 28,000 with an unemployment rate of 3.6%. Tourism is the major industry on the island of Kauai and the largest percentage of the labor force was employed in services, followed closely by trade. Finance, insurance and real estate also contributed significantly to the island's employment as did the government sector.

**Public Services** - Police protection for the school service area is provided by the Kauai Police Department, with the Lihue Headquarters providing service to the Kapaa area and the Hanalei sub-station serving the North Shore. The Kauai Fire Department's Kapaa Fire Station provides fire protection service to Kapaa and nearby communities while the Hanalei Fire Station serves the North Shore.

C. **CANDIDATE SITES** - Using a multi-level screening process and a preliminary analysis of site characteristics, four candidate sites were selected as potential locations for the New Kapaa Intermediate School. During the Notice of Preparation Consultation Phase it was determined that Site #3 could contain wetlands. It is the policy of DAGS and DOE to avoid the use of wetlands and therefore Site #3 is no longer being considered as a potential location for the new intermediate school.

The Site Selection Study, attached as Part II of this DEIS, describes in detail the criteria used during the site selection process. The location of the parcels within which the candidate sites are located are shown in Exhibits C and G with potential school sites identified as shaded areas within the parcels in Exhibits H, I, J and K. The shaded site locations are conceptual in nature and can be refined or modified to accommodate the desired school facilities layout once a final site is selected. A detailed analysis of the physical and social characteristics of the four potential candidate school sites is contained in the Site Selection Study, Section VII: Evaluation of Candidate Sites (pages 92-113). A summary of those characteristics is presented below.

**SITE #1: WAILUA, KUHIO HIGHWAY** - Candidate Site #1 is located within a 286.90 acre parcel identified as TMK: 4-3-026. The parcel is located adjacent to the northern extent of the Wailua Houseslots, mauka of Kuhio Highway in Wailua (see Exhibit G: Candidate Sites 1 & 2 Location). The parcel is owned by Lihue Plantation Company and is currently utilized for sugar cane production. Sugar cane is the primary botanical species present and there are no known rare, threatened or endangered species which could be adversely impacted by establishment of a school at this location.

Although the majority of the property has suitable topography to accommodate the 18 acre school site, the most appropriate location appears to be along the southwest boundary of the parcel (see Exhibit H: Site #1 Tax Key Map and Exhibit I: Site #1 Photographs). This location is considered suitable since it is set back from the highway and traffic noise, is adjacent to the Wailua Houseslots and therefore can be seen as a reasonable continuation of the urban developed area of Wailua, is outside of the flood zone, and since it is on the southern edge of the parcel, impacts associated with adjacent sugar cane operations can be minimized. In addition, this location within the parcel would permit establishment of a secondary access through the Wailua Houseslots if such an access is considered desirable.
Site #1 is within the "A" Agricultural State Land Use District and is adjacent to the "U" Urban State Land Use District. The site has a County General Plan designation of Agriculture (A), is identified as Single Family Residential on the Kapaa-Lihue Planning Area Development Plan Map and is within the Agriculture (A) County Zoning District. The potential school location is not within a flood zone although a small section in the southeast corner of the parcel within which the candidate site is located is within an area identified on the Federal Flood Insurance Rate Maps (FIRM) as inundated by the 100 year flood.

For purposes of this study access to the site is assumed to be along an access drive connecting the school site central building area with Kuhio Highway. A secondary access could possibly be provided along a roadway through the Wailua Houselots, however that option would require further study and negotiations with government agencies and landowners should this site be selected. The State Department of Transportation (DOT) is currently considering the development of a highway bypass between Wailua and Kapaa, and many of the potential alternative alignments pass through the parcel in which Site #1 is located. If Site #1 is selected as the final school site, the precise location of the school site can be coordinated with DOT to insure compatibility with the selected bypass alternative.

The parcel has relatively gentle topography and is not identified as culturally sensitive on the County Cultural Sensitivity Maps. A major cane haul road crosses the parcel near its eastern boundary and this dirt access may require modification to accommodate the school development. The area is served by the County Department of Water Kapaa Water System and it is possible that the site could connect to the County's Wailua Sewage Treatment Plant.

SITE #2: KAPAA, OLOHENA ROAD - Candidate Site #2 is located within a 183.28 acre parcel identified as TMK: 4-3-03:1, located off of Olohe Road just outside of the southern end of Kapaa town (see Exhibit G: Candidate Sites 1 & 2 Location). The parcel is owned by Lihue Plantation Company and is currently used for sugar cane cultivation. Sugar cane is the primary botanical species present and there are no known rare, threatened or endangered species which could be adversely impacted by establishment of a school at this location.

The location of the 18 acre school site within the parcel is limited by steep topography over portions of the total property. The most suitable location for the school site appears to be near the center of the parcel, adjacent to the south side of Olohe Road (See Exhibit I: Site #2 Tax Key Map and Exhibit N: Site #2 Photographs). In addition to possessing suitable topography, this location is at the outer edge of the sugar cane operation and easily accessible to the road and utility infrastructure corridor.

Site #2 is within the "A" Agricultural State Land Use District, and the parcel within which the site is located is adjacent to the "U" Urban State Land Use District. The site has a County General Plan Designation of Urban Mixed Use (UMU) and is within the Agriculture (A) County Zoning District. The site is designated Public on the Kapaa-Lihue Planning Area Development Plan Land Use Map which also has identified an unspecified portion of the parcel as a future high school site.

Access to the school site would be via Olohe Road which may require improvements to address school access safety issues. Olohe Road provides direct access to the Wailua and Kapaa Homesteads areas which contain a significant percentage of the District's student population. Thus, much of the bus traffic generated by the school could avoid the currently crowded conditions along Kuhio Highway. As with Site #1 above, cane haul roads traverse the parcel and some routing modification may be required.
Several of the DOT Wailua to Kapaa highway bypass alternatives pass through the parcel in which Site #2 is located. The suggested location of Site #2 is situated on the plateau above the proposed bypass alternatives and it is not likely that the bypass will directly impact this site. However, the bypass could affect access to the school site and the precise site location and facilities layout can be coordinated with DOT if Site #2 is selected.

The area is served by the County Department of Water Kapaa Water System and it is possible that this site could connect to the County Sewer System which is currently undergoing expansion into the Kapaa area. The parcel is not within a flood zone and is not identified as culturally sensitive on the County Cultural Sensitivity Maps.

SITE #3: KAPAA, APopo ROAD - During the Notice of Preperation Consultation Phase it was determined that Candidate Site #3 could contain wetlands. It is the policy of DAGS to avoid the use of wetlands and therefore this site is no longer being considered as a potential location for the new Kapaa Intermediate School.

Candidate Site #3 includes portions of four parcels with a total area of approximately 46.55 acres: TMK: 4-5-15:10,19,20 & 30. The property is located mauka of Kuhio Highway in Kapaa, in the low area between Apopo Road and Hauula Road (see Exhibit C: Candidate Sites 3 & 4 Location). All of the parcels are owned by the State of Hawaii with leases and permits to private individuals. Portions of the properties are currently used as pasture for cattle grazing with the remainder being vacant. The potential school site within the properties is covered with typical pasture grasses and the parcels would be required. Up to 25 acres could be necessary to accommodate an 18 acre site with suitable topography and meet County Planning Department requirements regarding configuration of the subdivided parcels.

Site #3 is within the "U" Urban State Land Use District, has a County General Plan Designation of Urban Residential (UR), is designated Open on the Kapaa-Lihue Development Plan Land Use Map and is within the Open (O) County Zoning District. The potential school location is located outside of any flood zone identified on the Federal Flood Insurance Rate Maps although a narrow band along Moikeha Canal immediately to the south is within the 100 year flood zone. A swale that is affected by the 100 year storm event traverses the length of the site and drains to the Moikeha Canal. This swale will require containment to accommodate the school facilities should this site be selected.

For purposes of this study access to the site is assumed to be along Apopo Road which will require improvements to address school access safety issues. A secondary access could possibly be provided from Hauula Road although that option would require further study and negotiations with government agencies and landowners should this site be selected. The site has access to the Kapaa and Wailua Homesteads via Kawaihau and Oloheha Roads. Thus, as with Site #2, much of
the bus traffic generated by the school could avoid the crowded conditions along Kuhio Highway. The area is served by the County Department of Water Kapaa Water System and, as with Sites #1 and #2, there is a possibility that the property could be served by the County’s Wailua sewage treatment plant system. The parcel is not identified as culturally sensitive on the County Cultural Sensitivity Maps.

SITE #4: KEALIA/KUMUKUMU, KUHIO HIGHWAY - Candidate Site #4 is located on a 1.118.08 acre parcel owned by Lihue Plantation Company identified as TMK: 4-7-04:1. The parcel is located mauka of Kuhio Highway, just north of Kealia and until recently was used for sugar cane cultivation (see Exhibit C: Candidate Sites 3 & 4 Location). Sugar cane continues to be the primary botanical species present and there are no known rare, threatened or endangered species which would be affected by development of a school at this location.

The most appropriate location for the school site within the parcel appears to be north of the Kaahuanui Road residential development, mauka of Kuhio Highway and makai of Kumukumu Camp (see Exhibit K: Site #4 Tax Key Map and Exhibit P: Site #4 Photographs). Situated at the southern edge of the formerly cultivated lands, this portion of the parcel has relatively gentle topography, would minimize conflicts with future agricultural operations and is adjacent to the Kaahuanui Road "U" Urban State Land Use District.

The property is within the "A" Agricultural State Land Use District and is adjacent to the "U" Urban State Land Use District; has a County General Plan designation of Agriculture (A) and Urban Residential (UR); is identified as Single Family residential on the Kapaa-Lihue Development Plan Land Use Map and is within the Agriculture (A) County Zoning District. Vehicular access to the site for purposes of this study is assumed to be provided directly off of Kuhio Highway. A secondary access could possibly be provided off of Kealia Road or the Kumukumu Camp Government Road although those options would require further study and negotiations with government agencies and landowners should this site be selected. Bus traffic through Kapaa town could be reduced at this site since North Shore students would have to travel only to Kealia, and some students from the Wailua and Kapaa Homesteads could be transported along Malihuna, Kawaihau or Oloheha Roads to Kuhio Highway avoiding Kapaa Town's peak hour traffic congestion. The site is outside of the County Department of Water service area and there are no plans to extend the County Sewer Service this far north. The proposed school site has relatively gentle topography, is not within a flood zone and is not identified as culturally sensitive on the County Cultural Sensitivity Maps.
VI. RELATIONSHIP TO PLANS, POLICIES AND CONTROLS

The relationship of the proposed project to plans, policies, and controls is discussed in the Site Selection Study: Section I. Introduction (page 64); II Need Assessment (pages 65-67); III. Alternative Site Selection Process (pages 69-71); IV. Candidate Sites Description (pages 72-74); VI. Description of Site Evaluation Criteria (pages 78 & 89); and VII. Evaluation of Candidate Sites (pages 89-113). A summary of the relationship of the proposed project to relevant plans, policies and controls is further discussed below and a chart summarizing the approvals which would be required is located at the end of this section.

A. HAWAII STATE PLAN/EDUCATIONAL FUNCTIONAL PLAN - The State Educational Functional Plan, one of fourteen plans called for by the Hawaii State Plan (Chapter 226, Hawaii Revised Statutes), attempts to provide for wise use of the Department of Education’s resources and guide its future. The proposed new Kapaa Intermediate School is consistent with the Hawaii State Educational Functional Plan Policy to “Ensure the provision of adequate and accessible educational services and facilities that are designed to meet individual and community needs.” Based on existing enrollments, population projections, anticipated future developments and other factors, DOE has determined that the current Kapaa High and Intermediate School facilities are inadequate. The proposed new intermediate school will help reduce the current overcrowding within the school district and provide for adequate and accessible educational services and facilities for future student populations.

B. STATE LAND USE DISTRICT - 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 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.

Candidate Sites #1 and #4 are located within the “A” Agricultural State Land Use District and are immediately adjacent to the “U” Urban District. Site #2 is located within the “A” Agricultural State Land Use District and the parcel within which the site is located is adjacent to the “U” Urban District (see Exhibit Q).

Any uses permitted by the County are permitted within the “U” Urban State Land Use District. A school is not a generally permitted use within the “A” Agricultural District and therefore a SLUD Boundary Amendment or a Special Permit will be required if either Site #1, #2 or #4 is selected as the school location. Amendments to State Land Use District Boundaries or Special Permits involving land areas greater than 15 acres must be approved first by the County Planning Commission then by the State Land Use Commission. If the school site is to be a minimum of 18 acres as indicated by DARGS and DOE specifications, a SLUD Boundary Amendment or Special Permit will have to be processed through both agencies.

SLUD Boundary Amendments or Special Permits involving land areas of 15 acres or less require the approval of only the County land use decision-making authority. If the size of the school site
could be reduced to 15 acres or less, the SLUD Boundary Amendment or Special Permit could be processed at only the local level, which would involve less time and fewer resources.

Public Hearings for SLUD Boundary Amendments, as well as Zoning Amendments, are held by the County four times a year, in January, April, July and October. The State Land Use Commission will consider a SLUD Boundary Amendment anytime during the year. Public Hearings for Special Permits may be held at both the County and State levels anytime during the year. SLUD Boundary Amendments, Special Permits, General Plan Amendments and Zoning Amendments may be processed simultaneously.

C. COUNTY GENERAL PLAN - The County General Plan establishes the long range goals and policies which guide comprehensive development and appropriate use of land resources in the County. Public service facilities such as schools are identified as permitted uses within the Public Facilities (PF) and Urban Residential (UR) General Plan District and A General Plan designation of Urban Residential (UR) or Public Facilities (PF) is preferred for a school site. Public service facilities are also identified as permitted uses within the Rural Residential (RR) General Plan District and sites within this District are preferred over sites designated Agricultural (A), Open (O), Resort (R) or Urban Mixed Use (UMU). Although public facilities are not specifically identified as a permitted use within the Urban Mixed Use (UMU) General Plan District, a school could be considered a use consistent with the intent of this designation. Exhibit R identifies the General Plan Districts for each Candidate Site.

Site #1 has a County General Plan Designation of Agriculture (A) and a General Plan Amendment (GPA) will be required if this site is selected as the location for the New Kapaa Intermediate School.

Site #2 has a County General Plan Designation of Urban Mixed Use (UMU) and a GPA may not be required if this site is to be selected, since a school may be considered consistent with the District’s intent.

A portion of Site #4 has a County General Plan Designation of Urban Residential (UR) while the remainder of the site has a General Plan Designation of Agriculture (A). A GPA may be required over the portion of the site within the Agriculture (A) District if this site is selected. Whether or not a GPA will be required is dependant on the final site size and location, and the district boundary interpretation made by the County Planning Department.

General Plan Amendments require the approval of the Planning Commission, the County Council and the Mayor. Planning Commission Public Hearings on General Plan Amendments are held twice a year, in January and July. SLUD Boundary Amendments, Special Permits, and Zoning Amendments may be processed simultaneously with General Plan Amendments.

At the discretion of the Planning Director a project may be considered through a County Use and Class IV Zoning Permit in lieu of a General Plan Amendment and Zoning Amendment, as was the case with the Kahili Adventist School. A Use Permit requires only Planning Commission approval and Public Hearings can be held at any regularly scheduled Planning Commission meeting, generally on the second and fourth Thursday of the month.

D. REGIONAL DEVELOPMENT PLAN - Development Plans are mid range planning tools which act as guidelines and refine the General Plan to a regional level with more specific uses. Lands
designated as Public or identified as a school site on the regional Development Plan Land Use Map are preferred as a school site. Land designated Single Family or Multi Family Residential are preferred as a school site over any of the other remaining designations.

The Kapaa-Lihue Planning Area Development Plan Land Use Map identifies Site #1 and Site #4 as Single Family Residential. Site #2 is designated Public and identified as a High School site.

Regional Development Plans are used as guidelines in the County of Kauai and permits or amendments would not be required in connection with these plans. However, Regional Development Plan designations can help support State Land Use District, General Plan and Zoning Amendment requests particularly in the case of Site #2 which is identified as a High School site on the Kapaa-Lihue Planning Area Development Plan Map.

E. COUNTY ZONING DESIGNATION - The County of Kauai Comprehensive Zoning Ordinance (CZO) establishes several Zoning Districts within the County and delineates the respective types of uses permitted and development standards for each District. In addition, the DOE has expressed its preference for the establishment of schools in certain Zoning Districts. The Residential (R) and Special Treatment-Public (ST-P) Districts are preferred for school use. The Agriculture (A) and Commercial (C) Districts are preferred as a school site over the remaining other Districts.

Site #1, Site #2 and Site #4 are all within the Agriculture (A) County Zoning District and Schools are not outright permitted uses within the Agriculture (A) Zoning District. A Zoning Amendment could be required for development of a school at any of the candidate sites. A Zoning Amendment requires the approval of the Planning Commission, the County Council and the Mayor, and can be processed simultaneously with a State Land Use District Boundary Amendment, Special Permit and General Plan Amendment.

The CZO specifically identifies schools as a use which may be considered within the Agricultural (A) District through a Use Permit. As noted above, the Planning Director may determine that an application for a Use Permit can be filed in lieu of a General Plan and Zoning Amendment application.

A Class IV Zoning Permit which can be processed simultaneously with a Use Permit or Zoning Amendment will be required for development of a School at any of the candidate sites.

F. OTHER POLICIES AND CONTROLS

Special Management Area - Lands identified as within the County’s Special Management Area (SMA) are subject to the Kauai County SMA Rules and Regulations as authorized under Chapter 205A, Hawaii Revised Statutes. None of the candidate sites proposed as potential locations for the new Kapaa Intermediate School are within the SMA.

Flood Hazard - It is the policy of DOE that schools not be located within a coastal high hazard (tsunami) inundation zone or in a major flood plain if adequate drainage provisions cannot be made. None of the candidate sites are located within a tsunami inundation zone or major flood plain as identified in the Federal Flood Insurance Rate Maps (FIRM). However, a small section of the parcel within which Candidate Site #1 is located is within an area identified on the FIRM as inundated by the 100 year flood. Due to the possible presence of wetlands, Candidate Site #3
which is subject to inundation by the 100-year storm event, has been dropped from consideration as a location for the New Kapaa Intermediate School.

**Department of Health** - The State Department of Health (DOH) has established an underground injection control (UIC) program to protect the quality of underground sources of drinking water from pollution by subsurface disposal of fluids. In general, disposal of treated wastewater through injection wells may be permitted in areas located below (makai) of the UIC line established by the State Department of Health. All four candidate sites are located below the UIC line and disposal of treated wastewater through injection wells may be possible, subject to the requirements of Hawaii Administrative Rules Title 11, Chapter 23. A UIC Permit from DOH would be required for an injection well at any of the Candidate Sites.

If Site #4 is selected as the final school location, development of a well to provide domestic water may be required. Development of a well as a domestic water source requires a permit from DOH. A domestic water supply well must be located a minimum of 1/4 mile from any underground injection wells.

**G. LAND USE APPROVALS CHART** - The following chart summarizes the Land Use Amendments and Permits which would be required for establishment of a school at each of the four candidate sites.

<table>
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<th>SITE</th>
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<th>General Plan Amendment or Use Permit</th>
<th>Zoning Amend. or Use Permit</th>
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* possibly required, see discussion above
VII. PROBABLE IMPACTS

Many of the impacts which might otherwise been expected as a result of the proposed development have been eliminated through the use of the multi-level screening process described in the Site Selection Study, Section III: Alternative Sites Selection Process (pages 69-71). Use of DOE minimum criteria eliminated sites within a tsunami inundation zone, major flood plain, landslide area, and areas hazardous from the standpoint of pedestrian and traffic safety. Additional factors initially considered included ownership, proximity to infrastructure corridors, State Land Use District designation, and location in relation to population centers.

Probable impacts associated with each candidate site are discussed in detail in the Site Selection Study, Section VII: Evaluation of candidate sites (pages 89-113). Site Evaluation Criteria based on standards established by DOE are used to assess the relative merits of candidate sites as potential locations for the new school. The criteria are divided into three categories: School Site Criteria, which are used to compare physical parameters important to site development and school operation such as environmental characteristics, roadways, utilities, and access; Community Criteria which enable evaluation of school development in terms of governmental/land use compatibility and the relationship of the school to the surrounding community; and Cost Considerations 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. A rating of good, fair or poor is assigned for school site and community criteria, and dollar amount estimates are made for cost considerations.

Probable impacts which may be expected from development of the new school are further described below.

A. BENEFICIAL IMPACTS - The establishment of a new Kapaa Intermediate School will relieve the overcrowding on the current Kapaa campus and create two manageable secondary schools in the service area. Construction of the proposed School will help implement the District plan to organize the complex into a three level grade structure, as well as conform to the School District objective to remove younger adolescents from the same campus as high school students. Removal of the Intermediate School from the current Kapaa High and Intermediate School campus will also permit expansion of the High School facilities to accommodate anticipated growth in enrollment in grades 9 through 12.

Temporary employment opportunities will be provided for construction related occupations during the construction phase of the proposed project. Permanent employment opportunities in the teaching, school administration, and operation and maintenance fields will be available once the school is opened.

B. SHORT TERM IMPACTS - A temporary increase in dust and noise during construction activity can be expected at the school site. Traffic in the area may be interrupted as equipment, construction materials, and refuse are moved to and from the site. Traffic congestion and an increase in dust and noise may also occur in the vicinity of the site during construction of off-site improvements to roads, drainage facilities, utilities, and water and sewer systems.
C. LONG TERM IMPACTS - The primary long-term adverse impact expected from establishment of the new Kapaʻa Intermediate School is an increase in traffic, particularly school bus traffic, on school year weekdays during opening and closing hours. An increased demand on public facilities such as roads, water and sewer systems, utilities, and drainage facilities may occur as a result of establishment of the school. Increased demand on community services such as police and fire protection also can be expected. 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.

