March 16, 2016

Mr. Scott Glenn  
Interim Director  
Office of Environmental Quality Control  
235 South Beretania Street, Suite 702  
Honolulu, Hawaii  96813-2437  

Re: Princess Nahienaena Elementary School Classroom Building  
Tax Map Key: 4-6-018: 013 por.  
Panaewa, District of Lahaina, Maui, Hawaii  

Dear Mr. Glenn:

The Hawaii State Department of Education has reviewed the Draft Environmental Assessment for the subject project and anticipates a Finding of No Significant Impact (FONSI) determination. Please publish this determination in the next Environmental Notice.

One printed copy of the Draft Environmental Assessment and a CD with the document in .pdf format are attached. The Environmental Notice publication form will be e-mailed to OEQC.

Should you have any questions or concerns, please contact Janna Mihara, Project Coordinator of the Facilities Development Branch at 377-8314 or via e-mail at janna_mihara@notes.k12.hi.us.

Sincerely,

Duane Y. Kashiwai  
Public Works Administrator  
Facilities Development Branch  

DYK:dw  
Attachment  

c: Facilities Development Branch
<table>
<thead>
<tr>
<th>Project Name:</th>
<th>Princess Nahı’ena’ena Elementary School Classroom Building</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Short Name:</td>
<td>Princess Nahı’ena’ena Classroom Building</td>
</tr>
<tr>
<td>HRS §343-5 Trigger(s):</td>
<td>§343-5(a)(1) Use of state land and funds</td>
</tr>
<tr>
<td>Island(s):</td>
<td>Maui</td>
</tr>
<tr>
<td>Judicial District(s):</td>
<td>Lahaina</td>
</tr>
<tr>
<td>TMK(s):</td>
<td>4-6-018: 013 por.</td>
</tr>
<tr>
<td>Permit(s)/Approval(s):</td>
<td>NPDES General Permit, Variance from Pollution Controls, Historic Site Review, Building Permit, Grading and Grubbing Permit, Certificate of Occupancy, Fire Protection</td>
</tr>
<tr>
<td></td>
<td>Project Management Section</td>
</tr>
<tr>
<td></td>
<td>4680 Kalanaianaole Highway, TB1A</td>
</tr>
<tr>
<td></td>
<td>Honolulu, HI 96821</td>
</tr>
<tr>
<td>Contact Name, Email, Telephone, Address</td>
<td>Janna Mihara</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:Janna_mihara@notes.K12.hi.us">Janna_mihara@notes.K12.hi.us</a></td>
</tr>
<tr>
<td></td>
<td>T: 377-8314</td>
</tr>
<tr>
<td>Accepting Authority:</td>
<td>(for EIS submittals only)</td>
</tr>
<tr>
<td>Consultant:</td>
<td>Gerald Park Urban Planner</td>
</tr>
<tr>
<td></td>
<td>Gerald Park</td>
</tr>
<tr>
<td></td>
<td>95-595 Kanamee Street #324</td>
</tr>
<tr>
<td></td>
<td>Millilani, HI 96789</td>
</tr>
<tr>
<td></td>
<td>T: 625-9626</td>
</tr>
<tr>
<td></td>
<td>E: <a href="mailto:gpark@goup.biz">gpark@goup.biz</a></td>
</tr>
</tbody>
</table>

**Status (select one)**

- **X** DEA-AFNSI
  - **Submittal Requirements**
    - Submit 1) the proposing agency notice of determination/transmittal letter on agency letterhead, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the DEA, and 4) a searchable PDF of the DEA; a 30-day comment period follows from the date of publication in the Notice.

- **FEA-FONSI**
  - Submit 1) the proposing agency notice of determination/transmittal letter on agency letterhead, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the FEA, and 4) a searchable PDF of the FEA; no comment period follows from publication in the Notice.

- **FEA-EISPN**
  - Submit 1) the proposing agency notice of determination/transmittal letter on agency letterhead, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the FEA, and 4) a searchable PDF of the FEA; a 30-day comment period follows from the date of publication in the Notice.

- **Act 172-12 EISPN** ("Direct to EIS")
  - Submit 1) the proposing agency notice of determination letter on agency letterhead and 2) this completed OEQC publication form as a Word file; no EA is required and a 30-day comment period follows from the date of publication in the Notice.

- **DEIS**
  - Submit 1) a transmittal letter to the OEQC and to the accepting authority, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the DEIS, 4) a searchable PDF of the DEIS, and 5) a searchable PDF of the distribution list; a 45-day comment period follows from the date of publication in the Notice.

- **FEIS**
  - Submit 1) a transmittal letter to the OEQC and to the accepting authority, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the FEIS, 4) a searchable PDF of the FEIS, and 5) a searchable PDF of the distribution list; no comment period follows from publication in the Notice.

- **FEIS Acceptance Determination**
  - The accepting authority simultaneously transmits to both the OEQC and the proposing agency a letter of its determination of acceptance or nonacceptance (pursuant to Section 11-200-23, HAR) of the FEIS; no comment period ensues upon publication in the Notice.
Office of Environmental Quality Control

FEIS Statutory Acceptance
Timely statutory acceptance of the FEIS under Section 343-5(c), HRS, is not applicable to agency actions.

Supplemental EIS Determination
The accepting authority simultaneously transmits its notice to both the proposing agency and the OEQC that it has reviewed (pursuant to Section 11-200-27, HAR) the previously accepted FEIS and determines that a supplemental EIS is or is not required; no EA is required and no comment period ensues upon publication in the Notice.

Withdrawal
Identify the specific document(s) to withdraw and explain in the project summary section.

Other
Contact the OEQC if your action is not one of the above items.

Project Summary
The Department of Education proposes to construct a two-story, 8 classroom building and outdoor learning area at Princess Nahi’ena’ena Elementary School. Located at the uppermost section of the campus, the approximately 2.0 acre site was previously graded and is currently covered by assorted dry grasses. The site is not used for school activities. The classroom building will be erected on a portion of an undeveloped site and the remainder improved for outdoor learning and activities. The outdoor learning area will be grassed, landscaped, and feature a covered structure to be built as a "classroom without walls".

