Windward Community College

URBAN DESIGN PLAN
and
Design Guidelines

for the

UNIVERSITY OF HAWAI'I
COMMUNITY COLLEGE
STATE OF HAWAI'I

by the

DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS
STATE OF HAWAI'I

prepared by

OKITA • KUNIMITSU & ASSOCIATES, INC.
1585 Kapiolani Boulevard, Suite 1340
Honolulu, Hawai'i 96814

July 15, 1994
(Revised November 30, 1995)
November 30, 1995

Mr. Patrick Onishi, Director
Department of Land Utilization
650 S. King Street
Honolulu, Hawaii 96813

Subject: Windward Community College
Urban Design Plan and Design Guidelines

Enclosed are three (3) copies of the revised Urban Design Plan and Design Guidelines for the Windward Community College for your review and approval.

Responses to DLU comments (dated November 15, 1994 and September 15, 1994) and the review meeting with DLU staff (on October 13, 1994) have been incorporated. The revised sections of this document are highlighted in "italics" typeface for easier reference.

An explanation of some of our responses are included below. The section and paragraph numbers are referenced to the revised Urban Design Plan.

1. Section II. A. 5 Energy Efficient Design

According to our landscape consultant, drought tolerant landscaping would be more suitable for the ewa plains and other leeward areas. However, the climate conditions in this location are too damp for this type of landscaping and is not recommended. Water conservation is emphasized through automatically controlled irrigation for selected areas.

2. Section III. B. 3 Site Design, Landscaping

In lieu of a Tree Disposition Plan, the requested information regarding trees to be kept or relocated is shown on the Landscape Plan. The College has worked with the Kaneohe Outdoor Circle and the Mayor’s Arborist Advisory Committee to identify and designate existing banyan trees to be protected.

The banyan trees were nominated to be included into the City’s Exception Tree Registry. However, this action was considered unnecessary by the Committee which felt that the trees will be sufficiently protected under the provisions of the campus Master Plan, PRU and Urban Design Plan documents. A copy of the letter confirming the Committee’s position to the College is attached.
Section IV. SIGNAGE GUIDELINES

The Signage Guidelines section identifies all the major sign requirements of the campus and provides sufficient direction for a future signage consultant to do a detailed design package for the campus. The basic parameters (such as sign types, materials, location, heights, illumination and typestyle) are provided in the Signage Guidelines. Exact sign sizes, design and locations will be worked out during detailed design.

We trust the revised Urban Design Plan and our responses satisfactorily address all of DLU’s comments and concerns. If there are any further questions or comments, please contact our office.

Sincerely,

Rodney Lee, A.I.A.
Project Architect

Attachments
Urban Design Plan (revised)--3 copies
Plan Review Use for a Five-Year Master Plan (Vols. 1& 2)--1 copy ea.

copy: Eric Nishimoto, DAGS
      Maynard Young, UH Community Colleges
      Jeff Hunt, Windward Community College
October 16, 1995

Mr. Pete Dyer, Provost
Windward Community College
45-720 Keaahala Road
Kaneohe, Hawaii 96744

Re: Exceptional Tree Nomination

Dear Mr. Dyer:

Thank you for your nomination of the Banyan trees on the Windward Community College campus to the Exceptional Tree Registry. The Mayor's Arborist Advisory Committee met with you and Mr. Jeff Hunt on campus in May 1995 to inspect the Banyan trees.

1. The Committee understands that a master plan is being done of the campus.

2. The plans are being reviewed by the City's Department of Land Utilization which has a Plan Review Process. The Plan Review Process has restrictions in place protecting the trees. Further protection from the Exceptional Tree Registry will be redundant.

The Committee is satisfied that the trees are sufficiently protected and we agree with your withdrawal of the nomination.

We apologize for the delay in the written response to this matter.

Thank you for your interest in the preserving the beauty of the trees in our State.

Sincerely,

STEVE NIMZ
Chairman

cc: Kaneohe Outdoor Circle
November 15, 1994

Mr. Rodney Lee
Okita Kunimitsu & Associates, Inc.
1585 Kapiolani Boulevard Suite 1340
Honolulu, Hawaii 96814

Dear Mr. Lee:

Windward Community College - Urban Design Plan

We are refining our position on the urban design plan, as required by the Plan Review Use approval for Windward Community College.

After careful consideration of the points made at the October 13, 1994 meeting between project representatives and department staff, our position as presented to you in our letter dated September 15, 1994 is modified as follows:

1. We will approve the new Building K (science building), even though the urban design plan has yet to be approved by this department, provided it is essentially the same design we reviewed earlier.

2. All other major development activities will not be cleared until the urban design plan has been approved.

3. Language in the Design Standards section of the urban design plan may be guidelines ("should"), rather than standards ("shall").

4. We will not require discussion on roof gardens. However, balconies, arcades and off-sets were initially suggested by you.

5. With respect to signage, you are not required to follow the standards associated with the AG-2 General Agricultural District. We will not insist on requiring signs to be wall signs, but are puzzled by your comment that wall signs are not flexible and cause "visual clutter." We strongly recommend a comprehensive section on signs that will be

Response to DLU Comments 11/15/94—Page 1

3. Complied.


5. Externally-lit ground signs are preferred for building identification because they are consistent with other sign types for the campus. This will also eliminate the need to illuminate wall-mounted signs on buildings at night. It is felt that locations of ground signs at multiple building entrances will be more flexible to accommodate than wall signage at each entrance.

The Signage Plan section provides sufficient guidelines for a future signage consultant to do a detailed design package for the campus. The basic parameters (such as sign types, materials, location, heights, illumination, and typology) are provided in the Signage Plan.
precise enough so that we will not have to unduly deliberate over each individual sign permit, nor modify the guidelines to accommodate unanticipated signage.

If you have any questions, please contact Joyce Shoji of our staff at 527-5354.

Very truly yours,

DONALD A. CLEGG
Director of Land Utilization

DAC: fm

wri: udp.bls
September 15, 1994

Mr. Rodney Lee
Project Architect
Okita Kunimitsu & Associates, Inc.
1585 Kapiolani Boulevard, Suite 1340
Honolulu, Hawaii 96814

Dear Mr. Lee:

Windward Community College - Urban Design Plan
Resolution No. 94-87
Plan Review Use File No. 92/PRU-3

This is in response to your Urban Design Plan (UDP), DLU datetime-stamped July 18, 1994.