If either Site #1 or #2 is selected, land currently used for agricultural purposes will be used for more urban type uses. This impact is not considered to be significant due to the relatively small amount of land required for the school as compared with the size of the parcels within which the school site would be located. In addition, the proposed school sites are located adjacent to or in the vicinity of residential and other non-agricultural land uses, and establishment of a new school could be seen as a reasonable continuation and logical extension of those more urbanized areas.

Sites #1, #2, and #4 are or were until recently utilized for sugar cane cultivation and sugar cane is the primary botanical species present at these sites. No endangered plant or animal species are known or expected to be affected by establishment of a school at these locations.

The “threatened” native Hawaiian seabird, Newell’s Shearwater is known to nest in the mountains above the Wailua area. Shearwaters leaving their nests at night can become disoriented and confused by urban lights and may become exhausted or fly into unseen objects. School facilities lighting can be designed and located to minimize the attraction and confusion impacts on Newell’s Shearwater.

None of the potential school sites fall within an area identified as culturally sensitive on the County Cultural Sensitivity Maps and the sites have been historically disturbed through sugar cane cultivation and grazing activities. No archaeological, historical or cultural resources are known or expected to be present at any of the sites, however an archaeological inventory survey of the selected site will be conducted to insure that no archeological, historical or cultural resources of significance are impacted by the proposed development. Should such resources be found at the selected site, mitigation and/or preservation plans will be prepared in consultation with the State Department of Land and Natural Resources, State Historic Preservation Division, the County Planning Department, and the Kauaʻi Historic Preservation Review Commission.

D. SECONDARY, GROWTH INDUCING AND CUMULATIVE IMPACTS - The four Candidate Sites are located in the vicinity of the Kuhio Highway corridor between Wailua and the Kaaʻo Road residential development near Kealia. This area is currently developed primarily with urban land uses such as residences, commercial centers, resorts and recreational facilities with pockets of agricultural uses, primarily sugar cane cultivation. Development patterns in the area have resulted in a steady increase in urban uses with a corresponding decrease in agricultural lands. Establishment of the new Kapaʻa Intermediate School at any of the Candidate Sites will continue this trend and cumulatively contribute to the conversion of agricultural lands to more urban uses. The new school will also have cumulative impacts on the community services and public facilities of the Kapaʻa-Wailua area.

Establishment of the new school on lands currently utilized for agricultural purposes could result in increased pressure to develop adjacent agricultural lands with more urban uses. This growth-inducing impact is not expected to be significant since all four Candidate Sites are currently
adjacent to or in close proximity to urbanized developed areas. In addition, all four sites are designated for more urbanized uses in the General Plan or Regional Development Plan and it would be difficult to reclassify other agricultural lands which do not fall within an area identified for future urban growth.
IX. SHORT TERM USES VERSUS LONG TERM PRODUCTIVITY

The proposed project will result in short term impacts on the environment due to construction activities, will convert agricultural lands to a more urbanized use and will result in increased demands on public facilities and community services. These impacts are considered minimal when compared with the long-term benefits of providing high quality, accessible educational opportunities to the community in compliance with the State Educational Functional Plan.

Use of the selected site for the new school will result in a long-term commitment of the land to school use which will foreclose other uses of the site such as agriculture, recreation, open space, residential, or commercial. Due in part to the relatively small land area involved and the benefits of providing enhanced educational opportunities, the foreclosure of other land use options is not considered a significant adverse impact.

IX. IRREVERSIBLE COMMITMENTS OF RESOURCES

The land resources of the selected site will be, for all practical purposes, irreversibly and irrevocably committed to school use. Capital, labor, energy and materials used during the construction phase of the project will be irretrievably committed to school use. Labor, energy, equipment, public facilities and community service resources required for school operation and maintenance will be committed to school use once the project is completed.
X. UNAVOIDABLE ADVERSE EFFECTS

A temporary increase in dust, noise and traffic congestion can be expected during the construction phase of the project. This impact will be a minor, short term inconvenience and will be minimized by the use of dust abatement techniques and limitations on the hours of construction activity.

Once the new school is opened, an increase in traffic in the vicinity of the school site, particularly during the hours of school opening and closing, can be expected. An increased demand on public facilities and community services and periodic increases in noise levels due to school activities are also expected. These impacts will be minimized through provision of improvements to roads, water systems, sewer systems and drainage facilities if required. School facilities can be designed and located to minimize conflicts with the surrounding community and agricultural activities. Walls, fences and landscaping can be incorporated into project plans to help screen and buffer school accessways, buildings and play areas.

The benefit of providing a high quality, accessible educational opportunity for current and future students outweighs the relatively minor adverse impacts associated with the project. Regardless of the location of the new school site, or if the current school facilities were to continue to serve intermediate level students, student populations would increase and many of the impacts would occur at some location.
XI. MITIGATION MEASURES

Use of the multi-level screening process described in the Site Selection Study, Section III. Alternative Sites Selection Process (pages 69-71) served to minimize or mitigate many of the adverse impacts which might otherwise have been expected from the proposed project. Use of DOE minimum criteria eliminated sites within a tsunami inundation zone, major flood plain, landslide area, and areas hazardous from the standpoint of pedestrian and traffic safety. Additional criteria also were used to help insure that the adverse impacts associated with potential school locations were minimized such as single property ownership, proximity to infrastructure corridors, location within or adjacent to the Urban State Land Use District and proximity to population centers.

Mitigation measures which will further eliminate or minimize adverse impacts associated with the proposed project are described in Part III, the Site Selection Study, Section VII: Evaluation of Candidate Sites (pages 89-113). In estimating the comparative costs associated with development of each site, the cost considerations subsection, on-site and off-site improvements (pages 99-103), identifies improvements which may be required to mitigate or minimize adverse impacts on public facilities, community services and the surrounding environment.

Other mitigation measures which may be required are discussed below.

A. CONSTRUCTION ACTIVITY - Mitigation measures proposed to minimize the temporary adverse impacts associated with construction activity include the use of dust abatement techniques such as dust screens, watering, and conformance with County Grading Ordinance and State Department of Health requirements. Limitations on the hours of construction activity will help minimize the impacts of noise and traffic congestion on the local community.

B. VEHICULAR TRAFFIC IMPACTS - As noted above under Section V.B. Candidate Sites, the shaded candidate school site locations within the larger parcels identified in Exhibits H through K are conceptual in nature and can be refined or modified once a final site is selected. The school buildings, accessways and play areas can be designed, located and orientated in a manner that avoids or minimizes the impacts on the school from dust, noise and exhaust fumes generated by vehicular traffic traveling on nearby roads. Landscaping, walls and fencing can be incorporated into the school design to help screen the school facilities from the impacts of vehicular traffic.

C. ADJACENT LAND USE - The final school site location also can be refined and the school facilities orientated to avoid or minimize the impacts of noise from school activities on nearby residences. If a site is selected where sugar cane continues to be cultivated, site location and facilities orientation can be designed to minimize conflicts with sugar cane operations. In addition, it is anticipated that many sugar cane operations which could disrupt school functions can be scheduled during times when school is not in session.

D. HIGH VOLTAGE LINES - If Site #2 or Site #4 is selected, the precise location of the 18 acre school site and the school facilities within the site can be located a sufficient distance from high voltage electrical lines so that students, teachers and others at the school are not impacted by electromagnetic radiation. The precise distance from the high voltage electrical lines and
orientation of the facilities can be determined in consultation with DOH. Placement of lines underground in the vicinity of school buildings and play areas also may be considered.

E. HIGHWAYS AND ROADS - Existing conditions and measures proposed to mitigate adverse impacts associated with traffic and roadways are discussed in the Site Selection Study under Roads and Utilities, Accessibility, and Off-site Improvements (pages 90, 92, 103 and 113). In addition to the impacts discussed in Part II the Site Selection Study, Site #1 and Site #2 could be impacted in the future by traffic travelling along the Department of Transportation’s contemplated highway bypass through the Wailua-Kapaa area.

As noted above, the shaded candidate site areas within the site parcels are conceptual and can be refined or modified to accommodate the most appropriate school facilities layout once a final site is selected. Although all feasible Wailua-Kapaa highway bypass alternative alignments pass through the Candidate Site #1 parcel (TMK:4-3-0206), the 286.9 acre parcel contains many potential locations for the proposed 18 acre school site.

The flexibility in site location also applies to Candidate Site #2 which may be affected by the bypass alignment. The suggested location of Site #2 within the candidate parcel is situated on the higher plateau area of the site, and is not likely to be impacted directly by the proposed bypass alignment alternatives. However, if either Site #1 or #2 is selected as the final school site, the precise location and orientation of the school facilities will be coordinated with the Department of Transportation (DOT) to insure compatibility with the Wailua-Kapaa highway bypass if one is to be constructed.

If it is determined to be necessary once the final site is selected, a traffic impact analysis will be prepared and submitted for DOT and County of Kauai Public Works Department review. All plans for construction work within the State highway and County Road right-of-way will be prepared during the school facilities design phase and will be submitted for DOT and the County Public Works Department review. Physical construction of any roadway or highway improvements can be scheduled during the summer months, when schools are not in session and traffic congestion is relatively lighter.

F. DRAINAGE - On-site and off-site improvements may be required to mitigate the impact of storm water flows resulting from an increase in impermeable surfaces if either Site #1 or #4 is selected. Topography and surrounding conditions at Site #2 are such that storm flows can be safely accommodated without significant improvements beyond those required for standard on-site school facilities. Site #3 has been dropped from consideration as a potential location for the new Kapaa Intermediate School.

Drainage for Sites #1, and #4 is discussed in the Evaluation of Candidate Sites section under Drainage/Flood on page 100. Drainage improvements which are anticipated to be required are described in the Cost Considerations section under Drainage (on-site) on pages 102 and 113 and Drainage (off-site) on pages 106 & 107. Once a final site is selected, the details of necessary drainage improvements will be developed in consultation with the County Department of Public Works.

G. FLORA AND FAUNA - Sites #1, #2 and #4 are or were until recently utilized for sugar cane cultivation and sugar cane is the dominant plant species present. Due to the possible presence of
wetlands, Site #3 is no longer being considered as a location for the new school. No rare, threatened or endangered plant or animal species are known or expected to inhabit any of the three potential school sites.

The native Hawaiian seabird, Newell's Shearwater, listed as “threatened” under the Federal Endangered Species Act, is known to nest in the interior mountains above the Wailua area. Shearwaters leaving their nests at night can become disoriented and confused by urban lights and may become exhausted or fly into unseen objects such as utility wires, trees, buildings and automobiles. School facilities lighting can be designed and located to minimize the attraction and confusion impacts on Newell's Shearwater. Avoidance of situations where light glare projects upward or laterally, particularly during the critical fallout period of October and November, will minimize adverse impacts on this unique species.

H. ADDITIONAL MEASURES - Additional measures proposed to mitigate potential adverse impacts associated with the project are described below under Unresolved Issues.
XII. UNRESOLVED ISSUES

For the most part the issues which remain unresolved are dependant on which candidate site is selected as the final school location. The following paragraphs describe the unresolved issues and the means proposed for their resolution and mitigation.

A. WASTEWATER - Although Sites #1 and #2 are located in proximity to existing or proposed sewer lines, the County Department of Public Works has indicated that existing and proposed system capacity has not been allocated for a new school. However, there is a possibility that system capacity could become available if those projects for which capacity has been allocated are canceled or capacity is reallocated through negotiations between State and County Agencies.

Should Site #1 or #2 be selected for the new intermediate school location, DADS will make every effort to obtain the necessary approvals to connect to the public sewer system. If the County determines that system capacity cannot be made available for school use, any site selected would require a separate wastewater treatment works.

The County of Kauai Department of Public Works has indicated that there is no public sewer system available to serve Site #4 and no expansion of the existing Kapaa system is planned for the foreseeable future. Should Site #4 be selected, all options for connection to a public sewer system would be re-examined and pursued with the County. However, if Site #4 is selected and no means of connection to a public system can be found, there would be no alternative but to construct a wastewater treatment works.

If Site #4 is selected, or if public sewer capacity cannot be made available to serve Site #1 or #2, a wastewater treatment works will be constructed in conformance with the requirements of DOH Administrative Rules Chapter 11-62, Subchapter 2.

B. CULTURAL RESOURCES - None of the potential school sites are identified as culturally sensitive on the County Cultural Sensitivity Maps and the sites have been historically disturbed through sugar cane cultivation and grazing activities. No archaeological, historical or cultural resources are expected to be present at any of the sites, however an archaeological inventory survey of the selected site will be conducted to insure that no archeological, historical or cultural resources of significance are impacted by the proposed development. Should such resources be found at the selected site, mitigation and/or preservation plans will be prepared in consultation with the State Department of Land and Natural Resources, State Historic Preservation Division, the County Planning Department, and the Kauai Historic Preservation Review Commission.

C. SECONDARY ROAD ACCESS - It is preferred that a school site be served by more than one road for pedestrian and vehicular access. Potential secondary accesses for Sites #1 and #4 are identified under the Candidate Sites Description in the Environmental Setting Section above. As
nated, development of the potential secondary accesses could require further study and negotiations with government agencies and landowners. Site #2 is surrounded by sugarcane fields and there does not appear to be a feasible alternate route other than via Oloheoa Road. The decision regarding alternative access routes will be made once a final site is selected, during the project design phase. If it is determined to be necessary once the final site is selected, a traffic impact analysis will be prepared and submitted for DOT and County of Kauai Public Works Department review.
XIII. CONSULTATION LIST

The following agencies, organizations, and individuals were consulted during the preparation of the Draft Environmental Impact Statement and Site Selection Study.

FEDERAL
Department of the Army
U.S. Army Engineer District, Honolulu
Building 230
Fort Shafter, HI 96858

Fish and Wildlife Service
U.S. Department of Interior
P.O. Box 50004
Honolulu, HI 96850

Soil Conservation Service
U.S. Department of Agriculture
P.O. Box 50167
Honolulu, HI 96850

STATE OF HAWAII
Department of Agriculture
1428 S. King Street
Honolulu, HI 96814

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

Department of Hawaiian Home Lands
3060 Ewa Street
Lihue, HI 96766

Department of Health
P.O. Box 3378
Honolulu, HI 96801

Department of Land and Natural Resources
1151 Punchbowl
Honolulu, HI 96813

Department of Transportation
869 Punchbowl Street
Honolulu, HI 96813

Kauai Community College
Pahi
Lihue, HI 96766
Office of Environmental Quality Control
220 South King Street
Fourth Floor
Honolulu, HI 96813

University of Hawaii
Environmental Center
2550 Campus Road
Crawford 3127
Honolulu, HI 96822

COUNTY OF KAUAI
Department of Water
P.O. Box 1706
Lihue, HI 96766

Department of Public Works
3021 Umi Street
Lihue, HI 96766

Economic Development Board
4444 Rice Street
Lihue, HI 96766

Fire Department
4223 Rice Street
Lihue, HI

Office of the Mayor
4396 Rice Street
Lihue, HI 96766

Planning Department
4280 Rice Street
Lihue, HI 96766

UTILITY COMPANIES
Citizens Utilities Company
Kauai Electric Division
P.O. Box 278
Elelele, HI 96705

GTE Hawaiian Tel
4444 Rice Street
Lihue, HI 96766
BUSINESSES AND ORGANIZATIONS

AMFAC JMB
P. O. Box 3230
Honolulu, HI 96801

Kapaa Elementary School PTSA
4886 Kawaihau Road
Kapaa, HI 96746

King Kaumualii Elementary School PTA
4380 Hanamaulu Road
Lihue, HI 96766

Life of the Land
2500 Pali Highway
Honolulu, HI 96817

Lihue Plantation Company
2970 Kele Street
Lihue, HI 96766

The Sierra Club, Hawaii Chapter
P. O. Box 11070
Honolulu, HI 96828

INDIVIDUALS

The Honorable James Aki, Senator
State Office Tower, Room 302
Honolulu, HI 96813

Manuel Andrade Jr.
P.O. Box 146
Kalaheo, HI 96741

The Honorable Peter Apo, Representative
State Office Tower, Room 1309
Honolulu, HI 96813

Lincoln Y. T. Ching
6116 Opaeka Road
Kapaa, HI 96746

The Honorable Ezra Kanoho, Representative
State Office Tower, Room 1211
Honolulu, HI 96813

The Honorable Lehua Fernades Salling, Senator
State Office Tower, Room 300
Honolulu, HI 96813
XIV. COMMENTS AND RESPONSES

The following lists include agencies, organizations, and individuals that were notified during The Preparation Notice of The Environmental Impact Statement and Site Selection Study process. A total of nine comment letters were received and those agencies can be found below. The comment letters and responses to substantive comments are reproduced in this section.

FEDERAL AGENCIES
1. Department of the Army, U. S. Army Engineering District, Honolulu

STATE AGENCIES
1. Department of Education
2. Department of Health
3. Department of Land and Natural Resources, Historic Preservation Division
4. Department of Transportation
5. Office of Environmental Quality Control

COUNTY AGENCIES
1. Department of Public Works
2. Department of Water

ORGANIZATIONS
1. Kapaa Elementary School PTSA

The following agencies, organizations, and individuals were provided copies of The Environmental Impact Statement Preparation Notice during the consultation phase but sent no response.

FEDERAL AGENCIES
1. Soils Conservation Service
2. Fish and Wildlife Service

STATE AGENCIES
1. Department of Agriculture
2. UH Environmental Center
3. Kauai Community College

COUNTY AGENCIES
1. Department of Planning

ORGANIZATIONS and INDIVIDUALS
1. American Lung Association
2. Kauai Electric Co.
3. Hawaiian Telephone Co.
4. King Kaumualii Elementary School PTA
5. The Sierra Club
6. Life of the Land
7. Amfac JMB Hawaii
8. Senator James Aki
9. Senator Fernades Salling
10. Representative Peter Apo
11. Representative Ezra Kanoho
DEPARTMENT OF THE ARMY
U. S. ARMY ENGINEER DISTRICT, HONOLULU
P.O. BOX 119
HONOLULU, HAWAII 96810

August 21, 1992

Planning Division

Mr. Huen S. Negata
State Comptroller
State of Hawaii
Department of Accounting
and General Services
P.O. Box 119
Honolulu, Hawaii 96810

Dear Mr. Negata:

Thank you for the opportunity to review and comment on the Site Selection Report and Environmental Impact Statement Preparation Notice (EIS) for the New Kapaa Intermediate School, Kapaa. 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 Acts, the Rivers and Harbors Act of 1936, and the Marine Protection, Research and Sanctuaries Act.

a. We recommend that the EIS provide botanical and hydrologic descriptions of each site. Wetlands may be present at Site 3 where hydric soils and vacant or grazing lands are present. A wetland determination/delineation should be performed and submitted to Operations Division for review. If Site 3 is selected and construction involves fill in wetlands, a DA permit would be required.

b. According to the Federal Emergency Management Agency's Flood Insurance Rate Map, Panels 150002-0130C, 0130-C, and 0140-C, all dated March 4, 1987 (copies enclosed), the sites are all located in Zone X - unspecial (areas determined to be outside of the 50-year flood plain).

Sincerely,

[Signature]
Director of Engineering

Enclosures
wetlands be avoided as possible sites will be added to the
evaluation criteria and Site 3 will be assigned a rating of
"poor" in this category. The possible presence of wetlands at
Site 3 will also be included in the body of the report.

Since Site 3 is already included in the Site Selection
Study, it must continue to be rated. As indicated earlier,
however, Site 3 will not be considered as acceptable due to
the possible presence of wetlands and it will be noted as such
in the report.

If you have any questions on this matter, please have
your staff contact Mr. Stanley Ichikawa of the Planning Branch
at 586-0487.

Very truly yours,

[Signature]

GORDON MATSUDA

State Public Works Engineer

ST:jk
TO: Mr. Gordon Natsunoa, Public Works Engineer
Division of Public Works, DGS

ATTN:

FROM: Alfred K. Suga, Assistant Superintendent
Office of Business Services

SUBJECT: Preparation Notice of Environmental Impact Statement (EIS) and Site Selection Study
for a New Kapaa Intermediate School

We have reviewed the subject preparation notice for the proposed new intermediate school in Kapaa and have no consent to offer regarding the document.

The Department of Education (DOE) is interested in the completion of the final environmental impact statement as soon as legally possible in order to be able to make a site selection and begin planning for the new school. Achieving the projected opening date of September, 1994, is of great importance to the DOE to alleviate the severe enrollment problems at the existing Kapaa High and Intermediate School.

Please refer any questions or comments to the Facilities Branch at 737-4763.

ACKS:
C. Toguchi
S. Akita
The Keith Companies

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

Wastewater

There are four possible sites for the new Kapaa Intermediate School. The Department of Health (DOH) Administrative Rules, Chapter 11-62, "Wastewater Systems", requires all developers to ensure the public sewer whenever they are within existing sewer systems. In addition, new availability of treatment capacity will not be an acceptable justification for use of any private treatment works.

As Site #1 is within the existing sewer line, which runs along Pupukoa Road, this is the best possible choice from a wastewater standpoint.

Sites #2 and #3 are within reasonable distances to the vicinity of the Kapaa Wastewater Reclamation Plant. System improvements are currently under construction and scheduled for completion in 1996. This will bring the sewer line to Ohikilolo Road, and as such, is our second preference.

Lastly, since there is no sewage collection system available to serve Site #4, and there is no scheduled expansion of the Kapaa system in the future, we would not recommend Site #4.

We would have to subject all of these proposed New Kapaa Intermediate School sites to the public sewers.

The developer should work closely with the County to ensure the availability of additional treatment capacity and adequacy for the project.

If you should have any questions on this matter, please contact Ms. Lori Kajiwara of the Wastewater Branch at 366-4290.
The Honorable James Takushi  
September 8, 1992  
Page 2  

Other Comments:

1. All four sites may be affected by the dust, noise, and exhaust fumes generated by the vehicular traffic traversing Koko Highway, Oheka Road, and the area has roads.

2. Traffic associated with school functions and activities may impact the nearby residents if Site 1 (Wai'anae, Koko Highway) or Site 4 (Kane'ohe, Kailua) is selected.