The cost of the project is estimated at $7.24 million. Construction is projected to commence in April 2017 with completion by Summer 2018.
DRAFT ENVIRONMENTAL ASSESSMENT

PRINCESS NAHI‘ENA‘ENA ELEMENTARY SCHOOL CLASSROOM BUILDING
Pana‘ewa, District of Lahaina, Maui, Hawai‘i

Prepared for

State of Hawai‘i
Department of Education Project Management
4680 Kalanianaole Highway, TB1A
Honolulu, HI 96821

March 2016
PRINCESS NAHI‘ENA‘ENA ELEMENTARY SCHOOL CLASSROOM BUILDING  
Pana‘ewa, District of Lahaina, Maui, Hawai‘i

Prepared in Partial Fulfillment of the Requirements of Chapter 343, Hawai‘i Revised Statutes and Title 11-200, Hawai‘i Administrative Rules, Department of Health, State of Hawai‘i

Prepared for
State of Hawai‘i
Department of Education Project Management
4680 Kalanianaole Highway, TB1A
Honolulu, HI 96821

Prepared by
Gerald Park Urban Planner
95-595 Kanamee Street #324
Mili‘ili, Hawai‘i 96789

and

Design Partners, Inc.
1580 Makaloa Street
Suite 1100
Honolulu, Hawai‘i 96814

December 2015
# PROJECT PROFILE

<table>
<thead>
<tr>
<th>Proposed Action:</th>
<th>Princess Nahì’en’aena Elementary School Classroom Building DOE Job No. Q54000-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location:</td>
<td>Pana’ewa, District of Lahaina, Maui, Hawai’i</td>
</tr>
<tr>
<td>Street Address:</td>
<td>816 Niheu Street Lahaina, Hawai’i 96761</td>
</tr>
<tr>
<td>Proposing/Determining Agency:</td>
<td>Department of Education Project Management Section 4680 Kalanianaole Highway, TB1A Honolulu, Hawai’i 96821</td>
</tr>
<tr>
<td>Tax Map Key:</td>
<td>4-6-0018: 013 por.</td>
</tr>
<tr>
<td>Land Area:</td>
<td>37.832 acres</td>
</tr>
<tr>
<td>Landowner:</td>
<td>State of Hawai’i</td>
</tr>
<tr>
<td>Existing Use:</td>
<td>Public Elementary School</td>
</tr>
<tr>
<td>State Land Use Designation:</td>
<td>Urban</td>
</tr>
<tr>
<td>Maui Island Plan:</td>
<td>Inside Urban Growth Boundary</td>
</tr>
<tr>
<td>Community Plan:</td>
<td>West Maui Community Plan</td>
</tr>
<tr>
<td>WMCP Land Use Map:</td>
<td>Public/Quasi-Public</td>
</tr>
<tr>
<td>Zoning:</td>
<td>Interim</td>
</tr>
<tr>
<td>Special Management Area:</td>
<td>Outside Special Management Area</td>
</tr>
<tr>
<td>Need for Assessment:</td>
<td>Chapter 343, Hawai’i Revised Statutes §343-5 (a) (1) Propose the use of state or county lands or the use of state or county funds.</td>
</tr>
<tr>
<td>Determination:</td>
<td>Anticipated Finding of No Significant Impact</td>
</tr>
<tr>
<td>Contact Person:</td>
<td>Janna Mihara, Project Coordinator Department of Education Project Management Section 4680 Kalanianaole Highway, TB1A Honolulu, Hawai’i 96821</td>
</tr>
<tr>
<td></td>
<td>Telephone: 377-8314</td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS

Project Profile i
Table of Contents ii
Figures, Tables, and Photographs iv

SECTION 1 DESCRIPTION OF THE PROPOSED ACTION 1

A. Purpose 1
B. Technical Characteristics 1
   1. Classroom Building 2
   2. Sustainable Characteristics 2
   3. Circulation and Off-Street Parking 3
   4. Infrastructure 3
   5. Demolition 3
   6. Grading and Drainage 3
   7. Landscaping 4
C. Economic Characteristics 4

SECTION 2 EXISTING CONDITIONS 14

A. Existing Uses and Structures 14
B. Environmental Characteristics 15
   1. Climate 16
   2. Topography 16
   3. Soils 17
   4. Hydrology 17
      a. Ground Water 17
      b. Surface Water 18
   5. Flood Hazard 18
   6. Biological Resources 18
   7. Archaeological Resources 18
C. Land Use Controls 18
D. Public Facilities and Services 21

SECTION 3 SUMMARY OF ENVIRONMENTAL IMPACTS AND MEASURES TO MITIGATE ADVERSE EFFECTS 23

A. Short-term Impacts 23
B. Long-term Impacts 25

SECTION 4 ALTERNATIVES TO THE PROPOSED ACTION 27

A. No Action 27
B. Alternatives Sites 27

SECTION 5 PERMITS AND APPROVALS 28
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>SECTION</th>
<th>CONTENT</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>AGENCIES AND ORGANIZATIONS TO BE CONSULTED IN THE PREPARATION OF THE ENVIRONMENTAL ASSESSMENT</td>
<td>29</td>
</tr>
<tr>
<td>7</td>
<td>DETERMINATION OF SIGNIFICANCE</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>REFERENCES</td>
<td>33</td>
</tr>
</tbody>
</table>
FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vicinity Map</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Tax Map</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>Site Plan (Sheet C-6)</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>Overall First Floor Plan (Sheet A-2.1)</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>Overall Second Floor Plan (Sheet A-2.2)</td>
<td>9</td>
</tr>
<tr>
<td>6</td>
<td>Exterior Elevations (Sheet A-4.1)</td>
<td>10</td>
</tr>
<tr>
<td>7</td>
<td>Exterior Elevations (Sheet A-4.2)</td>
<td>11</td>
</tr>
<tr>
<td>8</td>
<td>Grading and Drainage Plan (Sheet C-7)</td>
<td>12</td>
</tr>
<tr>
<td>9</td>
<td>Hardscape Plan</td>
<td>13</td>
</tr>
<tr>
<td>10</td>
<td>Flood Insurance Rate Map</td>
<td>19</td>
</tr>
<tr>
<td>11</td>
<td>State Land Use Districts</td>
<td>20</td>
</tr>
</tbody>
</table>

TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Architectural Space Program</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Structures at Princess Nahi'ena'ena Elementary School</td>
<td>14</td>
</tr>
<tr>
<td>3</td>
<td>Aquifer Classification</td>
<td>16</td>
</tr>
</tbody>
</table>

PHOTOGRAPHS

<table>
<thead>
<tr>
<th>Photograph</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>North View of Slope to Building “E. Building Site on Right.</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>North View of Building Site</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>West View of Site for Classroom Building Wing.</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>West View of Site. Building “E” in Background.</td>
<td>15</td>
</tr>
<tr>
<td>5</td>
<td>South View of Building Site. Lahainaluna Intermediate School Playground in Background.</td>
<td>15</td>
</tr>
<tr>
<td>6</td>
<td>Building Site Slope Looking South. Walkway in Foreground.</td>
<td>15</td>
</tr>
</tbody>
</table>
DESCRIPTION OF THE PROPOSED PROJECT

The Department of Education, State of Hawai'i, proposes to construct a new classroom building at Princess Nahī'ena'ena Elementary School located in the ahupu'a of Pana'ewa, District of Lahaina, Maui, Hawai'i. Princess Nahī'ena'ena Elementary School (hereafter "Nahī'ena'ena School" or "School") is bounded by Kanaha Stream Gulch on the north, Lahainaluna School on the east, Lahaina Intermediate School on the south, and the Kelawea Mauka residential subdivision on the west. A Location Map is shown as Figure 1.