Content of the UDP is generally acceptable. However, we recommend reorganization of elements and some changes to language. Section IV should be relabeled Design Standards and should be expanded to include Sections V, VI and VII. A new Section V, IMPLEMENTATION, should be created which will include the existing Section VIII, Amendment Provisions, as well as others discussed in greater detail in the body of this document.

Language in the Design Standards section shall reflect what individual developments will be required to comply with, rather than what is recommended. We believe these changes are necessary to guide the overall project design performed by a variety of consultants.

The following comments are a combined effort of the Urban Design and Zoning District Changes Branches. Please incorporate these revisions into the UDP and resubmit for our final review and approval.

Response to DLU Comments 9/15/94 - Page 1
Complied.

Design Standards language not required per DLU letter 11/15/94.
Comments are addressed under major subject headings as presented in the UDP and are as follows:

Section I. Introduction

Purpose and Intent

If the UDP is to supplement and be used in conjunction with the PRU/Masterplan, provide an additional copy of Volumes 1 and 2 to our Department for our use. In addition, a cross-reference of figures and Exhibits provided in the PRU/Masterplan shall be included in the UDP for ease of use.

Study Area

The description of the study area for which the UDP will have jurisdiction should be the same as the area described in the Resolution and as shown on the Resolution's Exhibit 1 - Location Map. The study area proposed under the UDP and much of the figures in the UDP deletes the northeastern corner of the PRU area which is labeled "Hale Awa and Tennis Courts".

Subsequently, all figures should be revised to show the "as built" Pookela Street Extension, the site of the Department of Transportation's construction baseyard, and the Hina Mauka Chemical Abuse Rehab Center.

Section II. Urban Design Principles and Controls

DEVELOPMENT PLAN COMMON PROVISIONS

Public Views

The implementation and phasing out of the overhead utility lines and poles to underground service shall be included in the Phasing Section described in the document.

Energy Efficient Design

All aspects of energy conservation should be addressed and standards provided for its practical implementation for individual projects. This shall include the use of gas and daylighting devices to control or limit the use of artificial lighting.

Water conservation and an emphasis on drought tolerant landscaping should be included.

Response to DLU Comments 9-15-94--Page 2

Complied. Extra copies of Volumes 1 & 2 provided with this submittal.

Complied. See Cross Reference Index in Appendix.

Complied.

Complied. See II.A.1 Public Views.


Drought tolerant landscaping is not recommended for this location. This area is too wet.
KOOLAUPOKO DEVELOPMENT PLAN SPECIAL PROVISIONS

Height Controls

Provide Figure 3; indicate which buildings will exceed the 25-foot height limit, with proposed heights, and required setbacks from residential properties.

Section III. Campus Concepts and Themes

Overall Design Character

The overall goal relative to design character is to promote the atmosphere of the small town college with an emphasis on maintaining the existing Spanish Mediterranean style architecture. Photographs of existing structure and/or elements of existing structures which relate and provide a standard for achieving this goal.

Site Design, Pedestrian Circulation

Rest stops with seating areas should be provided along pedestrian paths and under significant trees.

A plan should be provided which indicates which pedestrian pathways are to be covered. The application of proposed materials presented for these covered walkways could be contrary to maintaining the overall stated Design Character. Provide character sketches to illustrate how the design character can be maintained with the proposed materials.

Site Design, Landscaping

A tree disposition plan, relative to future phases of work, should be provided to indicate significant existing trees to be preserved and/or relocated.

Parking lot landscaping shall comply with the Land Use Ordinance.

Section IV. Design Guidelines

Sections IV, V, VI and VII, should be incorporated into one section. The language used in these sections shall clarify that these are standards to be implemented and not guidelines or recommendations.
ARCHITECTURAL GUIDELINES

Scale and Massing

The applicant shall consider encouraging the use of balconies, lanais, arcades and roof top gardens to control scale and massing of structures.

Height

Method of measuring building height shall comply with the LUD.

Roofs

Clarify language relating to amount of area required to be devoted to a slope roof with clay tile. We suggest using a percentage of the total roof area.

Facades

Roof wells should be considered a means of screening mechanical and/or electrical equipment.

Wall Finishes

Clarify if brick or split face painted CMU would be acceptable wall finishes.

SITE DEVELOPMENT GUIDELINES

Setbacks and Off-Street Parking

Clarify which zoning district standards shall be utilized in determining required setbacks and parking/loading spaces. Language relative to portions of buildings to be setback shall relate to all portions of that one-story or two-story building.

Roadways and Utilities

Clarify when and in which phase the improvements to non-standard roadways will be implemented.
Section VI. Signage Plan

Building Identification Signs

Individual raised or channeled letters mounted directly on the building wall should be considered as an alternate to or in conjunction with the free-standing Building Identification Sign proposed. This will reduce the amount of miscellaneous structures and should not dominate the facades of the individual buildings.

Directory Sign

The proposed structure for Directory signage appears unnecessarily large, and should be reduced in size.

Section VII. Lighting Plan

Minimizing glare, exposed luminaries and light spillage should be added to the list of objectives for all lighting.

Light pole heights that are proposed to exceed the 25-foot height limit cannot be approved under the UDP. The Resolution and the Director's Report only makes reference to buildings that need to be as high as 50 feet, and does not make reference to light poles. Thus, light poles that exceed the height limit must obtain a Minor Modification to the PRU.

Section VIII. Amendment Provisions

We recommend that the section title be revised to IMPLEMENTATION and that subsections for Phasing, Compliance, Design Review and Amendment to the UDP be included here.

Phasing

The phases as described in the Implementation Plan (Table A.1) shall be described in greater detail. It shall indicate which phases will implement work required or stated to be done within the UDP and PRU/Masterplan.

Compliance

This section shall address compliance with the Urban Design Plan and include legal documents and/or restrictive covenants to assure compliance with the approved UDP.
Design Review

This section shall establish in detail provisions for the design review process of individual projects. These provisions should provide for a committee to oversee compliance with the UDP. Upon review and approval by the design committee, plans for the development of parcels shall be submitted to the DLU for review and approval. Documentation of design committee approval should be transmitted to DLU.

This section shall identify how the design committee members will be selected. What will the membership consist of, its duties and responsibilities.

Should you have any questions, please contact Joyce Shoji of the Urban Design Branch at 527-5354.