3. Sites #1 and #2 (Koko, Oheka Road) are situated near a near site and will be impacted by the dust, smoke, noise, and exhaust fumes generated by the heavy equipment and vehicles used for major road planning, grading, and harvesting operations.

4. Sites #1 and #2 have high voltage electrical lines running along the property. Electromagnetic radiation from the lines may impact the students, teachers and others at the proposed school should either of the sites be selected. This concern needs to be addressed in the EIS.

5. Site #3 may be subject to flooding during heavy rainstorms. The Kekaha Transfer Station (former Kekaha Landfill Site) is located across from Site #3 on the makua side of Kau Road. Stormwater runoff from the solid waste facility site flows across Kau Road and drains into the proposed school site during heavy rainstorms.

6. Site #4 may be impacted by flow and odor from the above-mentioned transfer station.

7. The proposed school shall meet the minimum requirements of DOH Administrative Rules, Chapter 11-11, “Nutrition”, and Chapter 1-4, “Food Service and Food Establishment.”

8. The school site selected may have rodents which will be dispersed to the surrounding area when the property is cleared. In accordance with DOH Administrative Rules, Chapter 11-26, “Vector Control”, the applicant shall ascertain the presence or absence of rodents on the property. If the presence of rodents shall be detected, the applicant shall eradicate the rodents prior to clearing the site.

9. Effective soil erosion and protective dust control measures shall be implemented by the applicant during all phases of development.

10. Graded material shall be disposed of at a solid waste disposal facility that is permitted by the DOH. Open burning of the material is prohibited.

Due to the general nature of the proposed project, we reserve the right to impose further environmental health restrictions when more detailed information is submitted.

If you have any questions regarding these comments, please contact Mr. Clyde Takehuma of the Kauai District Health Office at 241-2120.

Wastewater

1. Approximately half of the comments submitted concerned wastewater which is also a primary concern of the Department of Accounting and General Services (DAGS). In your comment letter, Department of Health (DOH) Administrative Rules, Chapter 11-22-36(b) requires that all buildings generating wastewater and located within or near proximity of an available public sewer system as determined by the director, shall connect to the public sewer. The site selection study document Page 27 (Evaluation of Candidate Sites: Sewer) and Page 36 (Cost Considerations: Sewer) states that although Sites 1, 2, and 3 are located in near proximity to existing or proposed sewer lines, the County Department of Public Works has indicated that existing and proposed system capacity has not been allocated for a new school. However, there is a possibility that system capacity could become available if those projects for which capacity has been allocated are canceled or capacity is reallocated through negotiations between State and County agencies.

Honorable John Lewis  
Director  
Department of Health  
State of Hawaii  
Honolulu, Hawaii  

Dear Dr. Lewis:

Subject: New Kapaa Intermediate School  
EIS: Preparation Notice and Site Selection Study

Thank you for reviewing the above document and submitting the comments contained in your September 8, 1992 letter. The following is a discussion of the comments contained in your letter:

Wastewater

1. Approximately half of the comments submitted concerned wastewater which is also a primary concern of the Department of Accounting and General Services (DAGS). In your comment letter, Department of Health (DOH) Administrative Rules, Chapter 11-22-36(b) requires that all buildings generating wastewater and located within or near proximity of an available public sewer system as determined by the director, shall connect to the public sewer. The site selection study document Page 27 (Evaluation of Candidate Sites: Sewer) and Page 36 (Cost Considerations: Sewer) states that although Sites 1, 2, and 3 are located in near proximity to existing or proposed sewer lines, the County Department of Public Works has indicated that existing and proposed system capacity has not been allocated for a new school. However, there is a possibility that system capacity could become available if those projects for which capacity has been allocated are canceled or capacity is reallocated through negotiations between State and County agencies.
2. Should Site 1, 2 or 3 be selected for the new intermediate school location, DASG will make every effort to obtain the necessary approvals to connect to the public sewer system. If the County determines that system capacity cannot be made available for school use, any site selected would require an on-site wastewater treatment facility.

3. The County Department of Public Works has indicated that there is no public sewer system available to serve Site 4 and no expansion of the existing system is planned for the foreseeable future. Should Site 4 be selected, all options for connection to a public sewer system would be re-examined and pursued with the County. However, if Site 4 is selected and no means of connection to a public system can be found, there would be no alternative but to construct an on-site wastewater treatment facility.

4. If Site 4 is selected or if public sewer capacity cannot be made available to serve Site 1, 2 or 3, a wastewater treatment facility will be constructed in strict conformance with the requirements of DSH Administrative Rules, Chapter 11:49, Subchapter 2.

5. Your preference for Sites 1, 2 and 3 along with your recommendation against Site 4 is noted and will be considered during the selection of the final site.

Other Comments

1. As noted on Page 8 of the Site Selection Study, Candidate Site Description section, the shaded area within the site parcels are conceptual and can be refined or modified to accommodate the school facilities layout once a final site is selected. Once a site is selected, the precise location and orientation of the school facilities will be designed to avoid or minimize the impact of dust, noise and exhaust fumes generated by vehicular traffic traveling Kuhio Highway, Obhena Road and cane haul roads. Landscaping, walls and fencing can be incorporated into the school design to help screen the school facilities from the impacts of vehicular traffic.

2. As noted above, the precise location and orientation of the school site can be modified to avoid or minimize adverse impacts. If Site 1, 3 or 4 is selected as the final school site, the school facilities will be located and designed to minimize the impacts of noise and from school activities on nearby residences. Fencing, walls and landscaping can be used to help achieve this objective if required.

3. As with Comments 1 and 2 discussed above, if Site 1 or Site 2 is selected as the final school location, the school facilities will be located and designed to minimize conflicts with nearby sugar cane cultivation. In addition, it is anticipated that many sugar cane operations which could disrupt school functions can be scheduled during times when school is not in session.

4. If Site 2 or Site 4 is selected, the precise location of the 18-acre school site and the school facilities within the site will be located a sufficient distance from the high voltage electrical lines so that students, teachers and others at the school are not impacted by electromagnetic radiation. The precise distance from the high voltage electrical lines and orientation of the facilities will be determined in consultation with DSH. Placement of lines underground in the vicinity of school buildings and play areas also may be considered. The above considerations will be included in the EIS.

5. Drainage conditions associated with Site 3 are discussed in the Site Selection Study on Pages 27 and 28 (Evaluation of Candidate Sites: Drainage) and on Page 30, (Cost Considerations: Drainage, Site 3). Substantial drainage improvements will be required to mitigate the adverse impacts of stormwater flows if Site 3 is selected for the school location. If Site 3 is selected, the drainage system can be designed to intercept stormwater runoff which may enter the site from the solid waste facility across Apana Road and convey it via underground culvert or fenced channel.

6. Page 36 of the Site Selection Study (Evaluation of Candidate Site: Industrial and Agricultural Hazards) indicates a rating of Fair for Site 3 in this category due to the potential for periodic nuisances from the nearby solid waste transfer site. Mitigation measures including landscaping, fencing, appropriate building and play area siting, and design
Honorable John Lewis
Page 4

and drainage improvements along Apopo Road can be
provided to minimize adverse impacts from the transfer
station if Site 3 is selected.

7-10. Regardless of the site selected all appropriate DOH
requirements will be adhered to (including those
regarding sanitation and food services, vector
control, control of soil erosion and dust during
construction, and disposal of grubbed material). It
is understood that these requirements are applicable
to all developments and DASH and DOE have consistently
insured that they are incorporated into construction
and operation plans under their administration.

Many factors must be considered in selecting an appropriate
location for any new school. Please be assured that protecting
the health and safety of the new Kapa Intermediate School
students, faculty and staff, and the surrounding community
remains one of the priorities of DASH and DOE.

Please have your staff contact Mr. Stanley Ichikawa of the
Public Works Division at 586-0487 if you have any questions or
additional comments.

Very truly yours,

ROBERT P. TAKUSHI
State Comptroller

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
STATE HISTORIC PRESERVATION DIVISION
250 SOUTH KING STREET, 3RD FLOOR
HONOLULU, HAWAII 96813

October 26, 1992

TO: Mark Yamane, Department of Accounting and General
Services

FROM: Don Hibbard, Administrator
State Historic Preservation Division

SUBJECT: Historic Preservation Review -- Preparation Notice of
the Environmental Impact Statement and Site Selection
Study for the New Kapa Intermediate School

A review of our records show that there are no known historic
sites at these four proposed project locations. However, the
area is known to contain numerous historic sites such as
agricultural terraces, walls, etc. We understand that after
the applicants have chosen a site area an archaeological
inventory survey will be completed.

For your information, for this project to be in compliance with
Chapter 66, once a project site is chosen, an archaeological
inventory survey must be done to identify significant historic
sites. If any significant historic sites are present, then an
acceptable mitigation plan for their treatment must be approved
by our office.

Please contact Ms. Nancy McMahon at 587-0006 once site area is
selected.

NM: to

c: George Kalsik, Keith Companies - Hawaii
TO:  
Rex D. Johnson, Director  
Department of Transportation  
State of Hawaii  
Honolulu, Hawaii  

FROM:  
Robert F. Furlong  
Deputy Director  
Department of Accounting and General Services  

SUBJECT:  
ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE AND SITE SELECTION STUDY FOR THE NEW KAPAʻA INTERMEDIATE SCHOOL, KAUAI, TNR: 4-3-02; 4-4-03; 4-5-15; 4-7-04  

Thank you for your letter of August 5, 1992, requesting our review of the subject study.  

We have the following comments:  

1. Our planned highway improvements through the Kapaʻa area would be affected as follows:  
   a. Candidate Site No. 1 is likely to have a direct impact on the proposed Kapaʻa bypass highway as all feasible bypass alternative alignments pass through the site parcel.  
   b. Candidate Site No. 2 may have a minor impact since bypass alternative alignments pass just east of the site parcel boundary.  
   c. Candidate Sites No. 3 and 4 will not impact the bypass alternative alignments.  

2. A traffic impact analysis for the selected school site should be prepared and submitted for our review and approval.  
   a. The analysis should evaluate impacts to our facilities and propose mitigation measures.  

3. Plans for construction work within the State highway right-of-way must be submitted for our review and approval.  

   a. Although all feasible bypass alternative alignments pass through the site parcel (TNR 4-3-02-04), the 280.9-acre parcel contains many potential locations for the proposed 150-acre school site.  
   b. The flexibility in site location also applies to site 2 which may be impacted by the bypass alignment.  
   c. If either site 2 or 3 is selected as the final school site, the precise location and orientation of the school facilities will be...
coordinated with the Department of Transportation (DOT) and designed in a manner that avoids or minimizes adverse impacts associated with the Kapaa bypass highway.

2. Traffic Analysis Report

a. If it is determined to be necessary once the final site is selected, a traffic impact analysis will be prepared and submitted for review by the County and the DOT.

b. All plans for construction work within the State highway and County road right-of-way will be prepared during the school facilities design phase and will be submitted to the DOT and the County Public Works Department for review.

We would like to assure you that the Department of Accounting and General Services will work with DOT Highway Division to ensure that traffic generated by the school will be compatible with existing and proposed circulation patterns.

Please have your staff contact Mr. Stanley Ichikawa of the Public Works Division at 586-0487 if you have any questions or further comments regarding this project.

Very truly yours,

ROBERT P. TAKUSHI
State Controller
Mr. Gordon Matsuoka  
State Public Works Engineer  
Department of Accounting and General Services  
Division of Public Works  
P.O. Box 319, Honolulu, Hawaii 96810

August 19, 1992

Dear Mr. Matsuoka:

Subject: Environmental Impact Statement Preparatory Notice and Site Selection Study for the New Kapaa Intermediate School

Thank you for the opportunity to review the subject document. We have the following comments:

1. Please consult with the landowners and lessees of the candidate sites for the New Kapaa Intermediate School during the Environmental Impact Statement Process.

If you have any questions, please call Jeyan Thirugnanam at 586-4185.

Sincerely,

Brian J. J. Choy  
Director

cc: George Kalaisik  
The Keith Companies – Hawaii

---

Mr. Brian J. J. Choy  
Director  
Office of Environmental Quality Control  
Central Pacific Plaza  
230 South King Street, 4th Floor  
Honolulu, Hawaii 96813

Dear Mr. Choy:

Subject: New Kapaa Intermediate School  
EIS Consultation Phase  
DADG Job No. 14-16-4838

Thank you for your August 19, 1992 comments on the subject project. In your correspondence, it is recommended that landowners and lessees of the candidate sites be consulted during the EIS process. Libus Plantation Company, the owner of Sites 1, 2, and 4, was contacted regarding the Site Selection Study and company representatives attended the community informational session held in Kapaa on November 26, 1991. We will continue to consult with the landowners throughout the EIS process. A copy of the Preparation Notice of the Site Selection Study will be sent to the company. The EIS and Site Selection Study will be sent to the company. The EIS and Site Selection Study will be sent to the company.

If you have any questions or additional comments regarding this letter, please have your staff contact Mr. Brian Major of the Planning Branch at 586-0485.

Very truly yours,

Gordon Matsuoka  
State Public Works Engineer
Department of Accounting & General Services
1151 Punchbowl Street
P.O. Box 119
Honolulu, Hawaii 96818

ATTENTION: MR. HARRY YAMADA

Gentlemen:

RE: NEW KA'APA INTERMEDIATE SCHOOL
EIS CONSULTATION PHASE

Reference is made to your letter dated August 8, 1992 which requests our review and comments on the Site Selection Report and EIS Preparation Notice for the subject project.

Sites being evaluated for the new Ka'apa Intermediate School is similar to those identified for the Ka'apa Elementary School. Our comments for the intermediate school are similar to the elementary school with appropriate correlation to the site numbers identified in each report. Enclosed for your convenience is a copy of our comments made for the elementary school site.

Thank you for the opportunity to offer our comments.

Very truly yours,

ED RENAUD
Deputy County Engineer

July 20, 1992

Gentlemen:

RE: KA'APA ELEMENTARY SCHOOL
EIS CONSULTATION PHASE

As requested in your letter dated July 7, 1992 we are submitting our written comments on the subject project.

1. VEHICLE AND PEDESTRIAN ACCESS AND DRAINAGE

The sites investigated in the report will have access to County roadways that have poor roadway geometrics, such as

- seven feet or less, sharp curvatures, steep grades, and narrow
- unimproved earth and grass shoulders. We would expect vehicle
- and pedestrian access problems along all of the County
- roadways that will be used as an access way to each of the sites.

- The narrow right of way with more bus traffic, the narrow right of way with less traffic and
- does not provide sufficient width to develop traffic on
- parking lanes and also, a curb, gutter and sidewalk area that
- parking lanes and also, a curb, gutter and sidewalk area that
- is necessary for pedestrian traffic. Sharp curvatures, and
- is necessary for the roads and streets in existing
- use of County road and streets in line 3, 4, and
- residents streets. Residents may be impacted by the

- rough, unimproved
- rough, unimproved
- rough, unimproved
increase in traffic and its consequences such as noise, dust and vehicle emissions.

We are also concerned with sites selected which can only be reached by one main roadway. We believe that alternate routes should be developed and made available for motorists and pedestrians to reach a site.

The development of the site with impermeable surfacing will increase storm water flows. We are concerned especially with site 4 and 5 where increased storm water flows may impact existing residential units.

2. **WASTEWATER DISPOSAL**

The paragraph on page II-9 is not accurate. It is not an established fact that upon completion of the main sewer line in Espana town, the proposed school sites can connect to the system. In fact, none of the five proposed sites are within the designated service area of the existing Walla Walla Wastewater Treatment Plant. The capacity of the Treatment plant is projected to be utilized by the areas adjacent to the existing sewer lines, including the Espana lines presently under construction.

The evaluation of the candidate sites, Appendix C, more accurately portrays the situation as all sites are rated "poor" for sewage; the five sites have no sewer service and would require the construction of a sewage treatment facility. Unless a specific exception is made to allow any of the sites to connect to the County's system, such shall be the case.

Site 3 is adjacent to IDEA's low income housing project, which has received approval to connect to the public sewer system, although outside of the current service area of the treatment plant. It is improbable that approval will be given by the Department of Health to construct another treatment plant when the existing is to be abandoned primarily due to its ineffectiveness.

The first paragraph on page V-7 mentions the possibility of the State working with IDEA to construct a transmission line. The construction plans for that proposed transmission system is presently being reviewed by this Department.

We are unable to locate in the report any projections of wastewater quantity.
Mr. Ed Renaud  
Deputy County Engineer  
County of Kauai  
Department of Public Works  
3021 Umi Street  
Lihue, Hawaii 96766  

Dear Mr. Renaud:

Subject: New Kapaa Intermediate School  
EIS Consultation Phase  
EMGS Job No. 14-16-4826

Thank you for your August 17, 1992 comments on the subject project. In your comments, it was indicated that since the sites under consideration for the proposed new Kapaa Elementary School are similar to the sites being considered for the new Kapaa Intermediate School, your July 20, 1992 comments regarding the elementary school should also be applied to the intermediate school.

Please note that only three of the four candidate sites identified as potential locations for the new Kapaa Intermediate School are similar to sites being considered for the new elementary school. The following comments are provided on this matter:

1. Elementary school Site 1 is similar to intermediate school Site 2.
2. Elementary school Site 3 is similar to intermediate school Site 3.
3. Elementary school Site 5 is similar to intermediate school Site 1.
4. Only comments contained in your July 20, 1992 letter which are relevant to the intermediate school candidate sites will be addressed.

5. If you have any additional comments concerning Site 4 for which there is no corresponding elementary school site, please submit them as soon as possible.

The following responses are provided on the other County comments:

1. Vehicle and Pedestrian Access

Two sites use County roadways that have poor roadway geometrics with the potential for vehicle and pedestrian access and safety problems. Candidate Sites 2 and 3 gain access via County roadways (Oloheka Road and Apopo Road) which may require improvements, and dedication, purchase or condemnation of additional right-of-way should either of these sites be selected. Problems with these roadways are recognized in the Evaluation of Candidate Sites section of the Site Selection Study under Roadways and under Accessibility. The improvements anticipated to be required are discussed under the Cost Consideration section under Roadways. As noted by the report, the comparative land value figures for site acquisition include the amount of land required for off-site roadway improvements. Specific details regarding County road improvements will be developed in consultation with your department once a final school site is selected.

The use of County roads for access to school Site 3 will generate more passenger and bus traffic onto existing residential streets. Should Candidate Site 3 be selected traffic would increase in the vicinity of the Kali Road Hawaiian Housing Authority (HHA) residential development. The resulting increase in traffic noise, dust and vehicle emissions could represent a nuisance to residents of the development. However, these impacts would only be experienced primarily on weekdays during the school year at the opening and closing hours of the school day. The other three Candidate Sites would gain primary access off of Kuhio Highway or Oloheka Road and should not result in increased traffic on existing residential streets.

It is suggested that alternate routes be developed for those sites which can only be reached by one
main roadway. Potential secondary accesses for Sites 2, 3 and 4 are identified under the Candidate Sites Description section on Pages 8 and 10. As noted, development of the potential secondary accesses would require further study and negotiations with government agencies and landowners. Site 2 is surrounded by sugarcane fields and there does not appear to be a feasible alternate route other than via Oloheo Road. The decisions regarding alternative access routes will be made once a final site is selected during the project design phase.

2. Drainage

Drainage for sites 1, 3 and 4 is discussed in the Evaluation of Candidate Sites section under Drainage/Flood. Drainage improvements which are anticipated to be required are described in the Cost Considerations section under Drainage (on-site) and Drainage (off-site). Once a final site is selected, the details of necessary drainage improvements will be developed in consultation with your department.

3. Wastewater Disposal

The concerns expressed over wastewater disposal appear to apply primarily to the new Kapua Elementary School project. The Candidate Sites Description section of the new Kapua Intermediate School project indicates that connection to the County sewer system for Sites 1, 2 and 3 is only a possibility and that there are no plans to extend the County sewer service to Site 4 (Pages 8 to 10). The Candidate Site Evaluation section Page 29, however, discusses the fact that no sewer system capacity has been allocated for a new intermediate school and that connection to the County system at Sites 1, 2 or 3 would require negotiations between the State and County. It is noted that if system capacity cannot be allocated, any site would require an on-site wastewater treatment facility. Wastewater disposal is further discussed in the Cost Considerations section on Pages 36, 37, 42 and 43. As indicated on Page 37, wastewater flow at ultimate school buildout is estimated to reach approximately 68,000 gallons per day.

We hope this letter adequately responds to the concerns expressed in your August 17, 1992 letter. If you have any questions or additional comments regarding the new Kapua Intermediate school, please contact Brian Major of the Planning Branch at 361-3464.

Very truly yours,

GORDON MATSUO
State Public Works Engineer

HH:jk
August 17, 1992

Mr. Russell Nagata
DAGS State Comptroller
State of Hawaii
P.O. Box 119
Honolulu, HI 96810

Re: New Kapaa Intermediate School, Site Selection Report and EIS Preparation Notice, Kapaa, Kauai

We have no objections to the Site Selection Report and EIS Preparation Notice for the subject project.

Wynford Sato
Manager and Chief Engineer
EDMA

Kapaa Elementary School PTSA
4885 Kawailoa Road, Kapaa, HI 96746

August 21, 1992

Mr. Russel S. Nagata, State Comptroller
Mr. Mark Yamabe, Project Coordinator, Public Works Division
Department of Accounting and General Services
1151 Punchbowl Street
P.O. Box 119
Honolulu, Hawaii 96810

Subject: Kapaa II Elementary School and New Kapaa Intermediate School
EIS Consultation Phase/Site Selection Studies

Dear Mr. Nagata and Mr. Yamabe,

The Kapaa Elementary School PTSA board has reviewed both the elementary school's and middle school's Preparation Notice of the Environmental Impact Statement and Site Selection Study.