Princess Nahī'ena'ena Elementary School and Lahaina Intermediate School are located on the same parcel. The parcel bears Tax Map Key 4-6-018: 013 encompassing an area of 37.823 acres. A Tax Map is shown as Figure 2.

A. Purpose

The project is needed to accommodate growth in enrollment of elementary school age children in the Lahaina area. The only other nearby elementary school, King Kamehameha II, does not have any more space to expand their facilities. As a result, they have been sending their overflow of students to Nahī'ena'ena School. In addition, a new school site for the proposed West Maui Elementary School is not anticipated to be available before 2017.

B. Technical Characteristics

1. Classroom Building

The new building will be located in an undeveloped section (or project area) of the School mauka of Classroom Building “E” and east of Classroom Building “C”. At the proposed location the project area is the uppermost area on campus. The perimeter of the approximately 2.0 acre project area slopes in four directions — to an earthen drainage swale on the north, a play field at Lahaina Intermediate School on the east, south to Classroom Building “E”, and west to a wide concrete walkway aligned mauka-makai (east to west) through the middle of the school.

The building will be sited at the southern end of the project area (or “building site”) with the remainder of the project area improved for outdoor learning and activities. A Site Plan is shown as Figure 3. A two level, L-shaped building with a ground level footprint of approximately 10,067 gross square feet (net ground level floor area and circulation) is proposed. The second level also provides 10,067 square feet (See Overall First and Second Floor Plans on Figures 4 and 5).

Ground floor space in the structure is allocated for four general classrooms, an art/science room, boys and girls restrooms, faculty restroom, two separate stairways, elevator, electrical room, communication room, and storage.

Two general classrooms, computer center, faculty center and conference room, faculty restrooms, electrical room, communication room, and storage room comprise the second level. Eight classrooms are proposed in total. Program spaces are shown in Table 1.

In general a combination concrete / cement masonry unit structure is proposed. The building
Table 1. Architectural Space Program

<table>
<thead>
<tr>
<th>Space</th>
<th>Number</th>
<th>SF</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Classroom</td>
<td>4</td>
<td>950</td>
<td>3,800</td>
</tr>
<tr>
<td>Art and Science Classroom</td>
<td>1</td>
<td>1,100</td>
<td>1,100</td>
</tr>
<tr>
<td>Computer Resource Center</td>
<td>1</td>
<td>1,100</td>
<td>1,100</td>
</tr>
<tr>
<td>Faculty Center</td>
<td>1</td>
<td>900</td>
<td>900</td>
</tr>
<tr>
<td>Meeting Room/General Classroom</td>
<td>2</td>
<td>950</td>
<td>1,900</td>
</tr>
<tr>
<td>Conference Room</td>
<td>1</td>
<td>240</td>
<td>240</td>
</tr>
<tr>
<td>Gang Restrooms</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty Restroom</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Custodial Room</td>
<td>1</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>Communication Room</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical and Electrical Rooms</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>9,120</strong></td>
</tr>
</tbody>
</table>

*Source: Design Partners Inc., 2015*

will be constructed on a poured in place concrete foundation and floor with double tees supporting the second floor concrete walkways and flooring. Walls will be framed with concrete and CMU. Steel roof framing with metal decking will support a standing seam metal roofing system. The ground level finished floor elevation is 391.17 feet.

A detached structure will be constructed towards the western end of the outdoor learning area. The structure or “hale” will provide a covered outdoor classroom in support of the planned outdoor learning area. The hale has a floor area of approximately 308 square feet, is 13'-6" in height, and will be built as a classroom without walls.

Elevation differences between the walkway and the project area will be negotiated by a concrete exterior stairway. Wheelchair access will be provided via an access route (1:20 slope) at the north end of this stairway. A second stairway will be constructed on the south side of the new building for firefighter access.

Vertical access between floors will be provided by one elevator at the juncture of the two building wings and stairways on the end of each wing.

The height of the building is approximately 30 feet measured from existing grade to top of roof ridge. Exterior Elevations are shown as Figures 6 and 7. The design height does not exceed the 30-foot height limit for the Interim zoning district.

The computer center and communication rooms will be air conditioned. All other spaces will be naturally ventilated and augmented with ceiling fans.

The building will be equipped with a fire sprinkler system. The existing concrete walkway from the school driveway / parking area to just beyond Building 'C' also functions as a fire lane. The 20-foot wide walkway is sufficient to accommodate a fire apparatus.
2. Sustainable Characteristics

The classroom building will be designed according to a high performance building rating program developed to specifically facilitate the design, construction, and operation of high performance schools. The rating system is termed the Hawaii Collaborative for High Performance Schools or HI-CHPS. A high performance school is defined as having learning environments that are healthy and comfortable, energy resource and water efficient, safe, secure and adaptable, and easy to operate and maintain.

HI-CHPS criteria will be used to develop sustainability features for the project during design, construction, and performance phases. Design strategies will be developed and documented for the design phase; construction related criteria will be developed and documented for the construction phase; and operation and maintenance criteria documented for the performance phase.

3. Circulation and Off-Street Parking

Changes to on-campus vehicle circulation patterns, parking configurations, and bus loading zone are not proposed. Additional parking stalls are not required.

4. Infrastructure

Potable water will be supplied through a new distribution line from an existing 6" water main under the central walkway. The distribution line has not yet been sized.

A new 6" wastewater lateral will connect to an existing clean out in the central walkway. The school's wastewater system connects to the Maui County system.

Improvements to the existing electrical system are not required based on preliminary calculation of electrical load, mechanical load, and spare capacity for the new building and existing electrical service. An increase in any of the aforementioned parameters could trigger an electrical service upgrade.

All new electrical service ducts and lines will be routed underground from the electrical room in Building A.

5. Demolition

There are no structures to demolish on the building site.