Very truly yours,

DONALD A. CLEGG
Director of Land Utilization

Response to DLU Comments 9/15/94—Page 6

Compiled. See V.C.2. Design Review Committee and V.C.3. Design Review Procedures


DAC:gc
wcccomp.pbs
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I. INTRODUCTION
I. INTRODUCTION

A. PURPOSE AND INTENT

The campus Urban Design Plan is provided to supplement, and to be used in conjunction with, the Planned Review Use for a Five-Year Master Plan for the Windward Community College (PRU/Master Plan). The PRU/Master Plan document identifies future program and facility requirements. It also defines the intended design character and concepts which call for an identifiable and unified campus design theme. The campus Urban Design Plan provides additional guidance for implementing the desired character of future developments and the concepts put forth in the Five-Year Master Plan.

The intent of the plan is to achieve a cohesive campus character through the compliance with design guidelines. For the most part, the guidelines are general in nature to provide an overall design framework. However, the characteristics of certain key elements have been described in more detail to assure design consistency throughout the campus.

The guidelines are to be used by prospective consultants, the Department of Land Utilization (DLU), Windward Community College (WCC), the University of Hawai‘i Community Colleges (UHCC) and Department of Accounting and General Services (DAGS) in the development and review of future campus projects. The Department of Land Utilization will receive an annual report from the State, on project progress and compliance with the PRU and Master Plan. In addition, the State will submit any proposed revisions or updates to the PRU, Master Plan or campus Urban Design Plan.

B. SCOPE

The scope of this document addresses specific items required by the City Council. The items focus on the design and development of physical facilities and construction which impact the visual character of the campus. Other information such as the College’s long-range goals, planning criteria, and development requirements pertaining to utilities-related infrastructure is detailed in the PRU/Master Plan, Volumes 1 and 2.

As a condition upon which the approval of the PRU was granted, the Urban Design Plan was required by City Council Resolution No. 94-87 to provide a more detailed framework for the design and review of future developments.
Design Guidelines, an expanded Landscape Plan, a comprehensive Signage Plan, and an expanded Lighting Plan were required and included in this document.

C. APPLICABLE CODES AND STANDARDS

The campus Urban Design Plan is to be used in conjunction with the City and County of Honolulu Land Use Ordinance (LUO). The American with Disabilities Act Accessibility Guidelines (ADAAG), City and County of Honolulu Department of Public Works Standard Details (for roadway construction), the latest adopted Uniform Building Code (UBC) with local amendments and other applicable codes and standards should also be followed during the implementation of this plan.

*If a conflict exists between any provision of these guidelines and any law, code, ordinance or standard, the stricter provision will prevail.*

D. STUDY AREA

The campus Urban Design Plan addresses the area within the Windward Community College boundary. The location and limits of this Plan area are shown in Figure 1, Windward Community College Plan Area.

E. FORMAT

*This document incorporates corrections and revisions in response to DLU review comments to the Urban Design Plan, dated July 15, 1994. Revised sections in this document are highlighted in “italics” typeface.*

The campus Urban Design Plan is organized into five separate sections to address design considerations, concepts, guidelines, implementation and phasing, and amendment process. The guidelines are organized into the following-sections:

- **Urban Design Principles and Controls**

In addition to addressing the goals and objectives of the college, the Urban Design Plan also responds to the City’s Development Plans which specifies urban design principles and controls for open space, views, building heights, density and circulation.
Figure 1. Windward Community College Plan Area
Windward Community College  
Urban Design Plan and Design Guidelines

- **Campus Concepts and Themes**

  Central design concepts and themes define the desired campus character and context into which the college's facilities will be integrated. The resulting images and feel will be the basis for developing design guidelines to direct campus development.

- **Design Guidelines**

  **Architectural Design Guidelines**

  Guidelines and recommendations that affect the design character of new buildings or the renovation of existing buildings are provided in this section. The major architectural elements are addressed.

  **Site Development Guidelines**

  The section on site design describes the recommendations for the following components: setbacks, parking, roadways, pedestrian circulation, service areas, ancillary structures.

- **Landscape Guidelines**

  This section specifies recommended plant materials and irrigation schemes for key areas of the campus.

- **Signage Guidelines**

  The Signage Plan establishes the direction for campus signage by identifying the major signage types and their locations.

- **Lighting Guidelines**

  The Lighting Plan identifies the main types of site lighting and that will be appropriate for the Windward campus setting.

- **Implementation**

  This section contains procedures for amending these guidelines; reviewing and updating the implementation status of the Master Plan; and reporting the revisions to the Department of Land Utilization.
II. URBAN DESIGN PRINCIPLES AND CONTROLS
II. URBAN DESIGN PRINCIPLES AND CONTROLS

A. DEVELOPMENT PLAN COMMON PROVISIONS

The development of the Windward Community College will comply with the urban design principles and controls described in the City and County of Honolulu Development Plan Common Provisions, Section 24-1.4, except as modified in the campus Urban Design Plan.

1. Public Views

All existing public views to and from the campus will be maintained or enhanced. The main view corridor along the Keaahala Street will be unaffected and continue to afford views of Eckerdt Hall and the Koolau Mountains in the background when approaching the campus. Views from within the campus will be similarly unaffected from the large open space of the main campus.

Siting of new buildings will respect the same setbacks along the campus roadways established by existing buildings to preserve views and open space. Overhead utility lines and poles are to be converted to underground lines as infrastructure is constructed to support new buildings. The implementation and phasing of underground services will correspond with site improvements shown in Table 1 Implementation Plan.

2. Open Space

For the most part, the campus master plan will continue to exhibit a generous amount of open space despite the addition of new buildings. Most new facilities will be located where existing parking areas or buildings occur. By respecting the size, scale and siting of existing buildings, the character and feel of the developed campus will remain spacious and open.

3. Vehicular and Pedestrian Routes

Landscaping will be provided along all main roadways of the campus. Appropriate landscaping will be used to minimize the visual dominance of paved parking surfaces. Separation of the main
campus' vehicular and pedestrian routes will minimize conflict between circulation systems and encourage walking and bicycling as the main means of getting around the campus.

A comprehensive signage system will clearly direct vehicles and pedestrians to campus destinations. Site furnishings including benches, trash receptacles, planters, covered walkways and bus shelters should be compatible with the character of the campus.

4. **General Height Controls**

The height of the existing campus and adjacent areas are in general compliance with the intent of the City's Development Plan. However, several State Hospital buildings and the college's Central Kitchen building are well in excess of the present 25' height limit without producing any negative effects. Their impacts are mitigated by being separated with generous setbacks from adjacent residential properties.