Representatives of the existing intermediate/high school and elementary school met at three of the properties have been cited for both schools. The two reports were analyzed and compared. It is a great concern that disagreement over locations for the two schools could delay the selection process. Representatives were in agreement that there should be no delay in moving forward on the projects, and any conflicts should be addressed openly and expeditiously.

The elementary school group is aware that the high school group favors the Olohana Road site (Site 1/Kapaa II Elementary, Site 2/New Kapaa Intermediate), and that the Kealia site (Site 4/New Kapaa Intermediate; not cited for Kapaa II Elementary) would be their second choice. It is also understood that because the service area for the intermediate school presently extends to the northshore there is some sentiment that the Kealia site would be the most feasible location with regards to eliminating traffic from the north into and through Kapaa, thus reducing the bussing time of the northshore students. As the majority of students would then need to be bussed out of the Wallua and Kapaa areas, it was questioned whether the bussing time versus those students would outweigh the time differential for the northshore students between the Kealia and the Olohana site.
Also, it was felt that the aesthetics of the Oloheina site outweighed the Kealia site with regards to the bussing time factor for the northshore students.

Representatives from both groups feel that access from three directions to the Oloheina site is very attractive (Wallis Homesteads, Kupahli, and Kapaa town).

Both groups reviewed the cost considerations (page 49, New Kapaa Intermediate School report) and the Kapaa Intermediate and High School Ad Hoc Committee felt the Kealia site probably would be more costly to develop than the present report states, thus making it of equal or greater cost than the Oloheina site. Keith Companies confirmed that additional costs are a possibility, but this is true for any of the sites.

Site 3 for Kapaa II Elementary School/ Site 3 for New Kapaa Intermediate School has not been supported by anyone. The facts that the land is situated in a low area that recently flooded, the air circulation is poor, the temperature of the area is generally higher, the immediate neighborhood includes a cemetery and a refuse transfer station, and that the cost considerations differential is nearly 3.5-million dollars more than any of the other properties sited in the intermediate school study (page 49) cause this opinion.

The Lihue Plantation land in Wallis House lots (Site 5/Kapaa II Elementary School; Site 1/New Kapaa Intermediate) has not been supported by anyone. It was felt that bussing the northshore students through the entire stretch of Kapaa-Wallis traffic was not feasible. Traffic considerations were of the greatest concern with the sentiment that a "bottleneck" situation would be created at the entrance to the Wallis House lots subdivision. It was also felt that the location does not provide an optimum climate as the area is typically hotter with little air movement and circulation. The Wallis House lots Homeowners Association was contacted, but a written final opinion was not gained in the short period of time allowed for comments. In speaking with some homeowners in that area it was interpreted that the neighborhood does not want a school built there; many of the residents no longer have school age children.

This opinion holds for Site 4 in the Wallis House lots (Kapaa II Elementary School), also. Additionally, the size of this property does not allow for future expansion possibilities (park, community resource center).

The representatives from Kapaa Elementary School felt that of the five sites studied, Site 1, was the only viable choice. No site was felt to be acceptable as a second choice. With this thought in mind, the elementary group felt that the intermediate school should then be developed on the Kealia site. It was questioned why the Kealia site was not considered for the elementary school and if it was because of the proposed service area, then could the service area be reconsidered to accommodate an elementary school in that area. Consideration of the development of Anahola lands raised questions as to whether this site would then accommodate the growth. Thought were raised that eventually a school in Anahola should be built to address the growth of the Hawaiian Homeland community.

In consideration of the public input given in November for the intermediate school site selection study (pages 11-12), climate and aesthetics are of a priority. Though the representatives of Lihue Plantation Company prefer the Kealia site to be developed as sugar cane operations have ceased, it is likely that sugar cane operations will cease within the decade on the Oloheina site, and housing development might occur. It is believed that a school should enhance a community, not hinder it. That a developer should participate in the true development of a community which must include an educational facility and parks as well as safe vehicle and foot access. In view of the current needs to alleviate the overcrowded situation at the existing Kapaa complex, the Department of Education has been encouraged to move as quickly as possible to expedite construction of the school; land acquisition could delay that process with Lihue Plantation holding ownership to the sites. This should not be allowed. It is clear that the public wants a school built on the Oloheina site. The public encourages pursuit of acquiring a portion of the acreage for educational facilities which could include an agricultural and recreational park utilized by all of the community.

The study for the elementary school addresses wetlands (pages 17-19) and the Kapaa Marsh. It is not clear whether this marsh (Anahola Quadvrangle) is situated in or near any of the proposed sites. A clarification would be appreciated as access to such a natural resource could be educationally beneficial.

Though the community realizes that the Department of Education will make this final decision, our organizations believe that the communities' concerns should be weighed, and that cost factors should not be the only consideration.

Thank you for your attention to this matter.
If you need clarification of any statements made in this commentary, I can be reached at my home, 822-3771, or a message can be left at Kapaa Elementary School, 822-4141.

Sincerely,

Cynthia Stark-Wickman, Co-Chair, Facilities in Education Action Task Force

cc: Clifton Bailey, Principal, Kapaa Elementary School
    Wayne Watanabe, Principal, Kapaa Intermediate and High School
    Ewane Shinohzaki, Kapaa Intermediate and High School Ad Hoc Committee
    Warren Mizutani, Business Specialist, Kauai District, Department of Education
    Shirley Akita, District Superintendent, Kauai District, Department of Education
    The Keith Companies - Hawaii
    Stanley Yim & Associates
    Nancy Budd, President, Kauai District PTSA
    Billie Swain, President, Kilauea School PTSA
    Chipper Wickman, President, Hanalei School PTSA

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
A-100 700 KAHUAU STREET
AIEA 96701

OCT 1 1992

Ms. Cynthia Stark-Wickman
Co-Chair, Facilities in Education Action Task Force
Kapaa Elementary School PTSA
4886 Kawauw Road
Kapaa, Hawaii 96746

Dear Ms. Stark-Wickman:

Subject: New Kapaa Intermediate School
KIS Consultation Phase
DMOS Job No. 14-16-6530

Thank you for your August 21, 1992 comments on the subject project. Your letter raises many valid points concerning the sites being considered as potential locations for the two schools. We agree with your observation that development of both the New Kapaa Intermediate School and the New Kapaa Elementary School must proceed as quickly as possible in order to alleviate the current overcrowding at the Kapaa complex. Many of the issues raised regarding the potential intermediate school sites were discussed at the community informational meeting held in Kapaa on November 26, 1991. A summary of the public input received at that meeting is presented in the New Kapaa Intermediate School Site Selection Study. These issues will be considered in deciding which site is to be selected for the new intermediate school.

Other issues discussed in your correspondence regarding traffic, aesthetics, flood control, bus stop, and site development costs are discussed and evaluated in the Evaluation of Candidate Sites section of the Site Selection Study. These factors will also be taken into consideration in making the final site selection decision.

From the discussion contained in your correspondence it appears that development of the New Kapaa Intermediate School at the Kekaha location (Intermediate school Candidate Site 4) is favored with the Oheheka Road location (elementary school Candidate Site 1) being preferred for the elementary school. A final decision as to which sites will be selected will not be made
Ms. Cynthia Stark-Wickman  
Page 2  

Ltr. No. (P)1657.2

until completion of the environmental review process and acceptance of the final EIS. Please be assured that the concerns and opinions of the representatives of the existing intermediate/high school and elementary school groups as expressed in your letter will be incorporated into the final decision-making process.

If you have any questions or additional comments regarding this matter, please contact Mr. Brian Major of the Public Works Division at 366-0425.

Very truly yours,

[Signature]

ROBERT F. TAKUSHI  
State Comptroller
XV. COMMENTS AND RESPONSES - EIS PUBLIC REVIEW PHASE (DRAFT EIS)

Written responses to the Draft Environmental Impact Study were received from the following agencies, organizations, and individuals during the public review phase. An asterisk (*) indicates substantive comments. These response letters and DAGS replies are reproduced in this section.

FEDERAL AGENCIES
1. U.S. Army Corps of Engineers *
2. U.S. Navy *

STATE AGENCIES
1. Department of Business and Economic Development
2. Department of Defense
3. Department of Education *
4. Department of Health
5. Department of Land and Natural Resources
6. Department of Transportation
7. Housing Finance and Development Corporation *
8. Office of Environmental Quality Control
9. University of Hawaii - Environmental Center

COUNTY AGENCIES
- Department of Water Supply

ORGANIZATION AND INDIVIDUALS
1. Kauai Electric Company

The following agencies, organizations, and individuals were provided copies of the Draft Environmental Impact Study during the public review phase but sent no response.

FEDERAL AGENCIES
1. Soils Conservation Service
2. National Marine Fisheries Service
3. National Park Service *
4. U.S. Coast Guard
5. Environmental Protection

STATE AGENCIES
1. Department of Agriculture
2. Hawaii State Public Library System
3. Office of State Planning
4. Office of Hawaiian Affairs
5. State Archivist
6. State Historic Preservation Division
7. University of Hawaii Water Resources Center
COUNTY AGENCIES
1. Department of General Planning
2. Department of Public Works

ORGANIZATION AND INDIVIDUALS
1. American Lung Association
2. Hawaiian Telephone Co.
3. Honolulu Star Bulletin
4. Honolulu Advertiser
5. The Garden Island Newspaper
6. Kapaa Elementary School PTA
7. King Kaumualii Elementary School PTA
8. The Sierra Club
9. Life of the Land
10. Amfac JMB Hawaii
11. Senator James Aki
12. Senator Fernades-Salling
13. Representative Peter Apo
14. Representative Ezra Kanoho
Mr. Gordon Matsuzaka, State Public Works Engineer  
Department of Accounting and General Services  
State of Hawaii  
P.O. Box 119  
Honolulu, Hawaii 96810

Attention: Mr. Ralph Morita, Planning Branch

Dear Mr. Matsuzaka:

SUBJECT: NEW KAPAAL INTERMEDIATE SCHOOL DRAFT ENVIRONMENTAL IMPACT STATEMENT (EIS), KAWAHUAU, KAUAII

Thank you for submitting the above mentioned document for our review. We have the following comment:

When submitting the Final EIS for this project, please include the following information required by 111-200-17, Hawaii Administrative Rules:

- A list of those who had no comment on the EIS Preparation Notice [111-200-17m].

Please include copies of all substantive comment letters and responses in the Final EIS. Letters of no comment need not be reproduced in the Final, however, all persons, organizations, and public agencies who have commented on the Draft EIS (no comment letters included) shall be listed in the Final EIS pursuant to 111-200-18.

If you have any questions, please call Margaret Wilson at 586-4185. Thank you.

Sincerely,

Brian J.J. Choy  
Director

C: George Kalilik, The Keith Companies - Hawaii

Mr. Brian J. J. Choy  
Director  
Office of Environmental Quality Control  
Central Pacific Plaza  
220 South King Street, 4th Floor  
Honolulu, Hawaii 96813

Dear Mr. Choy:

SUBJECT: New Kapaal Intermediate School Site Selection Study and Draft EIS  
DASG Job No. 14-15-4838

Thank you for your April 21, 1993 comments on the subject project. In response to your comments, the EIS will be revised to include a list of agencies and persons consulted who had no comments on the EIS Preparation Notice and the draft EIS.

If there are any questions on this project, please have your staff contact Mr. Ralph Morita of the Planning Branch at 586-0485.

Very truly yours,

Gordon Matsuzaka  
State Public Works Engineer
May 11, 1993

Governor, State of Hawaii

c/o Office of Environmental Quality Control
220 South King Street, 4th Floor
Honolulu, HI 96813

Re: New Kapaa Intermediate School Site Selection and Draft EIS, Kauai District, Kauai, THK: 4-1-2; For. 6; THK: 4-3-03; For. 1; THK: 4-5-12; For. 2; THK: 4-7-4; For. 1

Thank you very much for giving us the opportunity to comment on the proposed project. We have no objections to the proposed new Kapaa Intermediate School. However, any actual development will be dependent on the adequacy of the source, storage and transmission facilities existing at that time.

Raymond H. Sato
Manager and Chief Engineer

DD:\\c: Ralph Narita, DAS
George Kalfaki, The Keith Companies - Hawaii

Mr. Raymond H. Sato
Manager and Chief Engineer
Department of Water
County of Kauai
P.O. Box 1706
Lihue, Hawaii 96766-5706

Dear Mr. Sato:

Subject: New Kapaa Intermediate School Site Selection Study and Draft EIS

DAOS Job No. 14-16-4628

Thank you for your May 11, 1993 comments on the subject project. The Department of Accounting and General Services will work with your Department to ensure that adequate water system capacity will be available to support the school needs at the actual time of development.

Please have your staff contact Mr. Ralph Narita of the Planning Branch at 586-0406 if you have any questions or further comments on this project.

Very truly yours,

Gordon Matsumura
State Public Works Engineer
TO: The Honorable John Waihee, Governor
c/o Office of Environmental Quality Control

FROM: Mr. Rex D. Johnson
Director of Transportation

SUBJECT: Site Selection and Draft Environmental Impact Statement for the
New Kapa'a Intermediate School

The comments expressed in our letter found on Page 39 of the draft EIS are still applicable. We look forward to working with the developer to ensure that traffic impacts are either mitigated or eliminated.

It is noted that Site #1 is located in an area of extreme traffic congestion which could be exacerbated by the daily dropoff and pickup of students by parents.

We wish to emphasize the importance of preparing a Traffic Impact Analysis Report (TIA) to determine the project's impact on existing and future traffic patterns no matter which site is selected. The TIA should then be submitted for our review and approval.

Thank you for the opportunity to provide comments.

cc: Mr. Ralph Morita - Dept. of Accounting and General Services
Mr. George Kalak - The Kaili Companies - Hawaii

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

Dear Mr. Johnson:

Subject: New Kapa'a Intermediate School
Site Selection Study and Draft EIS
DAS Job No. 14-16-1838

Thank you for your May 19, 1993 letter on the subject project. We are providing the following responses to your comments:

1. DOT concerns addressed in your September 4, 1992 letter and DAS' December 14, 1992 response, as found on Page 39 of the draft EIS, will be considered in the site selection process.

2. The EIS will be revised to note that Site #1 is located in an area of extreme traffic congestion which could be exacerbated by the daily drop-off and pick-up of students by their parents.

3. After the school site is selected, a traffic impact analysis will be prepared and submitted for review by the County and the DOT as required.

We would like to assure you again that DAS will work with DOT Highways Division to ensure that traffic generated by the school will be compatible with existing and proposed circulation patterns.

Honorable Rex Johnson

Ltr. No. (P)1520.3
Page 2

Please have your staff contact Mr. Ralph Morita of the Public Works Division at 586-0450 if you have any questions or further comments regarding this project.

Very truly yours,

Robert T. Takushi
State Comptroller
STATE OF HAWAII
DEPARTMENT OF DEFENSE
OFFICE OF THE DIRECTOR OF CIVIL DEFENSE
P. O. BOX 1060
HONOLULU, HI 96813

May 24, 1993

TO: Governor, State of Hawaii
   c/o Office of Environmental Quality Control

FROM: Roy C. Price, Sr.
   Vice Director of Civil Defense

SUBJECT: New Kapa'a Intermediate School: Site Selection and Draft EIS
         Environmental Impact Statement (EIS), Kauai County, Kauai

We appreciate this opportunity to comment on the Site Selection and
EIS by the Department of Accounting and General Services for the New
Kapa'a Intermediate School, Kapa'a, Kauai, Hawaii: TNC 4-3-02: Par. 6;
4-3-02: Par. 1; 4-5:15: Par. 30; 4-7-04: Par. 1.

We do not have negative comments specifically directed at the Site Selection
and EIS. However, we are concerned about the high winds and heavy rains
associated with tropical cyclones and hurricanes. Structures within the
selected project area should be designed and constructed to resist the
potentially destructive winds based on the evaluation. These structures
should then be surveyed for use as potential shelters.

Our SCE planners and technicians are available to discuss this further if
there is a requirement. Please have your staff call Mr. Nishioka at 734-2161.

Enc.

cc: Mr. Ralph Morita, DAGS

          Mr. George Kalisik
          The Keith Companies - Hawaii

Mr. Roy C. Price, Sr.
Vice Director of Civil Defense
Department of Defense
State of Hawaii
Honolulu, Hawaii

Dear Mr. Price:

Subject: New Kapa'a Intermediate School
Site Selection Study and Draft EIS
DAGS Job No. 14-16-4038

Thank you for your May 24, 1993 comments regarding the subject project. The following is provided in response to your comments:

1. The impact of terrain amplification of the high winds and heavy rains associated with tropical cyclones and hurricanes (based on available data) will be included in the study. The study will also be associated to note the effects of terrain amplification may entail that the structures be designed and constructed to resist these destructive winds.

2. After a final site has been selected and during the planning/design of the school, potential use of the school buildings as shelters and the requirements associated with their use as shelters will be discussed with your planners.

If you have any questions on this project, please have your staff contact Mr. Ralph Nishioka of the Planning Branch at 896-0486.

Very truly yours,

Gordon Hattori
State Public Works Engineer

RM/JS
Governor John Waihele
June 7, 1993

Page 2

Major Impact Topics

The document briefly discusses each of the required sections pursuant to the EIS regulations regarding content requirements and identifies six major impact topics:

1. Wastewater disposal;
2. Impacts to the Newell's Shearwaters;
3. Transportation and necessary road improvements;
4. Cane burning;
5. Conflict with site for Elementary School; and,
6. Traffic considerations.

The document goes on to describe each site in light of the impacts noted:

Site #1—Waialae, Kuhio Highway. As pointed out in the Draft EIS, this site may pose problems with road access, new highway construction, dislocation of Newell's Shearwaters, and lack of connection with the Waikana Sewage Treatment System.

The Newell's Shearwaters nest in the mountains behind Site #1 and Site #3. While lighting may be directed so as to minimize impacts to the birds, it is difficult if not impossible to eliminate that problem.

Site #2—Kapaa Old Hwy. Road. This site is currently used for sugar cane cultivation. The road will need substantial improvements if a school is built for this area. It should also be emphasized that current plans call for highway bypass alternatives across this parcel further impacting construction on this site.

Site #3—Withdrawn since it contains wetlands.

Site #4—Kalaia/Kalihoku, Kuhio Highway. It is presently in sugar cane production and does not have access to the county sewer system.

It appears that all four sites are in reasonable proximity to cane areas. Thus schools at any of the sites could be periodically inundated with cane smoke. Furthermore, given the rush hour congestion on Kaua'i's main circumferential road, traffic likely to be a problem at all four sites. We note that the community prefers Site #2 for an Elementary School and Site #4 for the Intermediate School. Based on the information provided in the Draft EIS, it does not appear that any of the four sites are really outstanding.

In attempting to evaluate the content of the Draft EIS and what information is likely to be needed for informed decision making, it has occurred to us that the Final EIS should include a section on projected population growth for this area. Are recent trends expected...
to continue? If so would Site #4 be the most logical choice? What are the community
development trends? What housing projects are under construction or in the planning stage
that might affect the site selection choices? What are the employment projections for the
general area and how might these projections be used in determining educational needs and
school site selection?

We appreciate the opportunity to review this Draft EIS and hope you will find our
comments useful in preparing the Final document.

Sincerely,

[Signature]

Jacqueline N. Miller
Associate Environmental Coordinator

cc: Ralph Morea, DAGS
George Kimik, The Keith Companies-Hawaii
Roger Fujita
John Harrison

Ms. Jacqueline Miller
Associate Environmental Coordinator
Environmental Center
University of Hawaii at Manoa
Crawford Hall Room 317
2550 Campus Road
Honolulu, Hawaii 96822

Dear Ms. Miller:

Subject: New Kapaa Intermediate School
      Site Selection and Draft EIS
      DAGS Job No. 14-16-4838

Thank you for your July 11, 1993 comments on the subject
project. The following is provided in response to your
comments:

GENERAL COMMENTS

1. Although there are problems inherent with develop-
ment at each of the sites, DAGS does not consider
these difficulties impossible to mitigate. The
proposed mitigation measures are included in the
draft EIS for the problems associated with each
site. From the research and data available,
sites 1, 2 and 4 are viable sites which can meet
the school needs.

2. Therefore, DAGS does not consider it appropriate to
redo the site selection process at this time. An
exhaustive search was conducted to identify the
potential sites included in the study. Additionally,
a separate site selection study by another
consultant for the proposed Kapaa II Elementary
School within the same area did not locate any other
sites in the area suitable for an intermediate
school. It is very clear that parcels suitable for
school use are difficult to locate within the area.
There is little likelihood that redoing the study
would result in finding any additional sites. However, if you are aware of any site within the area that meets the criteria for the school, please submit a location map of the site with the tax map key number to our office by August 12, 1983 and we will have our consultant review the site for use as a school site.

MAJOR IMPACT TOPICS

1. Howell's Observers: DADS notes the difficulty in completely eliminating the impact of electric lights on the Howell's Observers. However, the proposed ameliorative measures included in the study will minimize any adverse impacts on the birds. The impact of lighting on the Howell's Observers and the ameliorative measures are included on Page 26 of the draft EIS.

2. Transportation and Road Improvements: Roadway improvements for each of the sites are included on Page 60 of the draft EIS along with the comparative costs for the improvements.

   The draft EIS notes on Page 60 that the Kapaau highway bypass alternatives pass through Site 2. It is anticipated that the location for the 157-acre school within the 183-acre site can be coordinated with the Department of Transportation to minimize the impact of the bypass.

3. Cane Burning: Due to the fact that a large portion of the island of Maui is in agricultural production of sugar cane, it is difficult to locate any site which would not be impacted by periodic smoke from cane fires. As noted in the draft EIS, it is anticipated that the cane operations which could disrupt the school can be scheduled when school is not in session.

4. Traffic Considerations: DADS notes that due to the congestion on Kahului Highway, traffic would be a problem for any potential site within the area. It is anticipated that the highway bypass will help to alleviate this problem.

5. Projected Population Growth: The projections for student enrollment are determined by the Department of Education based on the residential development in the area. Determining if and how employment projections might be used to determine educational needs is not within the scope of this project. Available information on the projected developments in the service area will be included in the final EIS.