6. Grading and Drainage

The building site will be grubbed of vegetation and graded to an elevation of between 385 to 390 feet above sea level on the north side of the project area to a low of 30 feet on the south side of the project area. Grading will slope the terrain away from the building (FF 391.17 feet). In general the outdoor learning area will be approximately 4" to 6" lower in elevation than the new building.

The area to be disturbed by construction is estimated at 1.95 acres. Earthwork estimates are 6,060 cubic yards of excavation and 500 cubic yards of embankment.
Runoff will be collected in drain inlets arrayed on the east and south sides of the building and conveyed by 36" drain pipes to an existing catch basin in the southeast corner of the project area. The drain pipes will detain runoff prior to controlled release into the catch basin. A Drainage and Grading Plan is shown as Figure 8.

An existing off-site earthen drainage swale to the east of the project area drains off-site runoff from south to north. Minimal grading to the School side slope will help cut off runoff from entering the school grounds.

7. Landscaping

Areas around the building and open lawn will be landscaped using native and cultural plants. Native and cultural planting areas and a student garden are proposed to support and promote the School's immersion program. Trees and palms will provide shade, accent areas of the open lawn, and visually and acoustically buffer buildings. Approximately half of the open lawn area will be grassed for outdoor recreation and school functions. Landscaped areas will be irrigated using a low-flow underground irrigation system. A Hardscape Plan is shown as Figure 9.

C. Economic Characteristics

Construction costs are estimated at $7.24 million and will be funded by the Department of Education.

Construction is projected to commence in April 2017 with completion by summer of 2018. Building occupancy is projected for the start of the 2018 school year.

The 37.823 acre lot is owned by the State of Hawaii.

Note:

Several Environmental Assessments prepared for improvements at Princess Nahienaena Elementary School are listed below. The documents were used for reference in the preparation of this Environmental Assessment.

Princess Nahienaena Elementary School Playfield Site Improvements (December 1989)
Princess Nahienaena Elementary School Eight-Classroom Building (September 1993)
Princess Nahienaena Elementary School Cafetorium/Multipurpose Room (November, 1995)

The Department of Education has determined that the proposed action is not exempt from environmental assessment pursuant to Chapter 343, Hawaii Revised Statutes.
Photograph 1  North View of Slope to Building "E", Building Site on Right.
Photograph 2  North View of Classroom Building Site.
Photograph 3  West View of Site for Classroom Building Wing.
Photograph 4  West View of Building Site, Building "E" in Background.
Photograph 5  South View of Building Site, Lahainaluna Intermediate School Playground in Background.
Photograph 6  Building Site Slope Looking South. Walkway in Foreground.
A. Existing Uses and Structures

The new Classroom Building is proposed at the upper end of the School campus. Covered by dry grass, the site is undeveloped and free of structures. Environmental characteristics are described in this section and Site Photographs depict some existing conditions.

Princess Nahì'ena'ena Elementary School opened for instruction in 1988 with opening of one permanent building (Building A) and a portable building (P-7). Between 1990 and 1998 four permanent buildings later were constructed and portable buildings placed incrementally on the campus at various times. Existing structures and uses are listed in Table 1.

Table 2. Structures at Princess Nahì'ena'ena Elementary School

<table>
<thead>
<tr>
<th>Building</th>
<th>Function</th>
<th>Levels</th>
<th>No. Classrooms</th>
<th>Year Built</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Classroom</td>
<td>2</td>
<td>8</td>
<td>1988</td>
</tr>
<tr>
<td>B</td>
<td>Classroom</td>
<td>2</td>
<td>*8</td>
<td>1990</td>
</tr>
<tr>
<td>C</td>
<td>Classroom</td>
<td>2</td>
<td>8</td>
<td>1995</td>
</tr>
<tr>
<td>E</td>
<td>Classroom</td>
<td>2</td>
<td>7</td>
<td>1991</td>
</tr>
<tr>
<td>H</td>
<td>Serving Kitchen</td>
<td>1</td>
<td>None</td>
<td>1998</td>
</tr>
<tr>
<td>P-7</td>
<td>Dining Room</td>
<td>1</td>
<td>1</td>
<td>1969</td>
</tr>
<tr>
<td>P1- P6</td>
<td>Portable Classrooms</td>
<td>1</td>
<td>6</td>
<td>Various</td>
</tr>
</tbody>
</table>

* Includes one room for Administration and two rooms for Library.


At the front of the school, a Cafeteriorium, a portable building, and four detached portable classroom buildings face the school's driveway and parking area. The driveway accommodates a bus passenger loading zone and a drop off / pick up location for students.

From the driveway a broad concrete walkway provides access to the principal school buildings. Four permanent classroom buildings (Buildings "A", "B", and "C") are aligned north to south behind the four portable classrooms on the west side of the walkway. A fifth permanent classroom building (Building "E") is to the east of the walkway.

An outdoor play field located on the western end of the School features a grass covered performance mound, play apparatus, and a paved outdoor court striped for basketball and volleyball. Monkeypod trees shade picnic tables and benches placed under their broad canopy.

Parking is located at the front of School in two parking areas and a third adjoining the cafeteria. The two parking areas accommodate 42 vehicles (4 accessible stalls) and 39 vehicles for faculty/staff and visitors, respectively. The parking area adjoining the cafeteria provides 19 stalls (1 accessible stall).
The School is part of the Department of Education’s Hana-Lahainaluna-Lanai-Molokai Complex Area. Other public schools comprising the Complex include Kamehameha III Elementary, Lahaina Intermediate, and Lahainaluna High School. In general, the two elementary schools “feed” students into Lahaina Intermediate which in turn “feeds” students into Lahainalua High School.

Nahi‘ena‘ena School operates as a traditional school. The school year runs from early August to the end of May. Approximately 75 persons staff the school including the Principal and support staff, grade level faculty and special education teachers, before and after school programs staff, and aides.

It is one of two elementary schools on Maui offering instruction in the Hawaiian Language Immersion Program. The Program began in 2001. Seventy students currently are enrolled in the Program.

The School reports a total current enrollment of approximately 745 students in grades K-5 including regular, special education, pre-K, and its Hawaiian Language Immersion Program.

Kamaaina Kids operates the school’s A+ Program (2:05 PM to 5:30 PM) Mondays through Fridays. Kumon offers a tutoring program on campus Mondays and Thursdays after school.

School buses drop off students between the hours of 7:00 AM and 7:35 AM and return for pick-ups beginning at 2:05 PM. The last bus leaves around 2:45 PM. On Wednesdays, the pickup hours run between 1:25 PM and 2:00 PM. Pickups and drop offs are in front of the Cafeteria.