5. **Energy-Efficient Design**

In addition to aesthetic enhancement and enjoyment of the unique natural setting, environmental sensitivity should also be stressed to emphasize conservation of resources such as electrical energy, water and recyclable materials in the design of the site and buildings.

The latest technology in energy efficient design should be considered during the planning and design of future buildings. *All new construction and renovation projects shall comply with the State's model energy code. Daylighting and other devices should be considered to reduce the use of artificial lighting in buildings.*

*To emphasize a healthier campus lifestyle and reduce the dependency on automobiles, cars will be limited to the perimeter of the campus.* The campus concept calls for a network of paths for pedestrians and bicycles and conveniently located parking areas to encourage more walking and cycling.

*To conserve water by taking advantage of the area's climate and abundant rainfall, the Master Plan recommends automatic irrigation for selected areas and periodic irrigation of hardier landscaping.*
6. Rural Character

Although designated as Urban on the State Land Use Classification Maps, the campus site has a rural character because of its agricultural (AG-2) zoning and the low density of existing developments. The design concept promotes the preponderance of open space and small, low density developments which evoke a strong sense of place in a country-like environment.

B. Koolaupoko Development Plan Special Provisions

The development of the Windward Community College will also comply with the urban design principles and controls described in the City and County of Honolulu Development Plan, Special Provisions for Koolaupoko, Section 24-6.2, except as modified in the campus Urban Design Plan.

1. Open Space

The Urban Design Plan’s treatment of open space within the campus will be consistent with the intent of the City’s Development Plan for the Windward area. Visibility, preservation, enhancement and accessibility of open spaces will be a high priority and emphasized in the plan’s concepts and design guidelines. (See Figure 2)

The public open spaces mentioned for consideration by the Development Plan will not be affected by the campus.

2. Public Views

Panoramic mauka and makai views will continue to be available from within the campus and adjoining areas when future facilities are built. None of the important views cited for consideration by the Development Plan will be affected by any campus construction. (See Figure 2)

3. Height Controls

The only proposed area of non-conformance with the Development Plans is in the increased height limit from 25 feet, for the existing agricultural zoning of the campus, to 50 feet. The additional height,
where required, will facilitate the continuation of strong roof forms atop five buildings (Buildings D, E, G, H and J) designated to be two-stories high.

The estimated heights for proposed campus buildings exceeding the current 25 feet limit are shown on Figure 3. Heights are based on present proposed building sizes and footprints, approximate floor to floor heights of 14 feet, and 6 in 12 roof slopes. Actual heights based on final designs may vary from those indicated, but shall not exceed the proposed 50 feet height limit.

The effect of these buildings, along the upper part of the main campus, should be minimal and should not significantly affect the existing views. Their impact will be mitigated by their locations which are setback a substantial distance from residential areas. Building J, which is the nearest to residential properties of the two-story campus buildings, will be approximately 325 feet from the Hokulele subdivision property line.

4. Density Controls

The density controls of the Development Plan address residential uses, but not educational facilities, in Agricultural zoned lands. However, the continued character of the campus will be compatible with the surrounding low-density residential area.

The ratio of open space in relation to total campus area will be about 75% when the Master Plan is fully realized. Computation of the proposed development density is shown in Section B-1, Volume 1, of the PRU / Master Plan.
Figure 2. Campus Views and Open Space
FIVE YEAR
MASTER SITE PLAN

WINDWARD
COMMUNITY COLLEGE

FIGURE 3

Approximate Building Height

Covered Accessible Walkways

48'
III. CAMPUS CONCEPTS AND THEMES
III. CAMPUS CONCEPTS AND THEMES

A. EXISTING CHARACTER

The existing campus is characterized as rustic, with large open spaces between small-scale, single-story structures in a pastoral setting. The simple Spanish Mediterranean architectural style of the existing buildings, with stuccoed walls and clay tile roofs, creates a strong sense of visual unity for the main campus. Located at the base of the Koolau mountain range, the area’s many mature trees and lush, rich landscaping enhances the campus’ secluded and tranquil feeling.

The existing character and conditions of the campus’ architecture, site attributes and utilities are described further in Sections A-1, A-3, C-1, C-2, C-3, and C-4 of the PRU, Volume 1.

B. DESIGN CONCEPTS AND THEMES

Analysis of these qualities led to the establishment of design concepts and themes for the campus. The design concepts are generalized ideas that describe the essence of the perceived environment which can be visualized as a particular feeling, lifestyle or quality. Design themes develop the concepts and identify elements or parts that contribute to the organizing the environment.

1. Overall Design Character

The concept for the overall design character is to promote the atmosphere and feel associated with a friendly, small town college campus which presently exists. In response to this image, design concepts and themes consistently call for preserving and enhancing the existing unique qualities of the buildings and site features. The central concept of retaining the tranquil character of the campus recognizes that this quality contributes greatly to the uniqueness of the college’s environment and academic goals. The concept is consistent with the projected enrollment of 2,000 full-time equivalent (FTE) students and the required facilities to support this student population.
Windward Community College  
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2. **Campus Architecture**

The design concept for campus architecture calls for the continuation of the present architectural character for new and existing buildings to be renovated. Structures with a maximum height of two-stories and sloped roof forms similar to the existing buildings will be in keeping with the area’s residential nature.

The Urban Design Plan and its guidelines are not intended to require future buildings that only replicate or duplicate the existing architectural style, but instead, encourage a harmonious family of buildings that relate to the overall design concept. The intention is to rehabilitate existing, older buildings that are appropriate and functional and to incorporate new, compatible facilities into the existing fabric of the campus.

The architectural theme should be predominantly the Spanish Mediterranean style to reflect and complement the vocabulary of the older buildings. Thematic elements should include arched openings, stuccoed or plastered walls and hipped roofs with clay tile roofing to repeat the traditional flavor of the campus.

- **Objectives**
  - Create an identity for the College buildings that is separate from the Hawaii State Hospital buildings.
  - Keep the footprints of new buildings compact to maintain maximum open space.
  - Introduce new buildings that respect the location, scale and size of the existing buildings.

3. **Site Design**

The design concept for campus site also calls for preserving and enhancing the character and feel of the existing campus in future developments. It addresses four key elements that make up its distinctive character: siting of buildings; vehicular circulation; pedestrian circulation; and landscaping.
Objectives

The main objectives for the campus' site design concept are as follows:

- Create strong edge definition between the college and the State Hospital.
- Keep central portion of main campus and northern corner (future play fields) as major open spaces.
- Locate parking and roads at the perimeter of the main campus.
- Create a pathway system for pedestrians and maintenance, covered walkways and accessible routes.
- Relocate bus turnaround away from Building A, Eckerdt Hall.