The final selection of the site will not be made until completion of the environmental review process and acceptance of the final EIS. Your concerns and opinions will be incorporated into the decision making process.

If you have any questions or further comments on this matter, please have your staff contact Mr. Ralph Morita of the Planning Branch at 586-0486.

Very truly yours,

GORDON MATSUOKA
State Public Works Engineer

RH:JG
CC: Mr. E. Andrew Dapsaro, The Keith Companies-Hawaii
In reply refer to:
File 92-6-401RR

June 7, 1993

Governor, State of Hawaii
0/0 Office of Environmental Quality Control
210 South King Street, Fourth Floor
Honolulu, HI 96813

SUBJECT: NEW KAPAA INTERMEDIATE SCHOOL SITE SELECTION AND
DRAFT EIS

Dear Governor:

Kauai Electric's Engineering Department has completed its review of
the New Kapaa Intermediate School Site Selection and Draft EIS.
Presently, there are no concerns regarding Kauai Electric's
capability to provide power to the individual sites, however, the
cost estimates need to be adjusted.

SITE 1  Due to an addition error and an increase in cost to
construct said utility line, the estimate is
$18,710.

SITE 2  Due to an increase in cost to construct said
utility line, the estimate is $8,315.

SITE 3  Per Draft Environmental Impact Statement, this site
no longer being considered.

SITE 4  Due to an increase in cost to construct said
utility line, the estimate is $7,770.

State of Hawaii
June 7, 1993

Patti Finlay
Customer Engineer

CO: Department of Accounting & General Services - Mr. Ralph Herita
The Keith Companies - Hawaii - Mr. Andrew Dayoda

File 92-6-401RR
Page Two

Very truly yours,

[Signature]

A DIVISION OF CITIZENS UTILITIES COMPANY
SERVING TELEPHONE, WATER AND GAS SERVICE TO CUSTOMERS IN OVER 120 COMMUNITIES IN MANY STATES ACROSS THE NATION
AUG 3 1993

Ms. Patty Finlay
Customer Engineer
Kauai Electric Division
Citizens Utilities Company
P. O. Box 309
Lihue, Kauai, Hawaii 96766-0309

Dear Ms. Finlay:

Subject: New Kapaa Intermediate School
Site Selection Study and Draft EIS
DAMS Job No. 14-16-4938

Thank you for your June 7, 1993 comments regarding the subject project. The following is provided in response to your comments:

1. The adjusted cost estimates provided in your letter will be included in the report.

2. After a final site has been selected and during the planning/design of the school, the Department of Accounting and General Services’ electrical consultant will provide your office with copies of the electrical plans.

If you have any questions on this project, please have your staff contact Mr. Ralph Morita of the Planning Branch at 808-0486.

Very truly yours,

GORDON HATSUMIKA
State Public Works Engineer

EM: jk
cc: Mr. Lester Chuck, DOE
     Mr. Andrew Raymond, Keith Companies–Hawaii
To:  The Honorable John Waihee  
Governor, State of Hawaii  

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

Subject: Site Selection and Draft Environmental Impact Statement (EIS)  
New Kapaa Intermediate School  
Kauai  

June 17, 1993  

Thank you for allowing us to review and comment on the subject document. We have the following comments to offer in addition to the comments in our letter dated September 8, 1992, found on page 35 of the EIS:

Solid Waste

The Department of Health requests that spatial allocations are made for the separation and collection of recyclables at the school. The State of Hawaii has established (through Act 324-91, the Integrated Solid Waste Management Act) waste diversion goals of 25% by 1995 and 50% by the year 2000. Achievement of these goals will require a commitment from residents, businesses, and institutions in Hawaii. Education is an important element of a successful recycling program, and implementing school recycling will provide the students with the experience of running a program. Act 324-91 also directs all State and county agencies to implement in-house recycling programs.

If you should have any further questions on this matter, please call Ms. Carrie McCabe of the Office of Solid Waste Management at 586-4227.

Nonpoint Source Pollution

The construction of the new Kapaa Intermediate School will increase the acreage of impervious areas and also increase stormwater runoff volumes. The easiest and most cost-effective way to treat nonpoint source pollution is during the initial planning stages. Proper planning, design, and use of Best Management Practices substantially reduces the total volume of runoff generated, thereby decreasing sediment load. Suggested measures that should be considered are:

Honorable John Lewin  

Page 2

Thank you once again for your assistance on this project. If you have any questions or further comments, please have your staff contact Mr. Ralph Norita of the Public Works Division at 586-4486.

Very truly yours,

Robert P. Yamashita  
State Controller
The Honorable John Wainee  
June 17, 1993  
Page 2  

a. Conduct grubbing and grading activities during the low rainfall months (April - October).

b. Strategically plan and install open "green areas" within the project site to temporarily slow down and retain stormwater runoff.

c. Grub area sequentially so that only a small portion of the site is bare at any one time.

d. Replant or cover bare areas as soon as grading or construction is completed. New plantings will require soil amendments, fertilizers, and temporary irrigation to become established. Use high seeding rates to ensure rapid stand establishment.

e. Use vegetation, mulch, gravel and porous pavement wherever feasible to minimize the acreage of pervious areas.

If you should have any questions on this matter, please contact
Ms. Shirley Nakamura of the Environmental Planning Office at 586-4337.

c: Office of Solid Waste Management
Environmental Planning Office
Department of Accounting and General Services
The State Companies - Hawaii
PART TWO:
SITE SELECTION STUDY
1. INTRODUCTION

In accordance with the Hawaii State Educational Functional Plan Policy to "Ensure the provision of adequate and accessible educational services and facilities...", the State of Hawaii Department of Education (DOE) is proposing to establish a new Kapaa Intermediate School for grades 6 through 8 to serve the northeast portion of the Island of Kauai. As part of the process of establishing the new Kapaa Intermediate School, a Site Selection Study was conducted followed by preparation of the Draft Environmental Impact Statement. The Site Selection Study and DEIS are designed to aid in the selection of an appropriate location for the New Kapaa Intermediate School using standard Department of Education (DOE) minimum criteria, DOE site evaluation criteria, and additional considerations specific to the needs of the local community. In accordance with Chapter 343, Hawaii Revised Statutes, the study and DEIS are also designed to insure that environmental factors and the concerns of the public are given appropriate consideration in the decision making process.

In identifying the need for a new Kapaa Intermediate School, the Site Selection Study discusses the existing conditions within the proposed school's service area, future enrollment projections, the School District's plans for complex reorganization and alternatives to establishment of a new intermediate school. The process used to select alternative sites for the proposed new school is described in detail and the four candidate sites selected for further analysis are identified. A Community Informational Meeting was held to present the site selection process and the candidate sites selected for further consideration to the public and input received at that meeting is summarized in this study.

The four candidate sites were further evaluated to assess the relative merits of each site as a potential location for the new intermediate school. The criteria and ranking system used to evaluate the sites are first described and the results of the evaluation are explained in narrative form and summarized in tables. The candidate sites evaluation is designed to aid in comparing the relative merits of each site and no recommendation as to the most appropriate site is provided.

During the Notice of Preparation Consultation Phase it was determined that one of the candidate sites, Site #3, could contain wetlands. It is the policy of DAGS and DOE to avoid any site with wetlands. Therefore, although Site #3 is included in the Site Selection Study, it is no longer being considered as a potential location for the New Kapaa Intermediate School.
II. NEED ASSESSMENT

A. EXISTING CONDITIONS - The service area for the proposed new Kapaa Intermediate School includes the northeast portion of the Island of Kauai from the Wailua River in the Kawaihau District north to Haena in the Hanalei District (see Exhibit A: Service Area Location). According to the 1990 Census, the project service area had a population of 20,358 with 15,627 or approximately 77% residing between the Wailua River and Anahola. The service area is currently served by four public elementary schools which include grades Kindergarten (K) through 6 located in Hanalei, Kilauea, Kapaa and Hanamaulu (see Exhibit B: Elementary School Locations). Kapaa High and Intermediate School which includes grades 7 through 12 is located adjacent to the Kapaa Elementary campus at the north end of Kapaa town (see Exhibit C: Kapaa High and Intermediate School Location).

Currently all students in grades K through 6 attending the elementary schools in Hanalei, Kilauea and Kapaa are expected to attend Kapaa High and Intermediate. At this time the recently opened King Kamualii Elementary School serves both the Hanamaulu area and a portion of the Wailua Homesteads. Some students attending King Kamualii are currently designated to attend Kapaa High and Intermediate while the remainder will be attending Kauai High and Intermediate in Lihue.

Kapaa High and Intermediate School currently contains 51 permanent classrooms and 7 portable classrooms with a total capacity of 1,319 students. Enrollment at Kapaa High and Intermediate School rose from 1,126 students in 1980 to 1,315 students in 1989 and the school is currently operating beyond capacity. The Kapaa High and Intermediate School campus adjoins the Kapaa Elementary School campus and the two schools together had a combined total enrollment of 2,813 students in 1989. The establishment of King Kamualii Elementary in Hanamaulu in September of 1990 relieved some overcrowding in the elementary grade portion of the Kapaa school complex; however, population growth anticipated in the service area will continue to strain the campus capacity.

B. FUTURE PROJECTIONS - The number of students in the Kapaa High and Intermediate School service area is projected to continually increase through the year 2010 due to increased population growth and continued residential development in the area. The North Shore of Kauai also is one of the fastest growing regions in the State. There are approximately 75 acres of vacant residentially zoned, "U" Urban State Land Use District lands in the study and service area which could theoretically qualify for 3,289 additional dwelling units. Additional growth can also be expected in the "R" Rural and "A" Agricultural State Land Use Districts which make up a significant portion of the service area. As of August of 1993, the County of Kauai Planning Department has approximately 30 active residential subdivision cases in this district. This totals close to 350 (over 10% of the theoretical) additional dwelling units at some stage of the approval process. Exhibit D identifies the projected enrollment for Kapaa High and Intermediate School as compared with school capacity through the year 1995 at which time the enrollment is expected to reach 1,897. By the year 2010 enrollment in grades 7 through 12 is projected to reach 2,200 with 750 students in grades 7 and 8 and 1,450 students in grades 9 through 12.

As noted above the Kapaa High and Intermediate School is adjacent to the Kapaa Elementary School. The elementary school is projected at 1,372 in 1995 for a total enrollment for the combined campus complex of 3,269. A second elementary school for the Kapaa area is expected to be opened in 1996 to help relieve the crowding on the Kapaa campus. However, combined
enrollment projected for the Kapaa campus for the year 2010 will still be excessive at 3,100. Based on these existing enrollments, population projections, anticipated future developments and other factors, DOE has determined that the current Kapaa High and Intermediate School facilities are inadequate.

C. COMPLEX REORGANIZATION - As noted above the elementary schools in the Kapaa High and Intermediate School service area currently serve grades Kindergarten through 6 and the Kapaa High and Intermediate School serves grades 7 through 12. The Kauai School District has committed to reorganizing the school grade structure into three separate levels to remove younger adolescents from the same campus as high school students: the elementary level for grades Kindergarten through 5; the intermediate or middle school level for grades 6 through 8; and the high school level for grades 9 through 12. The proposed new Kapaa Intermediate School will include grades 6 through 8 and therefore will help implement this plan.

With the establishment of the new Kapaa Intermediate School, students in grades 9 through 12 will attend Kapaa High School. Kapaa Elementary, the new Kapaa Elementary II and King Kaumualii will serve grades K through 5. Hanaelei and Kilauea Elementary will serve grades 1 through 5 with students in grade 6 having the option of attending Kapaa Intermediate or remaining at their elementary schools. The existing feeder complex for the project area and the proposed feeder complex for the new Kapaa Intermediate School are illustrated in Exhibit E.

D. ALTERNATIVES - Three alternatives were considered to accommodate present overcrowding and the projected growth in enrollment in the school service area:

1. **Continue the Existing Situation.** The DOE on the Island of Kauai is currently experiencing a classroom shortage based on recently revised mandatory student to teacher ratios. As well, Kapaa High and Intermediate will continue to grow in enrollment if the existing campuses, service area and grade structure are maintained. Enrollment at the school is projected to increase from 1,315 in 1989 to 1,897 in 1995 with an ultimate design enrollment of 2,200 by the year 2010. This growth cannot be accommodated at the current school complex site which is shared with Kapaa Elementary since there is not sufficient space for an adequate number of portable or permanent classrooms without sacrificing other school facilities such as playfield areas. The elementary school is also experiencing a large enrollment growth with a projected enrollment of 1,372 students in 1995. Although the proposed development of a second elementary school in Kapaa will reduce the design enrollment of the elementary school from 1,450 to 900, total enrollment on the campus will still be excessive at 3,100 by the year 2010.

Merely adding classrooms to the existing school campus would create a negative atmosphere for student achievement. A recent study in the Leeward Oahu School District indicated 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. Finally, continuing the existing situation without an adequate number of additional classrooms would create crowded conditions with unacceptably high student to teacher ratios.

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1Design enrollment is the stabilized number of students to be served by a school based on the service area grade organization and future housing construction.
2. **Change in School Service Area.** Kauai High and Intermediate School, located in the adjacent service area to the south, is also experiencing significant increases in enrollment with a shortage of classrooms and this trend is expected to continue. Enrollment at that school is expected to increase from 1,454 in 1989 to 2,003 in 1995, with an anticipated design enrollment for the year 2010 at 2,300. There is no other secondary school which could accommodate students from Kapaa High and Intermediate and therefore a change in service area would not solve the problem of overcrowding at the Kapaa complex campus.

3. **Construct a New Intermediate School.** The establishment of a new Kapaa Intermediate School will relieve the overcrowding on the current Kapaa campus and create two manageable secondary schools in the service area. Construction of the proposed School will help implement the District plan to organize the complex into a three level grade structure, as well as conform to the School District objective to remove younger adolescents from the same campus as high school students. Removal of the Intermediate School from the current Kapaa High and Intermediate School campus will also permit an expansion of the High School facilities to accommodate anticipated growth in enrollment in grades 9 through 12.

The projected growth in enrollment for the service area cannot be accommodated at the current Kapaa campus. A change in the school service area also would not resolve the problems of enrollment growth since the Kauai High and Intermediate School is projected to experience significant growth on a campus with a shortage of classrooms and there is no other secondary school which could accommodate the anticipated increases. Therefore, the most appropriate alternative for meeting the service area needs as discussed above is the establishment of a new Kapaa Intermediate School.

**E. PROJECT DESCRIPTION** - To relieve current and anticipated overcrowding within the School District, DOE is proposing to establish a new Kapaa Intermediate School to serve grades 6 through 8 within the area currently served by the existing Kapaa High and Intermediate School. The existing Kapaa High and Intermediate School which currently serves grades 7 through 12 is proposed to be utilized exclusively as a High School for grades 9 through 12. The existing elementary schools within the District and the proposed new Kapaa Elementary School will serve grades K through 5, although enrollment in grade 6 at Hanalei and Kilauea Elementary will be optional. The target opening date for the new Kapaa Intermediate School is September of 1995 and enrollment projected for the school opening is 400. The school's planned design enrollment is 1,100 students with an anticipated peak enrollment of 1,300.

The proposed new Kapaa Intermediate School will consist of forty four (44) permanent Classrooms, four (4) permanent Special Education Classrooms, an Administration Building, a Library, and a Food Service Building with a conventional kitchen and student/staff dining area. Space for ten (10) Portable Classrooms will also be provided to accommodate the peak enrollment. Integrated with the Classroom Buildings will be a two-room Computer Resource Center, a Language Lab, and a three-room Faculty Center. Also proposed is a Boys and Girls Physical Education Building with lockers and showers, a Boys and Girls Physical Education Playfield and a Paved Playcourt. A minimum of eighty four (84) parking stalls are proposed with additional stalls to be provided if needed to meet County of Kauai Planning Department requirements.

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2Peak enrollment is a temporary situation where enrollment exceeds the design enrollment.
Funds for site selection, EIS, master planning and land acquisition for the new Kapaa Intermediate School have been appropriated through Act 296/91, Executive Budget, Capital Improvement Projects, which has been signed by the Governor. Once the site is selected, funds will be made available for project design and construction on an incremental basis.
III. ALTERNATIVE SITES SELECTION PROCESS

The objective of this site selection report is to identify and evaluate the appropriate alternative sites for the proposed Kapaa Intermediate School within the school service area. The process used to select the four alternative locations for consideration as the site for the proposed new Kapaa Intermediate School involved a multi-level screening using layers of criteria to eliminate less desirable sites and narrow the choices for more in-depth analysis. At the first level minimum criteria defined by the Department of Education were utilized to identify the broad range of sites which could be considered as potential locations for the proposed school. Next, additional factors provided by DOE and the Department of Accounting and General Services (DAGS), and specific guidelines developed to take into account the unique characteristics of the service area were used to help narrow the list of potential sites. Using the DOE minimum criteria and the additional factors, a list of 27 possible alternative sites for further consideration was compiled. Each of the sites was field checked and various characteristics of the sites were analyzed. The positive and negative characteristics of the possible alternative sites were compared, and those which appeared most suitable were included in the final candidates list (see Exhibit F: Site Selection Process Flowchart).

A. MINIMUM CRITERIA - The Department of Education in its publication Educational Specifications and Standards for Schools has defined minimum criteria which the selected school site must meet. The minimum criteria identified below were utilized to initially screen the lands available for consideration as the site for the new Kapaa Intermediate School:

1. Acreage: The usable area of the potential school site must be at least 18 acres except that a site with a minimum usable area of 12 acres may be considered if it adjoins a park.

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

3. Tsunami: The site must not be in a tsunami inundation 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 DOE's scheduled school opening date. The target opening date for the new Kapaa Intermediate School is September of 1995.

8. Location: The site must be within the ultimate service area.

9. Displacement: The site must be obtained without mass relocation of families.
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.

**B. ADDITIONAL FACTORS** - The service area for the new Kapaa Intermediate school stretches over 25 miles along the Kauai coast and up to nearly four miles inland at certain locations. Numerous parcels within this relatively large area satisfy the minimum site selection requirements and it was therefore necessary to develop additional criteria to help narrow the list of potential sites and to take into account the unique characteristics of the service area:

1. **Ownership** - The Department of Accounting and General Services and the Department of Education have indicated that due to difficulties with acquisition, the potential school site should be under a single ownership, i.e. two or more adjacent parcels totalling 18 acres, under different ownership should not be considered.

2. **Infrastructure Corridor** - To further refine the selection area, and in order to take advantage of the existing infrastructure such as major transportation routes, utilities, and access to public services, only lands located within 1/2 mile of Kuhio Highway (Route 56) were ultimately considered. Sites such as those in the Kapaa or Waialua Homesteads which met the DOE minimum criteria such as the minimum 18 acre size and 2.5 to 1 length to width ratio were generally far removed from the highway and accessed via winding, narrow, substandard roads. Often such parcels were located in Forest Reserves or did not have public services such as electricity or water. Therefore sites in these more remote locations were eliminated from further analysis.

3. **State Land Use District** - Chapter 15-15, Hawaii Administrative Rules was adopted to help assure that the lands in the State are used for the purposes to which they are best suited. To accomplish this objective, all lands in the State are placed into one of four land use districts: "U" Urban, "A" Agricultural, "R" Rural and "C" Conservation. In general, schools are outright permitted uses within the "U" Urban State Land Use District, while a Special Permit or State Land Use District Boundary Amendment would be required to consider establishment of an Intermediate School within the "R" Rural, "A" Agricultural or "C" Conservation Districts. Initially only lands within the "U" Urban and "R" Rural State Land Use Districts located between the Wailua River and the Kalihiwai River were considered as potential sites for the new Kapaa Intermediate School. The Hanalei Urban District was not considered since the majority of the service area student population is located south of the Hanalei River and access to Hanalei town is often blocked during periods of heavy rainfall.

Only eight (8) sites within the "U" Urban and "R" Rural Districts in this area met the State's minimum criteria for school site selection and there were no sites north of Kapaa which met these conditions. One parcel within the "U" Urban District in Kiluaea, specifically TMK: 5-2-05:46, came close to the 18 acre minimum at approximately 15 acres, however in addition to being too small the site is currently the subject of pending litigation regarding a proposed State Land Use District Boundary Amendment. Another parcel in Kiluaea, TMK: 5-2-05:24, was examined since a 22 acre portion of the parcel was required to be set aside for "Community use" as a condition of approval of a Special Permit for golf course development. However, in addition to this set aside area being within the "A" Agricultural State Land Use District, the site is also involved in the
previously mentioned litigation. Therefore these sites were not included in the initial inventory.

As discussed below, the initial site review was further refined by examining selected lands within the "A" Agricultural District. Lands within the "C" Conservation State Land Use District involve particularly sensitive resources or constraints and were not considered in the initial site inventory.

4. Population Center - In order to minimize the need for transportation of the majority of students over long distances and to avoid leapfrog development and urban sprawl, the initial inventory of available sites within the "A" Agricultural State Land Use District was limited to the area where the majority of the service area population is concentrated. According to the 1990 Census, the area from the Wailua River to Haena had a total population of 20,158 with 15,527 or approximately 77% residing in the area between the Wailua River and Anahola. Therefore the inventory of sites initially considered which were within 1/2 mile of the Kuhio Highway corridor and within the "A" Agricultural State Land Use District was limited to the area between Wailua and Anahola.