B. Environmental Characteristics

1. Climate

Lahaina can be characterized as having a moderate tropical climate with mild winters and warm sunny days during the summer months. Annual temperature averages 76°F and can range from highs of 85°F to lows of 68°F. June through October are the warmest months with temperatures reaching the high 80’s and November to May the coolest with temperatures in the low to mid 60’s. August is the hottest month and February the coolest.

Rainfall averages less than 10 inches annually along the coast. In comparison rainfall averages 360 inches atop Puu Kukui about 5.5 miles above Lahaina town in the West Maui Mountain. The trade winds blow from the northeast about 80% of the year with wind speeds of between 12 to 36 mph. Wind from the south (Kona wind) blows about 20% of the year at speeds less than the trade winds. Kona weather makes for hot and sticky days and nights throughout the Hawaiian Islands. Kona wind also transports volcanic fog (vog) from Kilauea volcano on Hawaii Island up the island chain. Vog makes for poor visibility and causes eye and respiratory irritation.

2. Topography

The entire school site has been modified by construction of buildings, walkways, impervious pavements, play areas, utilities, and landscaping. Ground elevation ranges from a high of 404 feet above mean sea level along the northern edge of the project area to a low of 388 feet along the south property line. Along this north to south gradient, ground slope is
calculated at 8%.

The building site is a level terrace that slopes down to the school grounds on two sides. Field investigation indicates the site was previously graded. If spot measured at the toe of the slope, there is a marked difference in elevation ranging from 6 feet along the walkway to 14 feet behind Classroom Building "E". The building site also slopes in the direction of Lahaina Intermediate School to the south.

3. Soils

The Soil Conservation Service (1972) soil map for the area identifies two soil types --- Wainee very stony silty clay, 3 to 7 percent slopes (Code: WxB) and Wainee very stony silty clay, 7 to 15 percent slopes (Code: WxC). Both soils commonly occur in areas south of Kanaha Stream Gulch. WxB soils are well drained and the erosion hazard is slight. Characteristics for WxC soils are not presented.

Site improvements probably have blurred the distinctions between the soil types. More than likely the existing surface and part of the subsurface soil is a mixture of soil types, imported engineered fill, and imported topsoil.

4. Hydrology

a. Ground Water

Lahaina overlies what Mink and Lau (1990) classify as the Laniupoko aquifer system. They further characterize the aquifer as a basal, unconfined, flank aquifer, low in salinity and providing fresh drinking water. It is considered to be irreplaceable as a source of fresh water and highly vulnerable to contamination (See Table 2).

Table 3. Aquifer Classification

<table>
<thead>
<tr>
<th>Aquifer Code</th>
<th>60204</th>
</tr>
</thead>
<tbody>
<tr>
<td>Island Code</td>
<td>6 - Maui</td>
</tr>
<tr>
<td>Aquifer Sector</td>
<td>02 - Lahaina</td>
</tr>
<tr>
<td>Aquifer System</td>
<td>04 - Laniupoko</td>
</tr>
<tr>
<td>Aquifer Type; hydrogeology</td>
<td>1 - Basal</td>
</tr>
<tr>
<td>Aquifer Condition</td>
<td>1 - Unconfined</td>
</tr>
<tr>
<td>Aquifer Type; geology</td>
<td>1 - Flank</td>
</tr>
<tr>
<td>Status Code</td>
<td>11111</td>
</tr>
<tr>
<td>Development Stage</td>
<td>1 - Currently Used</td>
</tr>
<tr>
<td>Utility</td>
<td>1 - Drinking</td>
</tr>
<tr>
<td>Salinity</td>
<td>1 - Fresh (&lt;250)</td>
</tr>
<tr>
<td>Uniqueness</td>
<td>1 - Irreplaceable</td>
</tr>
<tr>
<td>Vulnerability to Contamination</td>
<td>1 - High</td>
</tr>
</tbody>
</table>

Source: Mink and Lau, 1990.
b. Surface Water

There are no surface water features on the premises. Kahoma and Kanaha Streams flow east to west (or mauka to makai) in separate deep gulches adjoining the school grounds to the north. Both streams confluence about 600 feet northwest of the school grounds.

5. Flood Hazard

The Flood Insurance Rate Map ("FIRM") panel for this section of Lahaina places the school site in a flood zone designated "Zone X" which is defined as "areas determined to be outside the 0.2% annual chance floodplain (Department of Land and Natural Resources, 2012)." The 0.2% annual chance floodplain is the 500 year floodplain. The FIRM panel is shown on Figure 10.

6. Biological Resources

The building site is covered by dry grass up to 24" high in places. Kiawe, koa haole, and an opium tree grow between the project area and Lahaina Intermediate School on the east.

Maintained landscape plantings on the south and west slopes of the project area include grass, milo, plumeria, green and red ti, and bougainvillea.

Terrestrial fauna was not observed at the time of the field investigation for this assessment. Rodents including mongoose probably inhabit the building site and adjoining grassland.

The common mynah and cattle egret were the only birds observed.

7. Archaeological Resources

The site has been mass graded and surface historical features probably removed at the time of site work if any features were present. In addition, surface features were not observed protruding through the grassy landscape during a site reconnaissance for this assessment.

Prior environmental assessments prepared for school facilities do not mention the presence of archaeological features.

C. Land Use Controls

<table>
<thead>
<tr>
<th>State Land Use District:</th>
<th>Urban (See Figure 11)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maui Island Plan:</td>
<td>Inside Urban Growth Boundary</td>
</tr>
<tr>
<td>Community Plan:</td>
<td>West Maui</td>
</tr>
<tr>
<td>Community Plan Land Use Map:</td>
<td>Public/Quasi-Public</td>
</tr>
<tr>
<td>Zoning:</td>
<td>Interim</td>
</tr>
<tr>
<td>Lahaina Historic District:</td>
<td>Outside</td>
</tr>
<tr>
<td>Special Management Area:</td>
<td>Outside</td>
</tr>
</tbody>
</table>

The Maui Island Plan and West Maui Community Plan do not identify facility needs for individual schools (which is a State Department of Education function). Both plans, however, prescribe goals and policies for providing new school facilities to meet community needs, modernizing and expanding school facilities as needed, and maintaining a school’s physical plant. Said prescriptions demonstrate county government and community support for
assuring that communities have modern and well maintained facilities for students to achieve academic goals and as places for staff to work. Plan goals and objectives that are applicable to the proposed project are listed below.

Maui Island Plan

Goal 6.8: Maui will have school and library facilities that meet residents’ needs and goals.