Building Layout

The concept envisions the retention of the formal, but spacious layout of the existing campus when new buildings are sited or located. The site layout proposed by the Master plan provides for this and generally should be followed when developing future facilities. The intent of the site design concept is to maintain the present quality of open space.

Certain new structures, Buildings D, E, G, H, and J, will be two-stories in height to keep their footprints compact and allow more open space to be retained. Proposed on the upper part of the main campus, they will create a backdrop for the campus and provide a clearly defined transition between the college and the State Hospital facilities.

Vehicular Circulation and Parking

The concept for vehicular circulation is to preserve the simple, straightforward roadway system that encircles and defines the main campus. The existing two-lane roadway system helps to give the campus its scale and rural character. The main roadway system is a
loop road with two-way traffic around the main campus. Parts of these roads are tree-lined or shaded by mature canopy trees.

The Master plan eliminates the existing through-road that divides the main campus' open space into northwest and southeast parcels. Parking will be limited to spaces along Honeysuckle Road and in areas on the periphery of the main campus. Indented passenger loading areas along Banyan Drive and a bus drop-off at the entrance to the campus reinforces the emphasis on the pedestrian-oriented theme of the campus.

Related improvements include providing for and standardizing walkways and sidewalks along roads; converting overhead utilities lines to underground lines; and screening off-road parking, loading and service areas with appropriate landscaping.

Pedestrian Circulation

The primary concept for the campus circulation is pedestrian-oriented to encourage social interaction. The proposed walkway system calls for more clearly delineated pedestrian paths with a mixture of open and covered walkways between buildings for weather protection. *Walkway routes may be adjusted to accommodate the actual locations of future buildings and entrances.*

The Master Site Plan (Figure 3) indicates the proposed locations of covered walkways which will correspond with wheelchair accessible routes between buildings. Where appropriate, rest stops with seating areas should be provided along pedestrian paths and under shade trees.

The design of the covered walkways will be simple, airy, and compatible with the architecture of the buildings *(See Figure 8).* *Design criteria for covered walkways are described in the Site Development Guidelines.*

The proposed pedestrian circulation system for the campus calls for direct paths from parking areas to buildings and between buildings. Within the central campus area, a system of interconnected curvilinear pathways are proposed to provide a more fluid pedestrian movement,
as well as to create visual forms compatible with the open, rural character of the campus. All pedestrian pathways will be well-lit at night for safety and convenience.

**Landscaping**

The majority of the campus will remain grassed with special attention paid to grounds adjacent to buildings, parking areas, roadways and campus edges. *The proposed landscape concept supports the character of the existing campus by emphasizing the following features:*

- **Existing banyan trees are to be protected, or relocated when possible.** The Landscape Plan (Figure 9) indicates 31 mature banyan trees in the central campus area and along Banyan Drive which are to be protected as advised by the Kaneohe Outdoor Circle and the Mayor's Arborist Advisory Committee.

- Low shrubs and ground covers proposed around buildings will provide an attractive setting for each building and visual definition between campus structures and the open, central campus area. This landscaping treatment will also minimize maintenance activity around near buildings.

- Canopy trees will shade large parking areas, soften their effect and continue the rural setting theme.

- Trees proposed along roadways, such as Banyan Drive and Honeysuckle Road, will soften their effect and delineate campus edges.

- Campus edges will have landscaping consisting of vertical planting and ground cover materials to mitigate the view of parking areas and buffer adjacent properties.

- *Parking lot landscaping treatment (trees and screening elements) shall comply with the Land Use Ordinance (LUO).*
IV. DESIGN GUIDELINES
IV. DESIGN GUIDELINES

A. ARCHITECTURAL DESIGN GUIDELINES

The following architectural design guidelines provide direction for achieving the intent of the design concepts. Some of the architectural design elements that are most critical for buildings are: scale and massing; facade detailing; windows; and wall finishes. Facade designs with simple balanced elevations, plastered wall finishes, aluminum-framed windows, and clay tile roofing should be the main elements for new construction.

1. Scale and Massing

a. Size elements, such as windows, doors, and ornaments, to relate to human scale and proportions.

b. Minimize large masses or volumes through the use of varying roof and wall planes. Step or setback second floor areas from lower floors, where possible, to reduce the apparent mass of the upper levels.

c. Acknowledge the scale, massing, spacing and relationship of existing buildings when juxtaposing new construction.

d. Massing should emphasize horizontal elements instead of verticality. However, long building elevations should be articulated with changes in planes and / or vertical elements such as columns.

e. Utilize two-story structures, where allowed by the functional program and master plan, to keep footprints compact and retain as much open space as possible.

f. Balconies, lanais and arcades shall be used, where appropriate, to adjust scale and massing of structures. (See Figure 6)
2. Height
   a. Two-story buildings should reduce the emphasis on verticality with the use of horizontal elements such as tiered roofs and/or balconies.
   b. Limit maximum height of all buildings to 50 feet above adjacent finish or existing grade, whichever is lower. The method for measuring building height shall comply with the LUO (Figure 4).
   c. The heights of existing buildings shall be maintained. When substantial increase in floor area is required for an existing building, a second level and additional height may be provided where scale and massing are appropriate.

3. Roofs
   a. Roof design for new buildings shall generally conform with the hip or gable styles currently found on campus. Other acceptable roof styles or shapes may include double pitched and flat roofs used in conjunction with the hip or gable styles (Figure 5). Approximately two-thirds (2/3) of a building's total roof area should be designed with a sloped roof for clay tile roofing.
   b. Where appropriate or necessary and when approved by the College, other roof forms may be used for functional reasons, aesthetic relief or to comply with the required height limit.
   c. Use minimum roof pitches of 3:12 to 6:12 slopes for clay tile roofs (Figure 5). Flat roofs should maintain a minimum pitch of \( \frac{\frac{1}{2}}{\text{inch per foot}} \).
   d. Use one-piece mission S-style or two-piece mission style clay tiles as the predominant roofing material to maintain consistency with existing roofs. Tile colors should be modulated with a four color blend in the following percentages to give the college a separate identity from the
Figure 4. Existing and Proposed Height Envelopes

Figure 5. Conceptual Elevation
State Hospital facilities: Natural red (70%); Spanish red (10%); light buff (10%); and Sahara (10%). *(See Figure 6)*

e. Where feasible, existing buildings should be renovated with the same clay tile blend designated for new buildings.

f. Metal roofing, flashing, gutters and downspouts shall have an aged copper appearance with a verdigris patina finish.

g. Flat roofing materials shall be non-reflective or non-glare producing, in earth tone colors.

h. Rooftop equipment shall be screened from ground level view. Minimize the visibility of solar panels, mechanical and electrical equipment with the use of screen walls, parapets or roof wells. Where possible, group equipment together to facilitate screening.