C. ANALYSIS OF CHARACTERISTICS - Using the Department of Education's minimum criteria and the additional factors identified above, a list of possible alternative sites for further analysis was developed through the screening process diagramed in Exhibit F. Each of the possible alternative sites was field checked and analyzed using information derived from County of Kauai Tax Maps; USGS topographic maps; Federal Flood Insurance Rate Maps; State Land Use District Boundary Maps; County General Plan Maps; Regional Development Plan Maps and accompanying plan documents; County Zoning Maps; Special Management Area requirements; Hawaiian Home Lands Master Plan Maps; and Cultural Sensitivity Maps. Significant factors considered in identifying candidate sites included: proximity to "U" Urban State Land Use District Boundaries; General Plan Designation; the presence or absence of flood zones; topography; accessibility to transportation and community services; parcel shape; current use of the site; location within the service area and property ownership. The positive characteristics of each site were compared with any negative characteristics and four sites appeared to be likely candidates for further analysis and consideration as the location for the new Kapaau Intermediate School. The general locations of the candidate sites are identified on Exhibit B with more specific locations shown on Exhibits C and G. Each candidate site is described in detail in the following section.
IV. CANDIDATE SITES DESCRIPTION

As discussed above, using a multi-level screening process and a preliminary analysis of site characteristics, four candidate sites were selected as potential locations for the New Kapaa Intermediate School. During the Notice of Preparation Consultation Phase it was determined that Site #3 could contain wetlands and that site is no longer considered a potential location for the new school. The location of the parcels within which the candidate sites are located are shown in Exhibits C and G with specific school sites identified as shaded areas within the parcels in Exhibits H, I, J and K. The shaded site locations are conceptual in nature and can be refined or modified to accommodate the desired school facilities layout once a final site is selected.

SITE #1: WAILUA, KUHIO HIGHWAY - Candidate Site #1 is located within a 286.90 acre parcel identified as TMK: 4-3-02:06. The parcel is located adjacent to the northern extent of the Wailua House lots, mauka of Kuhio Highway in Wailua (see Exhibit G: Candidate Sites 1 & 2 Location). The parcel is owned by Lihue Plantation Company and is currently utilized for sugar cane production. Sugar cane is the primary botanical species present and there are no known rare, threatened or endangered species which could be adversely impacted by establishment of a school at this location.

Although the majority of the property has suitable topography to accommodate the 18 acre school site, the most appropriate location appears to be along the southwest boundary of the parcel. (see Exhibit H: Site #1 Tax Key Map and Exhibit L: Site #1 Photographs). This location is considered suitable since it is set back from the highway and traffic noise, is adjacent to the Wailua Houses lots and therefore can be seen as a reasonable continuation of the urban developed area of Wailua, is outside of the flood zone, and since it is on the southern edge of the parcel, impacts associated with adjacent sugar cane operations can be minimized. In addition, this location within the parcel would permit establishment of a secondary access through the Wailua House lots if such an access is considered desirable.

Site #1 is within the "A" Agricultural State Land Use District and is adjacent to the "U" Urban State Land Use District. The site has a County General Plan designation of Agriculture (A), is identified as Single Family Residential on the Kapaa-Lihue Planning Area Development Plan Map and is within the Agriculture (A) County Zoning District. The potential school location is not within a flood zone although a small section in the southeast corner of the parcel within which the candidate site is located is within an area identified on the Federal Flood Insurance Rate Maps (FIRM) as inundated by the 100 year flood.

For purposes of this study access to the site is assumed to be along an access drive connecting the school site central building area with Kuhio Highway. A secondary access could possibly be provided along a roadway through the Wailua Houses lots, however that option would require further study and negotiations with government agencies and landowners should this site be selected. Existing traffic congestion is a concern with all the sites in this study. However, site #1 is located in an area of greatest concern. Due to this existing situation, the State Department of Transportation (DOT) is moving forward with both an interim solution (the contra-flow lane configuration) and further development of the highway bypass between Wailua and Kapaa. Over the past year the alternatives have been narrowed to three similar alignments. Two of the alignments pass through the parcel in which Site #1 is located and one of the alternatives could even provide a frontage road for the school located between the existing Kuhio Highway and the proposed bypass. If Site #1 is selected as the final school site, the precise location of the school
site can be coordinated with DOT to insure compatibility with the selected bypass alternative and the connector road locations.

The parcel has relatively gentle topography and is not identified as culturally sensitive on the County Cultural Sensitivity Maps. A major cane haul road crosses the parcel near its eastern boundary and this dirt access may require modification to accommodate the school development. The area is served by the County Department of Water Kapaa Water System and it is possible that the site could connect to the County’s Wailua Sewage Treatment Plant.

SITE #2: KAPAA, OLOHENA ROAD - Candidate Site #2 is located within a 183.28 acre parcel identified as TMK: 4-3-06:1, located off of Olohana Road just outside of the southern end of Kapaa town (see Exhibit G: Candidate Sites 1 & 2 Location). The parcel is owned by Lihue Plantation Company and is currently used for sugar cane cultivation. Sugar cane is primary botanical species present and there are no known rare, threatened or endangered species which could be adversely impacted by establishment of a school at this location.

The location of the 18 acre school site within the parcel is limited by steep topography over portions of the total property. The most suitable location for the school site appears to be near the center of the parcel, adjacent to the south side of Olohana Road (See Exhibit I: Site #2 Tax Key Map and Exhibit N: Site #2 Photographs). In addition to possessing suitable topography, this location is at the outer edge of the sugar cane operation and easily accessible to the road and utility infrastructure corridor.

Site #2 is within the "A" Agricultural State Land Use District, and the parcel within which the site is located is adjacent to the "U" Urban State Land Use District. The site has a County General Plan Designation of Urban Mixed Use (UMU) and is within the Agriculture (A) County Zoning District. The site is designated Public on the Kapaa-Lihue Planning Area Development Plan Land Use Map which also has identified an unspecified portion of the parcel as a future high school site.

Access to the school site would be via Olohana Road which may require improvements to address school access safety issues. Olohana Road provides direct access to the Wailua and Kapaa Homesteads areas which contain a significant percentage of the District's student population. Thus, much of the bus traffic generated by the school could avoid the currently crowded conditions along Kuhio Highway. As with Site #1 above, cane haul roads traverse the parcel and some routing modification may be required.

Several of the DOT Wailua to Kapaa highway bypass alternatives pass through the parcel in which Site #2 is located. The suggested location of Site #2 is situated on the plateau above the proposed bypass alternatives and it is not likely that the bypass will directly impact this site. However, the bypass could affect access to the school site and the precise site location and facilities layout can be coordinated with DOT if Site #2 is selected.

The area is served by the County Department of Water Kapaa Water System and it is possible that this site could connect to the County Sewer System which is currently undergoing expansion into the Kapaa area. The parcel is not within a flood zone and is not identified as culturally sensitive on the County Cultural Sensitivity Maps.

SITE #3: KAPAA, APOPO ROAD - During the Notice of Preparation Consultation Phase it was determined that Site #3 could contain wetlands. It is the policy of DARGS to avoid the use of
wetlands and therefore Site #3 is no longer being considered as a potential location for the New Kapaa Intermediate School.

Candidate Site #3 includes portions of four parcels with a total area of approximately 46.55 acres: low area between Apopo Road and Hauaula Road (see Exhibit C: Candidate Sites 3 & 4 Location). Portions of the properties are currently used as pasture for cattle grazing with typical pasture grasses and there are no known rare, threatened or endangered species present which could be affected by establishment of a school at this location. Wetlands may be present at this site, rendering it unsuitable as a school site.

The location of the 18 acre school site within the parcel is constrained by steep slopes along the northern portion of the property and a narrow flood zone adjacent to Moikeha Canal which runs along the southern property boundary. The area with suitable topography located outside of the FIRM flood zone is identified on Exhibit J: Site #3 Tax Key Map (also see Exhibit O: Site #3 Photographs). It is anticipated that if this site were selected, consolidation and resubdivision of the parcels would be required. Up to 25 acres could be necessary to accommodate an 18 acre site with suitable topography and meet County Planning Department requirements regarding configuration of the resubdivided parcels.

Site #3 is within the 'U' Urban State Land Use District, has a County General Plan Designation of Urban Residential (UR), is designated Open on the Kapaa-Lihue Development Plan Land Use Map and is within the Open (O) County Zoning District. The potential school location is located outside of any flood zone identified on the Federal Flood Insurance Rate Maps although a narrow band along Moikeha Canal immediately to the south is within the 100 year flood zone. A swale that is affected by the 100 year storm event traverses the length of the site and drains to the Moikeha Canal. This swale will require containment to accommodate the school facilities should this site be selected.

For purposes of this study access to the site is assumed to be along Apopo Road which will require improvements to address school access safety issues. A secondary access could possibly be provided from Hauaula Road although that option would require further study and negotiations with government agencies and landowners should this site be selected. The site has access to the Kapaa and Wailua Homesteads via Kawaihau and Olehena Roads. Thus, as with Site #2, much of the bus traffic generated by the school could avoid the crowded conditions along Kuhio Highway.

The area is served by the County Department of Water Kapaa Water System and, as with Sites #1 and #2, there is a possibility that the property could be served by the County's Wailua sewage treatment plant system. The parcel is not identified as culturally sensitive on the County Cultural Sensitivity Maps.

SITE #4: KEALIA/KUMUKUMU, KUHIO HIGHWAY - Candidate Site #4 is located on a 1.118.08 acre parcel owned by Lihue Plantation Company identified as TMK: 4-7-041. The parcel is located mauka of Kuhio Highway, just north of Kealia and until recently was used for sugar cane cultivation (see Exhibit C: Candidate Sites 3 & 4 Location). Sugar cane continues to be the primary botanical species present and there are no known rare, threatened or endangered species which would be affected by development of a school at this location.

The most appropriate location for the school site within the parcel appears to be north of the Kaae Road residential development, mauka of Kuhio Highway and makai of Kumukumu Camp (see
Exhibit K: Site #4 Tax Key Map and Exhibit P: Site #4 Photographs. Situated at the southern edge of the formerly cultivated lands, this portion of the parcel has relatively gentle topography, would minimize conflicts with future agricultural operations and is adjacent to the Kaa Road "U" Urban State Land Use District.

The property is within the "A" Agricultural State Land Use District and is adjacent to the "U" Urban State Land Use District; has a County General Plan designation of Agriculture (A) and Urban Residential (UR); is identified as Single Family residential on the Kapaa-Lihue Development Plan Land Use Map and is within the Agriculture (A) County Zoning District. Vehicular access to the site for purposes of this study is assumed to be provided directly off of Kuhio Highway. A secondary access could possibly be provided off of Kaa Road or the Kumukumu Camp Governmental Road although those options would require further study and negotiations with government agencies and landowners should this site be selected. Bus traffic through Kapaa town could be reduced at this site since North Shore students would have to travel only to Kealia, and some students from the Wailua and Kapaa Homesteads could be transported along Mailihuna, Kawaihau or Oloheana Roads to Kuhio Highway avoiding Kapaa Town's peak hour traffic congestion. The site is outside of the County Department of Water service area and there are no plans to extend the County Sewer Service this far north. The proposed school site has relatively gentle topography, is not within a flood zone and is not identified as culturally sensitive on the County Cultural Sensitivity Maps.
cutting the majority of students off from their homes. However, during such an emergency, Site #2 still would be accessible to the Homesteads where the majority of the school's service area population resides.

Other individuals pointed out that since schools are not air conditioned, ventilation is an important consideration. It was felt that the candidate sites in the low areas - Sites #1 and #3, would not be as exposed to the wind and cooling breezes whereas the candidate sites in the upper areas - Sites #2 and #4, are more open which would provide for better air circulation.

The importance of aesthetics in selection of a school site was emphasized by some members of the community. It was felt that an attractive location for the school site would enhance the students' learning experience and present a positive community image. Many felt that Site #2 was an aesthetically pleasing location.

Representatives of Lihue Plantation Company, owner of three of the candidate sites (#1, #2 & #4), indicated that if one of the sites under their ownership were to be selected they would prefer that it be the northern most site - Site #4, Kealia/Kumukumu, Kuhio Highway. It was stated that sugar cane operations were no longer being conducted at that location while sugar cane was still being grown at the other two candidate sites under their ownership. It was felt that an intermediate school near producing cane fields would interfere with sugar cane operations. Finally, some individuals stated that the ability to acquire the site in a timely manner was another important factor to be considered. Since there was currently a need for the new intermediate school, delays in acquisition would further aggravate an already undesirable situation.
VI. DESCRIPTION OF SITE EVALUATION CRITERIA

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

The criteria are divided into three categories: School Site Criteria which are used to compare physical parameters important to site development and school operation such as environmental characteristics, roadways, utilities and access; Community Criteria which enable evaluation of school development in terms of governmental/land use compatibility and the relationship of the school to the surrounding community; and Cost Considerations 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. A rating of good, fair or poor is assigned for school site and community criteria, and dollar amount estimates are made for cost considerations.

A. SCHOOL SITE 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

♦ Size - The Department of Education has indicated that the minimum size requirement for the New Kapaa Intermediate School site is 18 acres of usable area. A minimum usable area of 12 acres may be considered if the site adjoins a park since the park could be used to reduce the amount of space required for the school playfield. The need for a 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.

Good: The size of the site can be reduced because an adjacent park will be used to meet a portion of the school's playfield needs.

Fair: The site meets the DOE minimum 18 acre size requirement but does not exceed it by more than 10%.

Poor: The site exceeds the DOE minimum size requirement of 18 acres by more than 10%.

♦ Slope - The average slope of a site represents the degree of steepness. 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:

<table>
<thead>
<tr>
<th>Slope of Land</th>
<th>% of Total Area Considered Usable</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 12%</td>
<td>100%</td>
</tr>
<tr>
<td>13 - 15%</td>
<td>90%</td>
</tr>
<tr>
<td>over 15%</td>
<td>0%(not usable)</td>
</tr>
</tbody>
</table>
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%.

- **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.

  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

- **Soil and Foundation Characteristics** - Soil and subsoil conditions affect the construction and maintenance of buildings, roads, utilities, sewage disposal and 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 Kauai are used to rate each soil type.

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

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

  Poor: Soils with high shrink-swell potential, low shear strength, low bearing capacity, high compressibility, low permeability and/or high organic matter content.

- **Aesthetic Qualities** - Natural beauty is considered a positive attribute for a school site. Shade trees, attractive plants and 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. The site is not crossed by overhead utility lines.

  Fair: The site lacks most attractive natural characteristics but has potential aesthetic value which can be developed through appropriate site design and landscaping. The site is not crossed by overhead utility lines.

  Poor: The site has no attractive natural features. The site is crossed by overhead power lines.
2. ROADS AND UTILITIES

♦ **Roadways** - Roads serving a school site must be adequate to safely and efficiently accommodate automobile and bus traffic serving the facility. 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 will have to be purchased.

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

♦ **Water** - Water of safe quality must be available in sufficient quantity and under adequate pressure to meet the schools domestic and fire protection needs.

*Good:* The site has adequate water pressure and capacity available to meet the ultimate school needs.

*Fair:* The existing water service is insufficient to meet the ultimate school needs but adequate service can be provided by the addition of transmission improvements or increasing storage capacity.

*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.

♦ **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 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.
*Drainage/Flood* - 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 drainage system to specifically meet school needs.

*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**

*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.

*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.

♦ **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:** At a minimum the site will have through streets along one short side and one long side.

**Fair:** The site will have through streets along one long side or two short sides.

**Poor:** The site will have a through street along one short side only or is served by cul-de-sacs or dead end streets, or is a flag lot.

♦ **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 corners, obstructions and other hazards.

**Fair:** Access to the site is via a major street without dangerous conditions, which is capable of handling heavy traffic.

**Poor:** Access to the site is via a street with dangerous, congested conditions, a dead end street or heavily traveled, high speed highway.

♦ **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 running through the service area which runs at intervals appropriate for the hours of school operation.

**Fair:** A public bus line running at appropriate intervals passes within 1/2 mile of the site.

**Poor:** No appropriate public bus service is available or a bus line is located further than 1/2 mile from the site.
4. ENVIRONMENT

- **Rainfall** - The new Kapaa Intermediate 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".

  **Good:** The site has an average annual rainfall less than 30".

  **Fair:** The site has an average annual rainfall between 30" and 40".

  **Poor:** The site has an average annual rainfall greater than 40".

- **Highway Noise** - Motor vehicle noise from major highways, freeways and truck routes 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; and a truck route is any roadway designated as such by the Department of Health. 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 traffic lane closest to the site to the building setback line of the site.

  **Good:** The site is more than 1500' from major highways, freeways or truck routes.

  **Fair:** The site is between 1500' and 500' away from major highways, freeways or truck routes.

  **Poor:** The site is within 500' of a major highway, freeway or truck route.

- **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.

- **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.

♦ 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.

♦ 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 floodwater 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.

♦ Terrain Amplification - Terrain amplification is defined as the impacts of high wind and heavy rainfall associated with tropical cyclones and hurricanes. Proper site selection, building siting, elevation analysis, and adherence to the Uniform Building Code all work together to provide safer and better facilities that potentially can be used as a shelter in emergency situations.

Good: The site is generally flat with a distance of 1.0 mile or greater from the shoreline and is outside of the flood and tsunami zones. The site would also be located in a low urbanized area and harbor substantial natural windward screening in the direction of the normal prevailing winds.
Fair: The site has sloping areas that cover less than 50% of the total area and is located between 0.5 and 1.0 mile from the shoreline. The site is outside the flood and tsunami zones.

Poor: The site is known to have substantial topographical relief and is in, or is in proximity to a flood or tsunami zone. The site may be within 0.5 mile of the shoreline and located in a highly urbanized area.

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

♦ State Land Use District - 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 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.

♦ County General Plan - The County General Plan establishes the long range goals and policies which guide comprehensive development and appropriate use of land resources in the County.

Good: The site is designated Urban Residential, or Public Facilities on the County General Plan Maps.

Fair: The site is designated Rural Residential on the County General Plan Maps.

Poor: The site is designated Agricultural, Open, Resort or Urban Mixed Use on the County General Plan Maps.

♦ Development Plan - Development Plans contain mid range, regional goals, objectives and land use designations and serve to apply the General Plan to specific areas.

Good: The site is designated Public 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 on the regional Development Plan Land Use Map.

Poor: The site is designated for any other use than those identified above on the regional Development Plan Land Use Map.

♦ **County Zoning Designation** - The County of Kauai Comprehensive Zoning Ordinance (CZO) establishes several Zoning Districts within the County and delineates the respective types of uses permitted in each District. In addition, the DOE has expressed its preference for the establishment of schools in certain Zoning Districts.

Good: The site is within the Residential (R) District or Special Treatment - Public (ST-P) District.

Fair: The site is within the Agriculture (A) or Commercial (C) District.

Poor: The site is within any other Zoning District and a Zoning Amendment will be required.

2. **COMMUNITY EFFECTS**

♦ **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 two families and living units.

Poor: The site cannot be acquired without the relocation of farms, businesses, or more than two families.

♦ **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 0.5 miles from hospitals, rest homes or other institutions which may be disturbed by large groups of students.

Fair - The site is between 0.25 and 0.5 mile from any hospital, rest homes or similar institutions 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.
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).

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.

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 business purposes.

Land Ownership - The ownership of a site can affect the difficulty, timing and cost associated with acquisition. Increased costs and excessive delays can result from negotiations or condemnation proceedings when an individual private owner or company 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 or County Government.

Fair: The site is under the ownership of an individual private owner or company.

Poor: The site is under the ownership of more than one private owner or company.

Aesthetic 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 will not interfere with scenic vistas when developed into a school.

Fair: The site has little aesthetic value or may partially obstruct scenic vistas when developed into a school.

Poor: The site is an aesthetic asset to the community or will obstruct scenic vistas when it is developed into a school.
**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 0.75 miles 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.

**C. COST CONSIDERATIONS** - A major consideration in the selection of a site for a new school is the relative costs associated with site acquisition and 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. **COMPARATIVE LAND VALUE**

For comparison purposes comparative land values are based on the assessed value of the land as determined by the County of Kauai, Department of Finance, Real Property Tax 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 is estimated based on assessed value. Since none of the four candidate sites are presently occupied no expenditure will be required for occupant relocation.

Assessed property tax valuation is not intended to accurately reflect actual market value but instead is to be used to compare the relative value of each candidate site. The four candidate sites are currently in agricultural use which is generally assessed at a much lower rate than urban land. Since a school would be an urban use and the four sites are adjacent to or in close proximity to urban uses it is anticipated that actual acquisition costs would be significantly 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.

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, playareas, internal accessways 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 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 COSTS**

An allowance for bus transportation is provided to students residing more than 1 mile in road distance from the school. Based on the Department of Accounting and General Services, Central Services Division figures, a present worth subsidy of $150.00 per bus per day is assumed for purposes of the comparison. The annual cost is determined by assuming 175 days per school year, a maximum passenger capacity of 60 students per bus, and 2 round trips per bus per day. School enrollment projections are based on an opening enrollment in 1995 of 400 increasing at a steady rate to the design enrollment of 1100 during an assumed 20 year school service life.

VII. **EVALUATION OF CANDIDATE SITES**

As discussed previously, four candidate sites were identified as potential locations for the New Kapaa Intermediate School using the multi-level screening process described in Section III: Site #1-Wailua, Kuhio Highway; Site #2-Kapaa, Oloheia Road; Site #3-Kapaa, Apopo Road; and Site #4-Kealia/Kumukum. (Also as noted previously, although this study contains an evaluation of Site #3, it is no longer considered a candidate for the new school location.) In the following section a detailed analysis is presented in which each candidate site is evaluated with regards to the standard Site Evaluation Criteria described above. Each candidate site is assigned a rating of good, fair or poor for school site and community criteria, and dollar amount estimates are made for cost criteria. Ratings and costs are summarized in Section D, Evaluation Summary Tables, so that the relative merits of each site can be easily compared. These ratings and cost estimates are intended for use as a basis for discussing the relative advantages and disadvantages of each site in order to facilitate selection of a site. The evaluation is for comparison purposes only and no attempt is made to recommend a particular site. Exhibits C and G identify the location of selected facilities affecting the candidate sites evaluation.

A. **SCHOOL SITE CRITERIA**

1. **SITE CHARACTERISTICS**

   ◆ **Size** - None of the candidate sites are adjacent to a park and thus a minimum of 18 acres is required.

   Only a portion of the parcels on which Sites #1, #2 and #4 are located would be required for the school site and the area acquired could be limited to less than 10% above the minimum 18 acre size. Each of these sites are therefore rated Fair.