Policy 6.8.1.e: Encourage the State to upgrade, modernize, and expand school facilities, including those in remote communities

West Maui Community Plan

Education Objectives and Policies
1. Ensure adequate school facilities and educational opportunities within the region
2. Support the improvement and maintenance of existing school facilities.
3. Encourage the construction of permanent classroom facilities in place of portable facilities.

Implementing Actions
3. Monitor and when necessary, upgrade existing school facilities.

Elementary schools are a permitted use per the County of Maui Interim Zoning Provisions. The proposed classroom building will be constructed at an existing elementary school and is thus considered a permitted property use.

D. Public Facilities and Services

Water and wastewater lines under the central walkway provide to this section of the campus. Water (6') and wastewater (6" and 8') laterals will be extended to the new building from existing systems.

Honoapi'ilani Highway, the major roadway through Lahaina, connects West Maui communities with communities in Central Maui to the east and South Maui to the south. From Honoapi'ilani Highway, the School is accessed via Lahainaluna Road and subdivision roads in the Kelawea Mauka residential subdivision.

The Lahaina Bypass Highway provides an alternate connection between Honoapi'ilani Highway and the School. The Bypass intersects Lahainaluna Road with on and off-ramps to/from Lahainaluna Road.

Except for a catch basin in the southeast corner drainage improvements were not observed in the project area. Drain inlets were observed at various locations on the school grounds.

A rock strewn earthen swale abuts the project area to the east (See Figure 1). The swale intercepts runoff from unimproved land mauka and or receives runoff from Lahaina School. The swale drains in the direction of Kanaha Stream Gulch to the north. Random spot measurement shows the swale has a 14-foot top width, 7-foot bottom width, 3-foot high slope on the makai side, and about 1-foot on the mauka side. The swale is known to overflow onto the school grounds during heavy rain.
Existing or pre-development discharge from the project area is estimated at 0.96 cfs.

Protective services originate from the Lahaina Police and Fire Stations located off Honoapi'ilani Highway about 3.5 miles northwest of the School.
SUMMARY OF POTENTIAL ENVIRONMENTAL IMPACTS AND MEASURES TO MITIGATE ADVERSE EFFECTS

The scope of the project was discussed with the consulting architect, members of the design team, and staff of the Project Management Branch, Department of Education. State and County agencies were contacted for information relative to their areas of expertise. Time was spent in the field noting site conditions and conditions in the vicinity of Princess Nahiʻenaʻena Elementary School. The sum total of the consultations and field investigations helped to identify existing conditions and features that could affect or be affected by the project. These conditions include:

- The new building will be constructed on previously modified terrain;
- Observed on-site flora and fauna are common to the State of Hawaiʻi;
- There are no archaeological resources on the site or known cultural practices associated with the site;
- The School is not located in a flood hazard area;
- There are no streams, ponds, or wetlands on the premises;
- The existing water system can accommodate the proposed use; and
- The wastewater system can accommodate the proposed use.

A. Short-term Impacts

Site work, a necessary function to prepare the land for building temporary and permanent improvements is the first and probably the most disruptive construction activity on the environment. Approximately 1.95 acres will be grubbed and graded. Grubbing will remove vegetation and grading will establish preliminary and final design elevations. The few trees and shrubs on and around the building site will be tagged for disposition (left in place, relocated, or demolished).

Site work is a persistent source of fugitive dust. Site contractors are aware that fugitive dust is a nuisance to construction workers, people living and working near work sites, and in this instance school age children and staff. Because the project is proposed on school grounds, at an elevation higher than other school buildings, adjacent to classroom buildings (particularly Building E) and a nearby play field (at Lahainaluna Intermediate School), stringent dust control measures should be implemented.

Wainee clay poses a slight erosion hazard under normal conditions but dust generation can be magnified on windy days. Water sprinkling is probably the most effective dust control measure given the size of the building site and the scale of the proposed improvements. It is anticipated that dust screens will be erected around the site to minimize dust blowing to Building E and others campus buildings. The contractor also may choose to implement other measures and best management practices based on their experience with similar projects and job site conditions.

The contractor will be responsible for general housekeeping of the site and for keeping adjacent driveways and streets free of dirt, mud, and construction litter and debris. Pollution control measures shall comply with Chapter 60.1, Air Pollution Control regulations of the State Department of Health.
The building site is flat but higher in grade than adjoining areas. Site work will expose soil creating opportunities for erosion and construction-related runoff. Approximately 1.95 acres will be graded. Grading quantities are estimated at 6,060 cubic yards of excavation and 520 cubic yards of fill. Site work impacts can be mitigated by complying with Best Management Practices ("BMPs") specified in Chapter 20.08 of the Maui County Code for drainage, dust control, erosion, and sediment control. BMPs will be prepared for review and approval by the Department of Public Works and Environmental Management.

An NPDES permit for storm water runoff associated with construction activities will be required because more than one acre area will be disturbed during construction.

Schools are considered noise sensitive facilities. Construction noise will be audible in classrooms and buildings adjoining the site but exposure is expected to vary in volume, frequency, and duration attributable to construction activity and equipment in use. Classroom Building “E” is located directly below the building site about 50 feet away. At this distance construction noise can interfere with instruction and distract students and teachers. Construction barriers or and/or dust screens will be erected around the project area to aid in noise mitigation, dust control (with dust screens), and safety. Window mounted air conditioning units were observed at several classrooms in Classroom Building “E”. Jalousie windows can be closed and the air conditioning units operated to minimize dust and noise from interfering with activities inside the classroom.

Noise will vary also by construction phase, the duration of each phase, and the type of equipment used during the different phases. For this project, noise will be most pronounced during the early stages when the site is grubbed, graded, and building foundation poured. Maximum sound levels in the range of 82-96 db(A) measured at 50 feet from the source would be generated by heavy machinery during site work. Noise will diminish as the structure is erected and roofed. Once the structure is completed, most construction activities will take place inside the building and the exterior walls will help to attenuate noise.

Community Noise Control regulations (Hawaii Administrative Rules Chapter 46) establish a maximum permissible sound level for construction activities occurring within (acoustical) zoning districts. The school site is zoned Interim by the County of Maui and is not equivalent to the land uses for any of the (acoustical) zoning districts. For purposes of this Assessment, the school is considered to be a 'public space' and thus in the Class A zoning district. The maximum permissible daytime sound level for excessive noise sources (to include stationary noise sources and construction and industrial activities) in the Class A zoning district is 55 dBA from 7:00 AM to 10:00 PM (Ibid). Construction activities often produce noise in excess of the permissible daytime noise level and a variance (or Noise Permit) may be needed. The contractor will be responsible for obtaining the variance and complying with applicable conditions.