4. Facades

a. Break up the mass of facades with recessed entries, doors, windows, transoms, and other elements which reflect the existing architecture of the campus.

b. Minimize the visibility of mechanical and electrical equipment with screen walls, *roof wells* and/or landscaping.

c. Maintain or replicate plastered walls, colonnades, and railings found in existing buildings.

d. Provide covered arcades or colonnaded walkways for weather protection and design continuity with existing buildings. Use arched elements where appropriate.

5. Building Entrances

a. Emphasize main entrances by articulation in plan and elevation. Use arched entries where appropriate.
b. Main entrances should be oriented toward the campus roadways and the central campus' main open green space.

6. Doors

a. Use aluminum storefronts at main entrances and glazed metal doors and frames at classroom entrances.

b. Finish for aluminum frames and members shall be fluorocarbon coating system. Finish for steel doors and frames shall be semigloss paint.

c. Relate glazing in entry doors to proportions of facade windows.

d. Reduce mass of large delivery doors with glazing or other details where possible.

e. Maintain or replicate existing door treatment, insofar as possible or feasible, when renovating existing buildings.

7. Windows

a. Use typical window characteristics and design found in existing buildings: regular pattern and rhythm; alignment of top or bottom with adjacent elements; awning or double-hung; and recessed into wall surface. (See Figure 7)

b. Use single or divided light windows with aluminum frame, sash, muntins, and screen frames. Finish for aluminum frames and members shall be fluorocarbon coating system.

c. Use light blue / green tinted glass throughout with Building B (Lokai) and Building K as standards.

d. Maintain or replicate existing window treatment, insofar as possible, when renovating existing buildings.
8. Wall Finishes

a. Minimize number of materials for exterior walls. The main materials for exterior walls shall be painted concrete, cement-plaster or exterior finish system (EFS) for a monolithic appearance to match existing buildings (Figure 5). Do not use metal, vinyl, plastic siding, asphalt sheets, or false veneers.

b. Repair damaged walls with materials that match adjacent existing finish when renovating existing buildings.

c. Use smooth or light sand textures for plaster finishes as found on existing buildings.

d. Where appropriate, limited amounts of complimenting or accent materials such as stone, marble, glass block or painted split-face CMU may be introduced as accent features for aesthetic and / or for functional purposes.

e. Color of walls shall be beige and / or light earth tones to match the character of existing buildings.

9. Ornamentation

a. Keep ornamentation simple and appropriate to scale and design of the building.

b. Maintain or replicate architectural details of existing buildings where appropriate. Use ornamentation such as moldings, rafter tails, brackets, grilled vents and railing details similar to those found on existing buildings. (Figure 7)

c. Avoid "pasted on" embellishments, such as non-functional shutters, which are not found on existing buildings.

10. Color Scheme

a. Minimize number of exterior colors. Colors for trims and moldings should be coordinated with main body color of the building and match those of existing buildings.
b. Paints or stains should be low sheen to reduce glare or reflectivity of surface. Use semigloss, eggshell or matte finishes instead of gloss finish where practical.

Clay Roof Tiles with Multi-color Blend

Covered Arcade and Balcony

Figure 5. Architectural Elements
Framed Window with Multiple and Arched Lites

Decorative Grillework

Decorative Railing and Grilled Vent

Figure 6. Architectural Elements
B. SITE DEVELOPMENT GUIDELINES

1. Setbacks

a. *AG-2 General Agricultural District Development Standards indicated in the LUO* shall be used in determining required setbacks along the campus boundary. Setbacks of 15' and 10' are required for front and side yard conditions, respectively.

b. The locations of future buildings will be as generally shown in the Master plan and the approved PRU. For future buildings which may be in closer proximity to adjacent properties, minimum setbacks shall be in accordance with the City's LUO provisions.

c. Setbacks from campus roads for new buildings should be consistent with the adjacent existing buildings. New buildings shall not be closer to campus roadways than adjacent or existing structures are from roadways.

d. Along Banyan Drive, on the makai edge of the main campus, **all** portions of one-story buildings shall be setback a minimum of forty (40) feet from the edge of the realigned roadway.

e. Along Banyan Drive, on the Kahuku edge of the main campus, **all** portions of one-story buildings shall be setback a minimum of twenty (20) feet from the edge of the realigned roadway. **All** portions of two-story buildings shall be setback a minimum of thirty (30) feet from the edge of the realigned roadway.

f. Along Honeysuckle Road, portions of buildings one-story in height shall be setback a minimum of forty (40) feet from the roadway edge. **All** portions of buildings two-story in height shall be setback fifty (50) feet from the roadway edge.

2. Off Street Parking and Loading

a. *Design standards for parking shall be in compliance with "Off-Street Parking Requirements" described in the LUO.*
Adequate number of parking spaces shall be provided in accordance with LUO Table 3.1A during all phases of campus development. See the accompanying document "Windward Community College Parking Implementation Plan" for parking and loading provisions for each phase.

b. Design standards for loading areas shall be in compliance with "Off-Street Loading Requirements" described in the LUO. Adequate number of loading spaces shall be provided during all phases of campus development.

c. Requirements for accessible parking spaces, routes and passenger loading areas shall be in compliance with the Americans with Disabilities Act Accessibility Guidelines (ADAAG).

d. Screen views of parking, loading and service areas from adjacent public or residential uses by providing landscape screening, fencing, walls, or berms.

e. Provide canopy trees in all parking areas per LUO requirements. See the Landscape Plan for recommended trees.

f. Refer to Section A-4 in the PRU, Volume 1, for a summary of other applicable requirements pertaining to parking and loading.