89
Due to topography, parcel size, and shape, Site #3 could require up to 25 acres which exceeds the DOE minimum of 18 acres by more than 10%. This site is rated Poor.

- **Slope** - The average slope of Sites #1, #2, and #4 is 2.8%, 2.6% and 3% respectively and these sites are rated Good.

  The potential school location within Site #3 has an average slope of 5.2% and is rated Fair.

- **Shape** - The parcels on which Sites #1, #2, and #4 are located have sufficient area with suitable topography to accommodate a school site with a length to width ratio of 1.7 to 1.0 or better and these sites are rated Good.

  Due to topography, parcel size and shape, the length to width ratio for Site #3 is approximately 2.2 to 1.0 and this site is rated Poor.

- **Soils and Foundation** - Sites #1 and #4 primarily contain soil identified as Lihue silty clay: 0 - 8% slope, by the USDA Soil Conservation Service. This soil type has a depth to bedrock greater than 5', moderate shrink swell potential, high shear strength, high compacted density and moderately rapid permeability. These sites are given a relative rating of Good.

  Site #2 contains soil identified as Puhi silty clay loam with a depth to bedrock greater than 5', moderate to low shrink swell potential, high shear strength, high compacted density, and moderate to rapid permeability; and Ioleau silty clay loam with a depth to bedrock greater than 5', moderate shrink swell potential, and slow to moderately slow permeability. This site is given a relative rating of Fair.

  The majority of Site #3 contains soil identified as Mokuleia clay loam which has a depth to bedrock of greater than 5', low shrink swell potential, slow permeability and a high water table. A portion of the site contains Lihue silty clay soil: 15 - 25% slopes, with similar characteristics as those noted on Sites #1 and #4 above. This site is given a relative rating of Poor.

- **Aesthetic Qualities** - None of the candidate sites are crossed by overhead utility lines.

  Site #1 provides views of the significant local landform, Nonou Ridge or Sleeping Giant and its aesthetic qualities could be maintained through appropriate landscaping and site design. Site #3 contains shade trees, a waterway and rolling hillside views which could be developed into positive aesthetic attributes. These sites are rated Fair.

  Sites #2 and #4 offer splendid ocean and mountain views and are rated Good.

2. **ROADS AND UTILITIES**
Roadways - Site #1 would be developed essentially as a flag lot and access to the school facilities would be off of Kuhio Highway which has a 60’ right of way in this area. Oloheka Road which serves Site #2 has a 60’ right of way and Site #4 is fronted by Kuhio Highway which has an 80’ right of way in that location. These sites are rated Good.

Apopo Road which serves Site #3 has a right of way of 30’ and extensive improvements to this portion of the road would be required. This site is rated Poor.

Water - The County of Kauai Department of Water provides domestic water to the southern portion of the new Kapaa Intermediate School Service Area through the Kapaa Water System. The Kapaa Water System transmission facilities currently extend north to Kauaihau Road in the vicinity of the current Kapaa High and Intermediate School.

The County Department of Water has indicated that at the present time the existing source and storage facilities for the Wailua - Kapaa area are adequate for Sites #1, #2 and #3 although storage facilities are nearing capacity. Actual adequacy is determined at the time of project development and the Department of Water cannot assure that adequate storage facilities will be available in the future. For purposes of this comparison it is assumed that adequate storage capacity will be available at the time of final school site selection.

A 12" water line is located along Kuhio Highway at the access entrance to Site #1 and a new on-site distribution system running along the site access drive would carry water from the existing 12" County line to the school facility. The County Department of Water has indicated that the existing transmission facilities are adequate and this site is rated Good.

The Department of Water has indicated that in order to provide sufficient pressure and flows to meet the fire protection needs of the school at Site #2 and Site #3, it will be necessary to upgrade approximately 5,850 feet of 12" water line to 16" running from the intersection of Kauaihau and Kapauni Roads to the County Stable tank site. Along with the above improvements it will be necessary to upgrade the existing 8" and 4" water lines along Malu and Apopo Roads to 12" to serve Site #3. These sites are rated Fair.

Site #4 is located outside of the County’s water service area with the nearest County water line located nearly one mile away, south of Kealia Stream on Kauaihau Road. A private water system owned by Lihiu Plantation Company provides domestic water to a small residential development on Kaae Road adjacent to this site, however that system could not be used for drinking water during recent heavy storm conditions and is subject to periodic maintenance shutdown. Development of a new water system consisting of new source and storage facilities is considered the most practicable means of providing water to Site #4 and this site is rated Poor.

Sewer - The County of Kauai Wailua Sewage Treatment Plant currently serves the makai portion of the School Service Area between the Wailua River and the Kauai Village Shopping Center. Improvements to the sewer system are currently being made which will extend service generally along Kuhio Highway to the Mabona Hospital’s small scale treatment plant. The system improvements are expected to be completed in 1993.

The County of Kauai Department of Public Works has indicated that capacity for the new system improvements has been allocated based on existing land use and current zoning.
Although no capacity has been allocated for a new intermediate school, capacity for school use could possibly be provided through negotiations between the State and County. If system capacity can not be allocated, any site selected would require an on-site wastewater treatment facility and all sites would be rated Poor.

The existing sewer line runs along Papaloa Road in the vicinity of the Site #1 access entrance on Kuhio Highway. System improvements currently under construction and scheduled for completion in 1993 will bring the sewer line to Olohe Road in the vicinity of the Kapaa Ball Park which is within a reasonable distance for connection to Site #2 and Site #3. Off-site transmission facility improvements will be required to permit connection of these sites to the system and they are rated Fair.

There is no sewage treatment facility available to serve Site #4 and no expansion of the existing Kapaa system is planned for the foreseeable future. Development of an on-site sewage treatment system would be required and this site is rated Poor.

- **Drainage/Flood** - Site #1 and Site #4 will require both on and off-site drainage improvements to accommodate the school facilities and prevent increased flood hazards to nearby developments. These sites are rated Fair.

Topography and surrounding conditions at Site #2 are such that storm flows can be accommodated without significant improvements beyond those required for standard on-site school facilities. This site is rated Good.

The 100 year storm event inundates a sizable portion of Site #3 and an extensive drainage system consisting of a considerable amount of fill import, installation of a large culvert and up-sizing of an open channel will be required to accommodate the school facilities and prevent flood hazards. This site is rated Poor.

- **Power and Communication** - Telephone and electric lines adequate to serve the ultimate needs of the school are available along roads fronting all candidate sites and only minimal improvements will be required to meet the ultimate needs of the school. All Four Sites are rated Good.

3. **ACCESSIBILITY**

- **Pedestrian Access** - Site #1 will function essentially as a flag lot and pedestrian access to the site could be provided from Kuhio Highway and via a side street from the Wailua House lots off of Haleioli Road. This site is rated Fair.

Pedestrian access to Site #2 can only be provided along Olohe Road and access to Site #3 would only be via Apopo Road. The only pedestrian access to Site #4 would be along Kuhio Highway and these sites are rated Poor.

- **Pedestrian Safety** - None of the sites currently have adequate and safe paved shoulders, sidewalks or walkways. Sidewalks and a signalized cross walk currently exist in the
vicinity of Site #1 and these can be tied into improvements made in conjunction with access drive development. A crosswalk combined with paved shoulders, sidewalks or walkways could be developed along Oloheha Road to provide safe access to Site #2 and along Apopo Road to Site #3. These sites are rated Fair.

Access to Site #4 would be along the heavily traveled Kuhio Highway and additional improvements beyond crosswalks and paved walkways may be required to provide safe access to this site which is rated Poor.

★★ Vehicular Circulation - Site #1 would function as essentially a flag lot off of Kuhio Highway and although access could possibly be developed through a Wailua House lots side street off of Haleiwa Road such as Eggerking Road, the site still would not have a through street along any side. This site is rated Poor.

Apopo Road fronts one long side of Site #3 and there is sufficient land area available at Site #2 and Site #4 to permit through access along one long side. These sites are rated Fair.

★★ Vehicular Safety - The main access to Site #1 would be through a dead end street or flag like portion of a lot which connects to a heavy traveled, congested portion of Kuhio Highway. Although this section of Kuhio Highway does not have excessive gradients or blind curves, the limited access and congested intersection nearby could present a safety hazard. A narrow bridge must be crossed to reach Site #3 and Apopo Road which serves the site has a narrow right of way with a blind curve in this location. These sites are rated Poor.

Improvements could be made to Oloheha Road which serves Site #2 to reduce potential hazards associated with steep grades and curves. Speed limit reductions and turning and storage lanes would be required along the heavily traveled, high speed section of Kuhio Highway fronting Site #4. These sites are rated Fair.

★★ Public Bus Service - The County bus line runs along Kuhio Highway within 1/2 mile of Site #1 at approximately 1/2 hour intervals during most of the school day. The County line also has a stop within 1/2 mile of Site #2 and Site #3 near the new Kapaa Park at the intersection of Lehua Street and Oloheha Road which runs approximately every hour from 9:30 AM until 3:30 PM. These sites are rated Fair.

The County bus line does not serve Site #4 at intervals appropriate for school operations and this site is rated Poor.

4. ENVIRONMENT

★★ Rainfall - According to National Weather Service Statistics, All Four Sites have an average annual rainfall between 40" and 50" and are therefore rated Poor.
Highway Noise - Site #1 is located approximately 1000' from Kuhio Highway which falls under the DOE definition for a major highway. This site is rated Fair.

Site #2 and Site #3 are both located well over 1500' from Kuhio Highway the nearest major highway and are rated Good.

Although it may be possible to place the potential school location of Site #4 on the parcel in a manner that removes the school facilities from the Highway, such a relocation could change the shape of the site and remove the school facilities from the adjacent Urban "U" State Land Use District. In its proposed configuration the site is adjacent to Kuhio Highway and is rated Poor.

Aircraft Noise - All Four Sites are located more than one mile from the normal flight path into and out of Lihue Airport, the nearest airport or air base. Nor are there any agricultural landing strips within one mile of these sites and all sites are rated Good.

Industrial and Agricultural Nuisances - Site #1 and Site #2 are located adjacent to currently utilized sugar cane fields and periodic nuisances associated with cultivation and harvesting may occur. It is assumed that an agreement could be reached with the sugar companies to assure that conflicts between school activities and sugar cane operations are minimized. Site #3 is located adjacent to the Kapaa solid waste refuse transfer station and composting facility and periodic nuisances could occur. These sites are rated Fair.

Sugar cane operations at Site #4 have been discontinued according to Lihue Plantation Company and no industrial or agricultural nuisances are expected. This site is rated Good.

Commercial Attractions - Site #1 is located slightly less than 1/4 mile from the Kuhio Highway/Haleiwa Road small commercial center. This center contains businesses which could attract students during school hours such as a small market, 7-11 store, frozen yogurt shop and restaurant. A rating of Poor is assigned for this site.

Sites #2, #3 and #4 are all located over 1/2 mile from commercial attractions and these sites are rated Good.

Wetlands - Site #1, Site #2 and Site #4 do not contain wetlands, and there are no wetlands near the sites which would be affected by development of a school at any of these locations. These sites are rated Good.

Site #3 may contain wetlands and a wetlands determination/delineation would be required if this site were to be selected as the location for the new school. This site is rated Poor. It is the policy of DAGS and DOE to avoid the use of wetlands and therefore this site has been dropped from consideration as a potential school location.

Terrain Amplification - As mentioned in evaluation criteria section, a detailed study by a SCD planner from the Department of Civil Defense should be conducted prior to the site
planning and design phases of the project. From this cursory analysis, Sites #1, #2, #3 are all greater than 0.5 mile from the coast and have gently sloping sites outside substantial major urbanization areas. A rating of Fair was assigned to each of these sites.

Sites #4 is located within 0.5 mile of the shoreline and has both sloping and flat areas on site. The natural hill to the north starting at the shoreline and crossing Kuhio Highway coupled with the gentle open sloping area to south, east and west could make this site more susceptible to terrain amplification. This site rated Poor.

B. COMMUNITY CRITERIA

1. GOVERNMENT

♦ **State Land Use District** (see Exhibit O) - Site #1 and Site #4 are located within the "A" Agricultural State Land Use District and are immediately adjacent to the "U" Urban District. Site #2 is located within the "A" Agricultural State Land Use District and the parcel within which the site is located is adjacent to the "U" Urban District. These sites are rated Fair.

Site #3 is within the "U" Urban State Land Use District and is rated Good.

♦ **County General Plan** (see Exhibit R) - Site #1 has a County General Plan Designation of Agriculture (A) and Site #2 has a County General Plan Designation of Urban Mixed Use (UMU). These sites are rated Poor.

A portion of Site #4 has a County General Plan Designation of Urban Residential (UR) which would receive a rating of Good while the remainder of the site has a General Plan Designation of Agriculture (A) which would receive a rating of Poor. Therefore an overall rating of Fair is assigned to this site.

Site #3 has a County General Plan Designation of Urban Residential and this site is rated Good.

♦ **Development Plan** - The Kapaa-Lihue Planning Area Development Plan Land Use Map identifies Site #1 and Site #4 as Single Family Residential and these sites are rated Fair.

Site #2 is designated Public and identified as a High School site and is rated Good.

Site #3 is designated Open and is rated Poor.

♦ **County Zoning Designation** (see Exhibit S) - Site #1, Site #2 and Site #4 are within the Agriculture (A) County Zoning District and are rated Fair.

Site #3 is within the Open (O) County Zoning District and is rated Poor.
2. COMMUNITY EFFECTS

♦ Displacement - Site #1 and Site #2 are currently utilized for sugar cane production although the school site would represent only a very small portion of the area under cultivation. The surrounding area will remain in sugar cultivation and removal of this area from sugar cultivation will not require displacement of Lihue Plantation from plantation operation in the area. Site #3 is currently leased for cattle grazing and sugar cane cultivation at Site #4 has been abandoned. None of the potential school locations contain dwellings, business offices, equipment storage areas or other structures and no farm or business relocation would be required. Therefore all sites are rated Good.

♦ Interference with Institutions - There are no hospitals, rest homes or other similar institutions which could be disturbed by school activities near any of the candidate sites and All Four Sites are rated Good.

♦ Agricultural Lands - Site #1, Site #2 and Site #4 have a University of Hawaii Land Study Bureau productivity rating of "B", good. These sites are rated Poor.

Site #3 has a productivity rating of "C", fair and is rated Fair.

♦ Existing Use - Site #1 and Site #2 are used for sugar cane cultivation and Site #3 is used for grazing of cattle. These sites are rated Poor.

Lihue Plantation Company has indicated that Site #4 is no longer being used for sugar cane cultivation and that site is rated Good.

♦ Land Ownership - Site #1, Site #2 and Site #4 are under the ownership of a single corporation and are rated Fair.

Site #3 is owned by the State of Hawaii and is rated Good.

♦ Aesthetic Value - Views of the local landmark, Nonou Ridge or Sleeping Giant are available from Kuhio Highway across Site #1. However the potential school location is set back sufficiently from the highway so that these views would not be affected. Due to topography Site #2 does not offer any ocean vistas and only a brief mountain view from Olomana Road. The site is generally covered with a dense crop of sugar cane and does not represent an aesthetic asset to the community. Site #3 has no significant features of aesthetic value to the community and would not interfere with scenic vistas if developed with a school. Site #4 is elevated above Kuhio and currently provides no scenic vistas. All sites are rated Good.

♦ Location - Due to the large, widespread nature of the school service area, none of the sites are within walking distance of 50% or more of the students to be served by the school. All Four Sites are rated Poor.
C. COST CONSIDERATIONS - To further assess the relative merits of each of the candidate sites, the following section presents a comparison of the costs associated with site acquisition and development, and facility operation. Cost estimates are made for comparative land value, off-site improvements, on-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 D, 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. COMPARATIVE LAND VALUE - As discussed above in Section VI, comparative land value calculations are based on the County of Kauai, Department of Finance, Real Property Division 1991 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 negotiations based on land appraiser reports or by the courts in condemnation proceedings if an agreement cannot be reached.

The four candidate sites are currently in agricultural use which is generally assessed at a much lower rate than urban land. Since a school would be an urban use and the four sites are adjacent to or in close proximity to urban uses it is anticipated that actual acquisition costs would be significantly 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 number of acres in each parcel to yield a dollar per acre figure. The dollar per acre figure is multiplied by the number of acres required for the school site to calculate a comparative land value.

Site #3 is owned by the State and therefore there would be no cost incurred for site acquisition. Instead an opportunity cost is assumed which represents the comparative value of the land to the State.

It must be emphasized that these costs are for comparison purposes only. As stated above all sites are categorized as assessment class 5, agriculture, by the County Real Property Division and use of a site for school purposes would actually place the site in the urban assessment class. Because Site #3 is State owned, the County uses a different method to calculate assessed value than it does for privately owned land. Likewise, Site #4 has a special assessment as it is dedicated for agricultural crop production at this time. In spite of these inconsistencies, it is felt that use of the assessed valuation as described above represents an acceptable means of determining a relative or comparative land value.

The comparative land values listed below include the amount of land required for off-site roadway improvements as well as the land required for the actual school facilities. The
figures for Site #1 include the flag lot pole portion required for access to the central flag portion buildable area.

**Site #1**

**TMK:** 4-3-02:06  288 acres  
**Assessed Value:** $81,600  
**Per acre value = $283**  

- **School site required** = 18 Ac.  
- **Flag lot pole portion** = 1 Ac.  
- **Off-site roadway improvements** = 20 Ac.  

**Comparative Land Value = $5,660**

**Site #2**

**TMK:** 4-3-03:01  175 acres  
**Assessed Value:** $37,800  
**Per acre value = $216**  

- **School site required** = 18.0 Ac.  
- **Off-site roadway improvements** = 0.5 Ac.  
- **18.5 Ac.**  

**Comparative Land Value = $3,996**

**Site #3**

**TMK:** 4-5-15: 10, 19, 20 & 30  46.5 acres  
**Assessed Value:** $3,700  
**Per acre value = $80**  

- **School site required**  
  (due to topography & parcel size) = 25.0 Ac.  
- **Off-site roadway improvements** = 2.5 Ac.  
- **27.5 Ac.**  

**Comparative Land Value = $2,200**

**Site #4**
TMK: 4-7-04:01 1,118 acres

Assessed Value = $189,200

Per acre value = $169

School site required = 18 Ac.
Off-site roadway improvements = 1 Ac

Comparative Land Value = $3,211

2. **ON-SITE IMPROVEMENTS** - The following 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 to compare the relative merits of each site, only those costs that are substantially different for different sites are included. Costs associated with construction of buildings, playareas, internal accessways and other standard school facilities will be approximately the same for each site and are therefore not considered in the cost estimates. Fine grading, topsoil import, landscaping and on-site utility costs are also considered approximately equal for all sites.

- **Clearing and Grubbing** - Site #1 and Site #2 are currently in sugar cane production and if one of these sites were selected it is assumed that the sugar cane crop would be harvested and all that would remain would be rogue cane and other stray species. Sugar cane operations at Site #4 have recently been abandoned and that site is now being invaded by rogue cane and stray species. The costs for clearing and grubbing of these sites would be comparable to the cost of clearing and grubbing the pasture portion of Site #3. An additional expense would be incurred for clearing and grubbing of that portion of Site #3 currently covered with trees.

**Site #3**

4.0 Acres (Ac.) X $5,000/Ac. = $20,000

- **Rough Grading** - Site #1, Site #2 and Site #4 are relatively level and will require only fine grading and topsoil import to accommodate the school facilities. Site #3 is subject to inundation by the 100 year storm event and, in addition to fine grading and topsoil import, is estimated to require 62,000 cubic yards of fill import to provide a buildable area 800' long by 500' wide above storm water inundation elevations.

**Site #3**

62,000 Cubic Yards (C.Y.) fill X $10/C.Y. = $620,000
Roadways - Site #1 will require an access driveway and pedestrian walkway along the flag lot pole portion of the site connecting the central school buildable area with Kuhio Highway.

Site #1

1,000 Linear Feet (L.F.) X $100/L.F. = $100,000

Water (on-site) - As discussed in the Candidate Sites Evaluation section above, Site #1, Site #2 and Site #3 are located within the County Department of Water service area and the County Department of Water has indicated that at the present time the existing source and storage facilities for the Wailua - Kapaa area are adequate for Sites #1, #2 and #3, although storage facilities are nearing capacity. Actual adequacy is determined at the time of project development and the Department of Water cannot assure that adequate storage facilities will be available in the future. For purposes of this comparison it is assumed that adequate storage capacity will be available at the time of final school site selection.

Site #1 will require an 8" water line running along the flag lot pole access from Kuhio Highway to the central building area. Site #2 and #3 will not require any on-site water system improvements other than standard facility plumbing which will be approximately the same for all sites.

Site #4 is located outside of the County’s water service area with the nearest County water line located nearly one mile away, south of Kealia Stream on Kawaihau Road. A private water system owned by Lihue Plantation Company provides domestic water to a small residential development on Kaeo Road adjacent to this site, however that system could not be used for drinking water during recent heavy storm conditions and is subject to periodic maintenance shutdown. Development of a new water system is considered the most practicable means of providing water service to Site #4.

Site #1

1,000 L.F. 8" water line X $60/L.F. = $60,000

Site #4

| Source Development | = 50,000 |
| Water Wells(2) and Pumps | = 500,000 |
| Storage Tank | 500,000 gal. X $1.50/gal. = 750,000 |
| Booster Pump | = 20,000 |
| **Total** | $1,320,000 |

Sewer (on-site) - As discussed in the Candidate Sites Evaluation section, the County of Kauai Wailua Sewage Treatment Plant currently serves the makai portion of the school service area between the Wailua River and the Kauai Village Shopping Center. Improvements to the sewer system are currently being made which will extend service to
the Muhelona Hospital's small scale treatment plant on Kuhio Highway. The system improvements are expected to be completed in 1993.