Construction will overlap into the school year and a time / work schedule will be developed in consultation with school administrators. With a projected April 2017 start-up it is anticipated that site work can be performed over the summer months when school is not in session. During this time period construction activities would preclude dust, noise, and construction vehicle traffic associated with site work from adversely affecting daily school activities and provide for the safety of students and school staff.
The project is proposed in an area that has been significantly altered by site work and construction activities as part of prior school development. Should excavation unearth subsurface archaeological sites, artifacts, or cultural deposits, work in the immediate area will cease and the proper authorities notified for disposition of the finds. If *iwī kupuna* are uncovered and appear to be less than 50 years old, the County of Maui Police Department will be notified. If the burials appear to be more than 50 years old, then the State Historic Preservation Officer will be notified. As a matter of protocol, both agencies will be notified for inspection and proper disposition of the finds.

The School and related facilities are less than 50 years old and thus not considered historic property.

The observed vegetation is not considered rare, threatened or endangered or proposed for that status.

The entry driveway to the School is the principal vehicle access onto the school grounds. The proposed building is located at the back of the school and work may, at times, temporarily conflict with traffic circulation. The project area may be accessed by a “jeep trail” between the back of the School and the play field at Lahainaluna Intermediate School. It has not yet been determined if the trail can be used for construction traffic access and if the ground can support construction traffic.

To minimize impacts traffic impacts, the contractor will:

- Post notices alerting drivers of scheduled work on and around the driveway;
- Position traffic cones or other directional devices to guide vehicles around work areas;
- Post flagmen for traffic control;
- Cover open trenches with steel plates during non-working hours and post safety devices with warning lights to alert motorists;
- Schedule work on or in the vicinity of the driveway to avoid student drop-off and pick-up times; and
- Coordinate construction and construction traffic with school administrators.

Vehicles carrying workers and material will contribute to traffic on Lahainaluna Road the main road between Honoapi'ilani Highway and Lahaina town, the Lahaina Bypass Highway, residential streets near the school, and the School. Material deliveries will be scheduled during non-peak traffic hours to minimize impact on school and residential traffic.

A field office and base yard will be set up in the project area at a location to be determined. Material will be unloaded and stockpiled in the base yard. Construction equipment will be stored in the base yard and the yard secured after working hours.

**B. Long-term Impacts**

The primary benefit of the project is to provide needed classroom space for students enrolled at Princess Nahienaena Elementary School (when the new classroom building is opened in fall 2018) and the growth in enrollment of elementary school age children in the Lahaina community.
Ambient air quality should not be adversely affected in the long-term. The principal source of air pollution is expected to be exhaust emissions from vehicles entering and exiting the school grounds and not the new building. Emissions will be dispersed by the prevailing winds.

In general elementary schools are not significant noise generators. Noise associated with classroom use can be expected and confined to interior spaces by walls and doors. Sounds of students talking and laughing outside of the classroom are typical of elementary schools and should not be constantly audible in residential areas makai of the School.

Post-development storm water runoff is projected at 2.63 cubic feet per second (cfs) versus 0.96 cfs under existing conditions. The increase cannot be avoided given the future ‘built’ condition compared to the current undeveloped condition of the project area. Runoff will collected, detained in drain pipes, then controlled released (at the pre-development flow rate) to an existing catch basin. An overflow weir in the catch basin will allow higher storm event storm water to be released into an existing grassy drainage ditch.

In anticipation of an increase in electrical consumption and to help offset the increase the building has been sited so that classrooms can be cooled and ventilated by the natural trade wind and to promote natural lighting. The use of insulated materials for walls, energy efficient fixtures, and low-E glazed glass will also promote energy conservation.

The computer center and communication rooms will be air conditioned. All other rooms will be equipped with ceiling fans. Both actions will aid in energy conservation.

The new building will present a new object to be seen on campus. At two floors in height, it will be the same height as existing classroom buildings with similar roofing. Trees and shrubs planted near or alongside the building will "soften" its mass and add a vertical element to its form. It should not be visible from adjoining streets or residential areas because of its location at the back of the School. Over time, it will come to blend with the existing permanent classroom buildings and visual environment.

Elementary schools are a permitted use in the Interim zoning district. Adding a classroom building to an existing permitted property use will not alter the character of surrounding areas, the zoning of adjacent properties, and the uses and zoning of the School property.

The new classroom building and associated improvements (such as landscaping) will be designed and built to "high performance" criteria incorporating sustainability features in design, construction, and operations. The project thus supports a State goal for fostering sustainability in new construction. HI-CHPS defines a high performance school "as having learning environments that are healthy and comfortable, energy resource and water efficient, safe, secure, and adaptable and easy to operate and maintain". In the long-run it is the students, educators, and parents that will determine if Princess Nahi'ena'ena Elementary School functions as a high performance school.
A. No Action

The No Action Alternative would not achieve the objectives of the project. This objective would maintain the status quo of the building site thus precluding the occurrence of all environmental impacts short and long-term, beneficial and adverse described in this assessment.

B. Alternative Location

Three locations including the proposed location (Option B) were considered. Option A was to construct the building to the north of Classroom Building “C” above the existing playground. Option C proposed placing the building on the site of an existing playground between the Cafeteria and four portable classrooms. A fourth option was to replace four portable classrooms below Building A with a new permanent structure. Replacing four portable classrooms would reduce the number of classrooms and would run counter to the objectives of the project.

The consulting architect, Department of Education Project Management Staff, and School administrators selected Option B. Cost, disruption to the school campus, and accessibility to the new building were factors leading to the selection of Option B.

Environmental impacts at the other two locations should not be significantly different from impacts disclosed in this Assessment. However, for Option C construction noise and fugitive dust would probably be more pronounced on classroom instruction and Cafeteria functions and uses because of its location.
Permits required for the project and responsible authorities are identified below. Additional permits and approvals may be required depending on final construction plans.