3. Roadways and Utilities

a. All new roadways and utilities construction shall comply with City and County of Honolulu Department of Public Works standards. All existing non-standard roadway construction shall be renovated to comply with City standards.

b. Non-standard roadways will be improved as infrastructure is constructed for new buildings. Implementation and phasing of roadway improvements shall be coordinated with adjacent building projects and in accordance with site improvements shown in Table 1 Implementation Plan.
c. Eliminate Ilima Way, the roadway which presently divides the central campus.
d. Realign Banyan Drive, along the makai edge of the central campus, so that the existing roadway is relocated approximately twenty (20) feet in the mauka direction from its present location.
e. Realign Banyan Drive, along the Kahuku side of the central campus, so that the existing roadways are perpendicular and straight.

4. Pedestrian Circulation

a. Elements in the campus' pedestrian circulation system shall be constructed in compliance with ADAAG requirements. Accessible routes shall connect all buildings, parking and bus drop-off areas.
b. Walks connecting buildings shall be a minimum of 6'-0" wide. Sidewalks along campus roadways or adjacent to parking areas shall be a minimum of 4'-0" wide.
c. A system of covered walkways, where indicated between buildings, shall be provided along accessible routes. (See Figure 3)
d. Covered walkways columns shall be CMU or concrete with plaster finish to match buildings. Roofs shall be a flat framed structure and finished with built-up roofing. The spacing of columns shall allow a minimum walkway width of six feet clear. (See Figure 8)

5. Open Storage and Service Areas

Open storage and services areas shall be screened from public view by a fence, wall, or landscaping. Waste containers store solid waste prior to disposal shall be contained within enclosures. It is also recommended that various recycling methods be utilized in order to minimize the quantity of solid waste generated including composting of landscape maintenance debris.
6. Miscellaneous Construction / Structures

a. Miscellaneous construction or structures along the periphery of main campus and away from public view, when possible.

b. Dish antennae, as required for communication and support of curriculum, are to be located away from the main campus at the southwest corner of the site near the Automotive facilities.

c. A wind generator may be erected near the agriculture plots, near the northwest boundary of the campus.

Figure 8. Covered Walkway
C. LANDSCAPE GUIDELINES

In general terms, the proposed ultimate landscape plan calls for retaining the character of the existing campus. The majority of the campus is to remain primarily grassed open spaces between buildings.

In order to realize the landscape concept for the campus, the following landscape urban design principles, criteria and recommended materials shall be applied in the development of the landscape design for specific projects. Refer to the Landscape Plan (Figure 9), for the location of corresponding planting treatments described in items nos. 1 through 6 below.

The recommended plant materials are not intended to be limited to the species indicated below. See the Ultimate Landscape Plan Plant List, PRU / Master Plan, Volume 2, Appendix A., for additional species that will be acceptable.

1. Open Space (Central Campus)
   a. Trees and Palms: The existing trees in the central campus area provide the major landscape elements. No major plantings of trees or palms are required.
   b. Groundcovers: Areas beneath existing tree canopies should be planted with shade tolerant grass such as St. Augustine (Stenotaphrum secundatum), sprigged or Hilo grass (Paspalum conjugatum), seeded.

   Adjacent to special locations like sitting areas, groundcovers such as Taro Vine (Pothos aureus), rooted cuttings, Laua'e Fern (Microsorium scolopendria) or Mondo Grass (Ophiopogon japonicus), divisions are recommended.

   To retain clear visual access throughout the central campus area, no major shrub massing is proposed.

2. Enhanced Landscaping (Individual Buildings)

   Use planting, where possible, around buildings and parking areas to soften their effect and to provide a buffer and transition to the neighboring residential area. It is recommended that the areas
adjacent to and surrounding each building be landscaped utilizing ground covers, shrubs, and ornamental trees to provide an attractive setting for each building and provide a visual definition between campus structures and the central campus area.

a. **Trees:** Native trees are recommended as accents or focal points. Included are Kukui (Aleurites moluccana), 15-gallon and Loulu (Pritchardia sp.), field specimen.

As a transition to the central campus area, single-trunked palms such as Alexander Palm (Archontophoenix alexandrae), 65-gallon minimum, in an informal arrangement are recommended.

b. **Shrubs and Groundcovers:** At the building foundation, a planting of shrubs and groundcovers act as a transition from the structure to the rest of the campus. Shrubs such as Monstera (Monstera deliciosa) and Hibiscus (Hibiscus sp.) should be one-gallon minimum and planted in masses or rows (not individually spaced).

3. **Parking Areas**

Parking areas shall have flowering shade trees to provide visual and aesthetic relief. It is recommended that species of trees be limited to provide consistency and unity.

a. **Trees:** For parking areas, flowering canopy trees such as Rainbow Shower (Cassia nealae), Pink Tecoma (Tabebuia pentaphylla) or Hong Kong Orchid (Bauhinia blakeana) are recommended. Size and location should conform to current LUO requirements.

b. **Shrubs and Groundcovers:** To screen parking areas, shrub hedges should be installed. Plants should be one-gallon minimum planted no further than 30 inches apart. Shade tolerant groundcovers should be used.
4. Screening

A visual buffer is proposed along the mauka, eastern and western boundaries of the campus as follows:

a. **Trees and Palms**: Areca Palms (Chrysalidocarpus lutescens), five-gallon minimum should be planted no further than six feet on center.

b. **Shrubs and Groundcovers**: Shrubs should be one-gallon minimum and planted in a continuous mass. Recommended are Monstera, or Heliconia (Heliconia sp.). Groundcovers such as Laua'e Fern or Mondo Grass are suggested.

5. Palm Plantings

a. A single row of Alexander Palm or Royal Palm (Roystonea regia) is proposed along Honeysuckle Road along the eastern edge of the central campus. This will, in time, provide a sense of enclosure or containment of the campus along this edge.

b. Palms should match field specimens and be planted in a regular pattern at 20 feet apart.

6. Trees

a. **31 existing banyan trees should remain and** be protected from damage during construction activities and maintained as needed to preserve the existing visual ambiance throughout the campus.

b. **New canopy trees should be added as shown on the Landscape Plan.** Mango and selected monkeypod trees will be removed.

c. **Groundcover treatment under existing trees shall be as indicated under Item 1.b. above, Open Space (Central Campus).**
7. Irrigation

Installation of irrigation systems will be phased with the implementation of site or building facilities. See Figure 6, Irrigation Plan, for the general locations of the manually and automatically controlled systems described below.

a. **Open Space**: Hose bibbs or quick coupler systems are recommended. This system will be employed for large, open lawn areas such as the Central Campus and the future Athletic Fields.

b. **Around Buildings**: For the enhanced landscape areas, permanent underground sprinkler systems should be provided and automatically controlled. For lawn areas and areas adjacent to walkways, pop-up type heads should be used with spray heads on risers for groundcover areas.

c. **Parking Areas**: Permanent underground sprinkler systems should also be provided and automatically controlled for landscaping in and around parking areas.
2. Enhanced Landscape Treatment (Typical Around Buildings)

6a. Existing Banyan Trees, Typical

5. Palm Planting Treatment

1. Open Space Treatment

3. Parking Area Treatment

4. Screening Treatment

6b. New Canopy Trees, Typical

Note: For description of landscape, see Landscape Guideline.