The County of Kauai Department of Public Works has indicated that the increased capacity resulting from the new system improvements has been allocated based on existing land use and current zoning. Although no capacity has been allotted for a new intermediate school, capacity for school use could possibly be provided through negotiations between the State and County. The cost figures for on-site sewer improvements assume that system capacity can be allotted for the new intermediate school. If system capacity can not be allocated, any site selected would require an on-site wastewater treatment facility and sewage treatment implementation costs would be approximately the same for each site.

Costs associated with on-site wastewater piping for the central building area of each site is assumed to be approximately the same. In addition to the central building area piping, Site #1 will require a sewer line extension from Kuhio Highway to the west end of the flag lot pole access and an on-site lift station. Site #4 is located outside of the area served by the County sewer system and an alternative means of wastewater disposal will be required.

**Site #1**

1000 L.F. 8" line X $80/L.F. = $80,000
Sewer Lift Station = $50,000

$130,000

**Site #4**

Hawaii Administrative Rules, Title 11, Department of Health, Chapter 62, Subchapter 3, Section 11-62-31.1(a) permits the use of individual wastewater systems such as septic tanks for developments involving buildings other than dwellings only when the total wastewater flow does not exceed 15,000 gallons per day. The wastewater flow at ultimate school buildout is estimated to reach approximately 66,000 gallons per day and a wastewater treatment works will be required.

The sewage treatment facility will require a space allocation of approximately 1,500 square feet which is assumed to be accommodated within the 18 acre school site, an effluent disposal agreement to allow disposal by irrigation or discharge to surface waters, and an emergency overflow lagoon. It may be possible to utilize an underground injection well as an alternative to the lagoon and disposal agreement, and off-site disposal facilities could be required for effluent disposal. A detailed study and negotiations with regulatory Agencies and nearby landowners would be required to determine the most appropriate system specifications. For purposes of this general site comparison the cost of the treatment works and storage lagoon are utilized to estimate on-site wastewater disposal costs.

Treatment works for 66,000 gpd X $3/gal. = $198,000
Storage Lagoon Excavation,
7,000 C.Y. X $10/C.Y. = $70,000

$268,000
Drainage(on-site) - Site #1, Site #2 and Site #3 are currently or were recently in sugar cane cultivation and contain irrigation systems which traverse the sites. The ultimate treatment of any irrigation ditches, such as replacement with pipe or backfilling, would be decided by agreement between the State and current land owners. Therefore, costs associated with treatment of these ditches are not included in this comparison.

Site #1

Storm flows drain gently to the southeast corner of the site where they are collected in a small cut-off ditch adjacent to the Waialua Houselots and then traverse to the southwest to a small culvert crossing at Haleiwa Road. Larger storm events inundate the existing system and pond near Kuhio Highway. Two existing 18" concrete pipe siphons are located at the highway apparently to alleviate the ponding. However, there are no records available to indicate whether they are still functioning.

On-site drainage improvements required for Site #1 are estimated to involve up-sizing the existing cut-off ditch to convey the 100-year storm event.

300 L.F. X $220/L.F. = $66,000

Site #3

Upstream and on-site storm flows drain to an existing swale that traverses the length of the site. This swale drains to the Mokkepa Canal, located at the southerly end of the site, and continues to drain to the ocean. The 100-year storm event inundates a sizable portion of the site and requires containment to accommodate the school facilities.

On-site drainage improvements required for Site #3 are estimated to involve an import of fill to create a buildable area above storm water inundation elevations, a triple box culvert to traverse the buildable area, and up-sizing the remaining swale to convey the 100-year storm event. Cost estimates for the fill import are included under "Rough Grading" above.

Triple Box Culverts, 800 L.F. X $950/L.F. = $1,900,000
Open Channel, 700 L.F. X $950/L.F. = $665,000

Site #4

Storm flows drain gently to the southerly end of the site where they are collected in a small cut-off ditch adjacent to the houselots along Kaoo Road. From there, flows traverse directly south to a small culvert crossing at Kaoo Road and remaining flows are collected in a swale along Kuhio Highway. These flows converge at the northwest corner of Kailua Road and Kuhio Highway at an 8' by 8' box culvert and drain easterly to the ocean.

On-site drainage improvements for site #4 are estimated to involve up-sizing the existing cut-off ditch to Kuhio Highway.

700 L.F. X $220/L.F. = $154,000
Drainage(on-site) - Site #1, Site #2 and Site #3 are currently or were recently in sugar cane cultivation and contain irrigation systems which traverse the sites. The ultimate treatment of any irrigation ditches, such as replacement with pipe or backfilling, would be decided by agreement between the State and current land owners. Therefore, costs associated with treatment of these ditches are not included in this comparison.

Site #1

Storm flows drain gently to the southeast corner of the site where they are collected in a small cut-off ditch adjacent to the Waialua Houselots and then traverse to the southwest to a small culvert crossing at Haleiwa Road. Larger storm events inundate the existing system and pond near Kuhio Highway. Two existing 18" concrete pipe siphons are located at the highway apparently to alleviate the ponding. However there are no records available to indicate whether they are still functioning.

On-site drainage improvements required for Site #1 are estimated to involve up-sizing the existing cut-off ditch to convey the 100-year storm event.

300 L.F. X $220/L.F. = $66,000

Site #3

Upstream and on-site storm flows drain to an existing swale that traverses the length of the site. This swale drains to the Meikheia Canal, located at the southerly end of the site, and continues to drain to the ocean. The 100-year storm event inundates a sizable portion of the site and requires containment to accommodate the school facilities.

On-site drainage improvements required for Site #3 are estimated to involve an import of fill to create a buildable area above storm water inundation elevations, a triple box culvert to traverse the buildable area, and up-sizing the remaining swale to convey the 100-year storm event. Cost estimates for the fill import are included under "Rough Grading" above.

<table>
<thead>
<tr>
<th>Triple Box Culvert</th>
<th>800 L.F. X $950/L.F. = $1,500,000</th>
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<tbody>
<tr>
<td>Open Channel</td>
<td>700 L.F. X $950/L.F. = $660,000</td>
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<td>$2,165,000</td>
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Site #4

Storm flows drain gently to the southerly end of the site where they are collected in a small cut-off ditch adjacent to the houselots along Kaoo Road. From there flows traverse directly south to a small culvert crossing at Kaoo Road and remaining flows are collected in a swale along Kuhio Highway. These flows conjugate at the northwest corner of Kealia Road and Kuhio Highway at an 8' by 8' box culvert and drain easterly to the ocean.

On-site drainage improvements for site #4 are estimated to involve up-sizing the existing cut-off ditch to Kuhio Highway.

700 L.F. X $220/L.F. = $154,000
3. **OFF-SITE IMPROVEMENTS** - The following cost estimates provide a comparison of the relative costs associated with improvements required to bring necessary services to the school site or upgrade existing services to adequately meet school needs. Off-site improvements considered include extending, upgrading, or new construction of utilities, roadways, sidewalks, drainage facilities, and wastewater systems.

♦ **Roadways** - The County of Kauai Planning Department has indicated that sidewalks would most likely be required only along the portion of the school site fronting a public roadway although a final determination would be made at the time of project application. Cost for roadway improvements provided below include installation of sidewalks.

**Site #1**

Construct Kuhio Highway improvements to provide an acceleration/deceleration lane and turning lane at the site entry. Provide curb, gutter and sidewalk improvements from the site entry to match existing improvements in front of the Wailua Market.

700 L.F. X $200/L.F. = $140,000

**Site #2**

Realign the existing Oloheana Road to conform to County standards for a major roadway (60' right-of-way). Improvements would include reconstruction of an existing 16" water line located in Oloheana Road.

1,400 L.F. X $250/L.F. = $350,000

**Site #3**

Realign the existing Apopo Road to conform to County standards for a minor roadway (44' right-of-way). Improvements would include relocating the existing overhead utility facilities located along Apopo Road. The existing 4" water line located in Apopo Road would be up-sized to a 12" water line and costs for that improvement are considered under off-site water below.

1,800 L.F. X $200/L.F. = $360,000

**Site #4**

Construct improvements to Kuhio Highway to provide an acceleration/deceleration lane and turning lane at the site entry.

700 L.F. X $200/L.F. = $140,000

♦ **Clearing and Grubbing** - Land utilized for off-site roadway improvements will require clearing and grubbing at an estimated cost of $10,000 per acre.

**Site #1**

1.0 Ac. X $10,000/Ac. = $10,000

103
Site #2
0.5 Ac X $10,000/Ac. = $5,000

Site #3
2.5 Ac. X $10,000/Ac. = $25,000

Site #4
1.0 Ac. X $10,000/Ac. = $10,000

♦ Rough Grading

Site #3
A roadway embankment will be required at Site #3 to accommodate the Apopo Road realignment and match the on-site buildable pad.

16,000 C.Y. X $10/C.Y. = $160,000

Site #4
Slope excavations will be required to accommodate improvements to Kuhio Highway at Site #4.

3,000 C.Y. X $10/C.Y. = $30,000

♦ Grassing

The portion of land acquired for off-site roadway improvements which will not be paved will need to be landscaped with grasses.

Site #1
20% X 43,560 Square Feet (S.F.) X $0.30/S.F. = ±$3,000

Site #2
60% X 21,780 S.F. X $0.30 = ±$4,000
Site #3

100% X 108,900 S.F. X $0.30 = ±$33,000

Site #4

50% X 43,560 S.F. X $0.30 = ±$7,000

♦ Water(off-site) - As discussed in the Candidate Sites Evaluation and On-site Water sections, existing water transmission facilities are adequate for Site #1, and Site #4 is located outside of the County’s water service area and will require the development of an on-site water system. Site #2 and Site #3 will require improvements to the off-site water transmission facilities to meet the ultimate school domestic and fire protection needs.

Site #2

Up-size an existing 12” water line to a 16” water line from the intersection of Kawaihau and Kaapuni Roads to the County Stable tank site to provide adequate pressure and volume for fire protection.

5858 L.F. X $160 L.F. = $936,000

Site #3

Up-size an existing 12” water line to a 16” water line from the intersection of Kawaihau and Kaapuni Roads to the County Stable tank site. Up-size the existing 8” and 4” water lines to a 12” water line along Malu and Apopo Roads.

5858 L.F. X $160/L.F. = $ 936,000
3500 L.F. X $130/L.F. = $455,000

$1,391,000

♦ Sewer(off-site) - As discussed under on-site improvements above, allocation of sewer system capacity for a new Kapaa Intermediate School at Site #1, Site #2 or Site #3 is subject to negotiations between the State and County of Kauai. If sewer system capacity cannot be allocated, any site selected would require an on-site wastewater treatment works and the cost would be considered approximately equal for all sites. The following on-site cost estimates assume that capacity can be provided for the sites within the Waiuha Sewage Treatment Plant (STP) service area.

It is the policy of the County of Kauai, Department of Public Works not to provide sewer line extensions for only one development. Instead, new lines are sized for the needs of an entire area based on an overall master plan. At this time the County does not have a master plan for sewer connections in the vicinity of any of the candidate school sites. Therefore the minimum transmission line size of 8 inches which would be required for an intermediate school is assumed for cost comparison purposes.
Site #1

An 8" sewer line currently runs from an existing 15" gravity line on Papaloa Road along Lanikai Street to within approximately 80' of Kuhio Highway (See Exhibit G). Approximately 200' of line and a sewer lift station would be required to connect the east end of the flag lot pole portion of Site #1 with this existing line.

200 L.F. X $80/L.F. = $16,000
Sewer Lift Station = 50,000
$66,000

Site #2

Improvements to the County Sewer System scheduled for completion in 1993 will bring an 8" line along Kukui Street near its intersection with Ulu Street which is located approximately 3,000' from Candidate Site #2 (See Exhibit C). Connection to another 8" line to be located near the intersection of Lehua and Huluili at approximately the same distance from Site #2 may also be possible. The Hawaii Housing Authority (HHA) residential development on Malu Road (TMK:4-5-15: 7, 38 & 42) has been approved for connection to the improved system and if this site or Site #3 were to be selected as the final school location, provision for extension of sewer service would be coordinated with the HHA.

3,000 L.F. X $80/L.F. = $240,000
Sewer Lift Station = 50,000
$290,000

Site #3

This site is located in the same area as Site #2 and the nearest sewer connection would be at the same intersection described above. Site #3 is located approximately 3,600' feet from the intersection of Kukui and Ulu Streets following existing roads and as with Site #2, any connection would be coordinated with the HHA.

3,600 L.F. X $80/L.F. = $288,000
Sewer Lift Station = 50,000
$338,000

Site #4

Site #4 is located north of Kealia Stream outside of the area served by the County sewer system and approximately one mile from the terminus of the current system improvements. An on-site sewage treatment facility will be required for this site and that need is addressed under on-site improvements.

Drainage (off-site) - Off-site drainage improvements are dependent on the adequacy of existing downstream systems to convey additional flows generated by the school facilities.
Drainage and easement agreements may be required for sites requiring off-site drainage improvements.

**Site #1**

Continue the up-sizing of the on-site cut-off ditch to the low level ponding area near Kuhio Highway. Provide a sump outlet and culvert system following the existing drainage course across Haleiwa Road and into the existing ditch which drains out behind the Coco Palms.

Open Channel, 500 L.F. X $220/L.F. = $110,000
Culvert System, 500 L.F. X $280/L.F. = 140,000
Structures = 30,000

$280,000

**Site #4**

Provide an on-site cut-off ditch outlet and a culvert system within the State right-of-way and an outlet above the existing 8' by 8' box culvert crossing near the intersection of Kealia Road and Kuhio Highway.

600 L.F. X $200/L.F. = $120,000
Structures = 30,000

$150,000

**Utilities (off-site)** - The Kauai Electric Division of Citizens Utilities has estimated the "For Budget Purposes Only" costs to provide electric service to each of the potential school sites. GTE Hawaiian Tel has indicated that they can provide telephone services to each of the sites at no cost to the developer. Utility gas would be trucked in to each of the sites and costs for on-site gas storage and transmission would be approximately the same for all sites.

**Site #1**

Provide Electric Service = $18,710

**Site #2**

Provide Electric Service = $8,315

**Site #3**

Provide Electric Service = $7,800

**Site #4**

Provide Electric Service = $7,770
BUS SUBSIDY COSTS - An allowance for bus transportation is provided by the State for students residing more than one mile in road 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 Department of Accounting and General Services, Central Services Division figures, a present worth subsidy rate of $150 per bus per day is assumed for purposes of this comparison. Each bus has a maximum capacity of 60 students and each bus is assumed to make two trips in each direction per day. Student enrollment is assumed to increase at a constant rate from the opening enrollment of 400 in 1995 to the design enrollment of 1,100 in 2015. Peak enrollment figures are not included for purposes of the bus subsidy comparison.

Site #1 is located adjacent to the Wailua House lots and it is estimated that approximately 90% of the students attending an intermediate school at this site would qualify for the bus subsidy.

Site #2 is within one mile road distance of the Malu Road Hawaiian Housing Authority residential development and a small portion of the residences in Kapaa town. It is estimated that approximately 95% of the students attending an intermediate school at this site would qualify for the bus subsidy.

Site #3 is within one mile road distance of a portion of the Kapaa Homesteads, the Malu Road Hawaiian Housing Authority residential development and a small number of the residences in Kapaa town. It is estimated that approximately 90% of the students attending an intermediate school at this site would qualify for the bus subsidy.

Site #4 is within one mile road distance of the residential developments along Kaoo Road and Kamole Road and a few residences in Kealia. It is estimated that 97% of the students attending an intermediate school at this site would qualify for the bus subsidy.

The following table illustrates the bus subsidy calculations for each candidate site. Over the 20 year life of the school, the bus subsidy costs in present worth dollars are estimated as follows:
# BUS SUBSIDY CALCULATIONS TABLE

## SITE #1 AND SITE #3

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<tr>
<th>Year</th>
<th>Enrollment</th>
<th>No. of Students</th>
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<th>Daily</th>
<th>Annual Subsidy</th>
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**TOTAL BUS SUBSIDY ESTIMATE: SITE 1 & 3................. 3,202,500**

## SITE #2

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**TOTAL BUS SUBSIDY ESTIMATE: SITE 2................. 3,386,250**
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**TOTAL BUS SUBSIDY ESTIMATE: SITE 4.......................... 3,465,000**
D. EVALUATION SUMMARY TABLES - The following tables summarize the results of the above evaluation of the four candidate sites. The total number of Good, Fair and Poor ratings for each site are tabulated for School Site Criteria and Community Criteria and total dollar amounts are calculated for Comparative Land Values, On-Site Improvements, Off-Site Improvements and Bus Subsidy Costs.

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<th>SITE #3</th>
<th>SITE #4</th>
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</table>
REFERENCES

AGENCIES AND ORGANIZATIONS

Citizens Utilities, Kauai Electric Division

City and County of Honolulu:
Board of Water Supply

County of Kauai:
Department of Public Works
Department of Water
Economic Development Board
Fire Department
Office of the Mayor
Planning Department

GTE Hawaiian Tel

Lihue Plantation Company

State of Hawaii:
Department of Accounting and General Services
Department of Education
Department of Land and Natural Resources
Department of Health
Department of Transportation, Highways Division
Department of Civil Defense

DOCUMENTS


County of Kauai, Comprehensive Zoning Ordinance, May 1977.

County of Kauai, General Plan Update, June, 1984.

County of Kauai, Kapa'a-Lihue Planning Area, Development Plan-Land Use Map, March 1971.


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<th>COST CONSIDERATIONS (IN DOLLARS)</th>
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</table>


University of Hawaii, Land Study Bureau, *Detailed Land Classification - Island of Kauai*, December 1967.


EXHIBIT A
SERVICE AREA LOCATION
EXHIBIT B
GENERAL LOCATION:
EXISTING SCHOOLS & CANDIDATE SITES
EXHIBIT C
EXISTING KAPAA HIGH &
CANDIDATE SITES 3 & 4
PARCEL LOCATION
ANNUAL ENROLLMENT
KAPAA HIGH & INTER

ENROLLMENT

YEAR

EXHIBIT D
PROJECTED ENROLLMENT
KAPAA HIGH AND ELEMENTARY
KAPAA COMPLEX
FEEDER ORGANIZATION

EXISTING STRUCTURE

Hanalei Elementary
K-6

Kilauea Elementary
K-6

Kapaa Elementary
K-6

Kapaa High and Intermediate
7-12

King Kaumualii Elem.
K-6

Kauai High and Intermediate
7-12

PROPOSED STRUCTURE (1996)

Hanalei Elementary
*K-6

Kilauea Elementary
*K-6

Kapaa Elementary
K-5

Kapaa Intermediate—Kapaa High
6-8 (New) 9-12

Kapaa II Elementary
K-5 (New)

King Kaumualii Elem.
K-5

Kauai Intermediate—Kauai High
6-8 (New) 9-12

* - Grade 6 optional to Kapaa Intermediate

EXHIBIT E
EXISTING AND PROPOSED FEEDER COMPLEX
FLOWCHART OF THE
SITE SELECTION PROCESS
NEW KAPAA INTERMEDIATE SCHOOL

Does the site meet DOE minimum criteria? (Size, Shape, Location, Tsunami etc.)

YES

NO

SITE ELIMINATED FROM FURTHER ANALYSIS

Does the site comply with additional factors? (Ownership, State Land Use District, etc.)

YES

NO

Do the positive attributes of the site compare favorably with any negative attributes?

YES

NO

SITE SELECTED AS CANDIDATE FOR NEW KAPAA INTERMEDIATE SCHOOL LOCATION

EXHIBIT F
SITE SELECTION PROCESS FLOWCHART
EXHIBIT G
CANDIDATE SITES 1 & 2
PARCEL LOCATION
November 6, 1991

TO: Principals Concerned
FROM: Shirley T. Akita

SUBJECT: New Kapaa Intermediate School
         Informational Meeting on Site Selection Study

An informational meeting on the alternative sites for the new
Kapaa Intermediate School, scheduled to open in September,
1995, will be held on:

DATE: Tuesday, November 26, 1991
PLACE: Kapaa High & Intermediate
       School Cafeteria
TIME: 7:00 p.m.

Please notify your school community, including students,
parents, staff and others regarding this meeting. We are
interested in their comments, in-put and support for this new
school.

The school will be organized to include grades 6 to 8 for
students residing in the Kauaihau District which is north of
the Wailua River. Grade 6 students from Kilauea and Hanalei
Schools will be given an option of either attending this
school or remaining at their current schools.

Should you have questions or need more information, call us
at 241-3321.

cc: Facilities Branch
    DADS, Planning Branch
    Keith Companies

EXHIBIT L:
COMMUNITY MEETING NOTICE

AN AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY EMPLOYER
LOOKING SOUTHWEST ACROSS SITE
WAILUA HOUSELOTS SEEN IN BACKGROUND

LOOKING EAST ACROSS SITE
KUHIO HIGHWAY SEEN IN BACKGROUND

EXHIBIT M:
SITE #1 PHOTOGRAPHS
LOOKING SOUTHEAST ACROSS SITE
TOWARD WAILUA

LOOKING WEST FROM WEST CENTRAL
PORTION OF SITE

EXHIBIT N:
SITE #2 PHOTOGRAPHS
LOOKING NORTH ALONG WESTERN BOUNDARY OF THE SITE

LOOKING NORTHEAST ACROSS SITE WITH CEMETERY ON THE HILL IN THE BACKGROUND

EXHIBIT O:
SITE #3 PHOTOGRAPHS
LOOKING WEST ACROSS SITE WITH KAAO ROAD RESIDENCES IN THE BACKGROUND

LOOKING EAST ACROSS SITE TOWARD KUHIO HIGHWAY KAAO RESIDENCES SEEN ON THE RIGHT

EXHIBIT P:
SITE #4 PHOTOGRAPHS
EXHIBIT Q
STATE LAND USE DISTRICTS
LEGEND

ZONING DISTRICTS (numbers after letter refer to density)

R  Residential
RR  Resort
A  Agriculture
O  Open
ST  Special Treatment

C-N  Neighborhood Commercial
C-G  General Commercial
I-L  Limited Industrial
I-G  General Industrial