**State of Hawai'i**

**Department of Health**
- NPDES General Permit
- Disability and Communication Access Board (Facility Access Review)
- Variance from Pollution Controls (Noise Permit)

**Department of Land and Natural Resources**
- Historic Site Review (Chapter 6E)

**County of Maui**

**Department of Public Works**
- Building Permit
- Grading and Grubbing Permit
- Certificate of Occupancy

**Department of Water Supply**
- Temporary Water Permit (To Be Determined)

**Fire Department**
- Fire Protection (Fire Sprinkler Plans)
AGENCIES AND ORGANIZATIONS TO BE CONSULTED

State of Hawai‘i
  Department of Health
  Environmental Planning Office
  Department of Land and Natural Resources
  Historic Preservation Division

County of Maui
  Department of Environmental Management
  Department of Parks and Recreation
  Department of Public Works
  Department of Water Supply
  Planning Department
  Police Department
  Fire and Public Safety

Others
  Maui Electric Company, Inc.
  Lahaina Public Library (Placement)
Chapter 200 (Environmental Impact Statement Rules) of Title 11, Administrative Rules of the State Department of Health, establishes criteria for determining whether an action may have significant effects on the environment (§11-200-12). The relationship of the proposed project to these criteria is discussed below.

1) **Involves an irrevocable commitment to loss or destruction of any natural or cultural resource;**

   The loss or destruction of natural and cultural resources is not expected since said resources are not present on or associated with the project area.

2) **Curtails the range of beneficial uses of the environment;**

   The project does not curtail the beneficial uses of the environment. There is a need for additional classrooms at the School to accommodate a growing elementary school age population. The project area is vacant and already has been modified. Construction of school facilities is considered a beneficial use of the unused (or underused) environment.

3) **Conflicts with the state’s long-term environmental policies or goals and guidelines as expressed in chapter 344, Hawaii Revised Statutes, and any revisions thereof and amendments thereto, court decisions or executive orders;**

   The project does not conflict with long-term environmental policies, goals, and guidelines of the State of Hawaii.

4) **Substantially affects the economic or social welfare of the community or State;**

   The project will not substantially affect the economic or social welfare of the State. In the long-term the project will provide space to accommodate elementary school students already enrolled at the school (those moving up in grade when the project is completed), soon to be enrolled elementary school students in the community, and projected enrollment increases resulting from population growth in elementary school age children residing in the Lahaina area.

5) **Substantially affects public health;**

   Short-term environmental impacts in the form of fugitive dust, noise from construction equipment, and minor erosion can be expected. These impacts will be mitigated by measures described in this Assessment and measures, such as BMPs for erosion control, to be submitted with construction plans and documents.

   Building materials to be used will not expose students and teachers to public health hazards.
6) Involves substantial secondary impacts, such as population changes or effects on public facilities;

Population changes and effects on public facilities are not anticipated as a result of the project.

7) Involves a substantial degradation of environmental quality;

The project area was previously altered by grubbing and grading associated with initial construction of the school and subsequent expansion and facility construction over time. It is argued that environmental quality of the school grounds was most impacted at that time and the proposed classroom building will not substantially degrade environmental quality of the built environment.

The vacant project area provides environmental benefits as open space and the dry grass aids in retarding erosion. The site, however, is unusable and not used for school activities at this time.

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

Construction and long-term facility use will not result in significant adverse short and long-term environmental impacts or involve a commitment for a larger action.

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

Rare, threatened or endangered flora and fauna are not found on the building site or on the school grounds.

10) Detrimentally affects air or water quality or ambient noise levels;

Ambient air quality will be affected by fugitive dust and combustion emissions during construction but can be controlled by measures stipulated in this Assessment. Construction noise may be pronounced during site preparation work but should diminish once the structural improvements are completed. All construction activities will comply with air quality and noise pollution regulations of the State Department of Health.

Erosion control measures will be prescribed in grading plans and best management practices prepared for the project.

11) Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters.

The classroom building is not located in an environmentally sensitive area.

12) Substantially affects scenic vistas and view planes identified in county or state plans or studies, or,

Princess Nahienaena Elementary School and its immediate environs are neither identified as a visual resource nor located within scenic vistas or view planes identified in
state plans. Over time, the new building's scale, mass, and height will visually and physically blend with existing classroom buildings at the school.

13) Requires substantial energy consumption.

Energy consumption is anticipated to increase but prudent site planning, the use of energy efficient fixtures, sustainable architectural design, and energy conserving building materials should help offset some of the increase and promote energy conservation.
REFERENCES


Maui County Council. No Date. *West Maui Community Plan (1996)*.


The School is part of the Department of Education's Hana-Lahainaluna-Lanai-Molokai Complex Area. Other public schools comprising the Complex include Kamehameha III Elementary, Lahaina Intermediate, and Lahainaluna High School's. In general, the two elementary schools “feed” students into Lahaina Intermediate which in turn “feeds” students into Lahainalua High School.

Nahi'ena'ena School operates as a traditional school. The school year runs from early August to the end of May. Approximately 75 persons staff the school including the Principal and support staff, grade level faculty and special education teachers, before and after school programs staff, and aides.

It is one of two elementary schools on Maui offering instruction in the Hawaiian Language Immersion Program. The Program began in 2001. Seventy students currently are enrolled in the Program.

The School reports a total current enrollment of approximately 745 students in grades K-5 including regular, special education, pre-K, and its Hawaiian Language Immersion Program.

Kamaaina Kids operates the school's A+ Program (2:05 PM to 5:30 PM) Mondays through Fridays. Kumon offers a tutoring program on campus Mondays and Thursdays after school.

School buses drop off students between the hours of 7:00 AM and 7:35 AM and return for pick-ups beginning at 2:05 PM. The last bus leaves around 2:45 PM. On Wednesdays, the pickup hours run between 1:25 PM and 2:00 PM. Pickups and drop offs are in front of the Cafeteria.

B. Environmental Characteristics

1. Climate

Lahaina can be characterized as having a moderate tropical climate with mild winters and warm sunny days during the summer months. Annual temperature averages 76°F and can range from highs of 83°F to lows of 68°F. June through October are the warmest months with temperatures reaching the high 80’s and November to May the coolest with temperatures in the low to mid 60’s. August is the hottest month and February the coolest.

Rainfall averages less than 10 inches annually along the coast. In comparison rainfall averages 360 inches atop Puu Kukui about 5.5 miles above Lahaina town in the West Maui Mountain. The trade winds blow from the northeast about 80% of the year with wind speeds of between 12 to 36 mph. Wind from the south (Kona wind) blows about 20% of the year at speeds less than the trade winds. Kona weather makes for hot and sticky days and nights throughout the Hawaiian Islands. Kona wind also transports volcanic fog (vog) from Kilauea volcano on Hawaii Island up the island chain. Vog makes for poor visibility and causes eye and respiratory irritation.

2. Topography

The entire school site has been modified by construction of buildings, walkways, impervious pavements, play areas, utilities, and landscaping. Ground elevation ranges from a high of 404 feet above mean sea level along the northern edge of the project area to a low of 388 feet along the south property line. Along this north to south gradient, ground slope is