LANDSCAPE PLAN

WINDWARD COMMUNITY COLLEGE

FIGURE 9
Parking Area

Keaahala Stream

Central Campus

Existing Natural Vegetation to Remain

LEGEND

- Automatic Irrigation System
- Quick Coupler & Hose Bibb System

Athletic Field

IRRIGATION PLAN

WINDWARD COMMUNITY COLLEGE

FIGURE 10
D. SIGNAGE GUIDELINES

1. Objectives

The signage system will be the primary means of communicating information, direction, and identification of facilities to those unfamiliar with the campus area. The intent of the signage plan is to provide guidelines toward the development of a uniform signage system that will effectively convey information and contribute to the visual enhancement of the campus.

These guidelines are intended to describe the general parameters that will meet the objectives of the signage system. The aim is not to dictate or specify a rigid design for signage that must address a number of unknown variables at the present time. The guidelines are intended to be flexible to allow for design refinements when detailed requirements, such as exact sign locations and messages, are determined during the implementation of the campus signage program. The objectives of the signage system are:

- Clarity, conciseness and consistency of messages to minimize the total number of signs and visual clutter.
- Proper design and placement of the signs to address vehicular and pedestrian traffic.
- Aesthetic and physical compatibility with the existing environment by complimenting the character and design of the architecture and landscaping.
- Economy of construction, durability and ease of maintenance.
- Continuity of design standards for all subsequent signage needs.

2. Sign Types

The following sign types represent a significant portion of the signage system. Additional special signs need not be restricted to only these types. Future signs with special requirements or restrictions shall be
types. Future signs with special requirements or restrictions shall be developed as needed, but shall be compatible with the overall signage program by complying with these guidelines.

The generic designs indicate the basic character and intent of the signage types. Detailed design work will be required when the overall campus signage program is implemented.

a. Type 1: Entry Sign

The entry sign is for overall identification of the campus. This sign shall be located at the major vehicular entrance to the campus. The design shall be compatible with the overall architectural design of the buildings. (See Figure 11)

Basic Characteristics:

- Support structure of concrete or plastered CMU
- Lettering, graphics and/or symbols out of cast bronze
- Lighting shall be from an external source

b. Type 2: Building Identification Sign

Type 2 signs are used to identify the campus' main building facilities. The design character shall be similar to Sign Type 1. These signs shall be freestanding and located near the main entrances to all buildings. (See Figure 11)

Basic Characteristics:

- Support structure of concrete or plastered CMU.
- Lettering, graphics and/or symbols out of cast bronze.
- Larger signs near entrances along roadways; smaller ones near entrances on the campus' main open space.
- Lighting shall be from an external source.
Figure 11. Sign Types 1 & 2
c. Type 3: Directory

Type 3 signs will be used to convey information primarily along pedestrian routes and vehicular ways. These freestanding signs will feature graphics such as campus maps for directory and orientation purposes. (See Figure 12)

Basic Characteristics:

- Support structure of concrete or plastered CMU.
- Sign structure of aluminum.
- Information and graphics shall be subsurface silkscreened on clear plexiglass with ultraviolet ray blocking capabilities.
- Where provided, simple and easy-to-read, diagrammatic maps shall be oriented to the site.
- Directories shall be *internally illuminated*.

d. Type 4: Large Directional Signs

Type 4 signs shall be primarily for providing directional information along vehicular and pedestrian ways. These signs should be compatible with Sign Types 2 and 3. There may be variations in the sizes of the sign plaque, due to the messages, but 2-3 standard sizes should be the maximum. (Figure 12)

Basic Characteristics:

- Support structure of concrete or plastered CMU.
- Sign plaque of aluminum or "corian" type material.
- Information shall be silkscreened.
- Reflective graphics shall be used for vehicular type signs.
Figure 12. Sign Types 3, 4 & 5
Figure 13. Sign Types 6 & 7
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e. **Type 5: Small Directional Sign**

Type 5 signs are smaller versions of Type 4, and shall be used primarily for pedestrian orientation. A minimum number of sizes for the sign plaque shall be used. (See Figure 12)

**Basic Characteristics:**

- Support structure of concrete or plastered CMU.
- Sign plaque or head made of aluminum or "corian".
- Information to be silkscreened.
- *Lighting shall be from an external source.*

f. **Type 6: Post Signs**

These signs may be very prevalent on campus. These are traffic control, regulatory and warning signs (such as "Stop", "Speed Limit", etc.) and shall be used primarily along vehicular ways (See Figure 13). Type 6 signs will mainly incorporate standard traffic messages in standard symbols and shapes (See Figure 14). Sign placement shall be coordinated with the civil engineer for each project.

**Basic Characteristics:**

- Support shall be aluminum or galvanized steel post.
- Sign plaques shall be aluminum or galvanized metal.
- Information shall be silkscreened.

g. **Type 7: Small Post Signs**

Type 7 signs shall be similar to Sign Type 6, except smaller and shorter. These signs shall be used as required for information, warnings, restriction or miscellaneous purposes. (See Figure 13)
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Basic Characteristics:

• Support shall be aluminum or galvanized steel post.

• Sign plaques shall be aluminum or galvanized sheet metal.

• Information shall be silkscreened.

3. Typestyle

The typestyle shall be of weight and character that will ensure readability and be legible for its intended use. Lettering shall be a serif typestyle for readability and compatibility with campus architecture. The standard typestyle shall be "Optima" in regular or bold type. (See Figure 15)

4. Symbols

All symbols used in this sign system shall conform to the international standards and be in compliance with all codes and regulatory agencies. Customized symbols may be used, if they assist in conveying the required message. Numerical or other graphic elements may also be used.

5. Colors

A color coordinated system should be standardized to provide clarity to both vehicular and pedestrian traffic. Sign colors should be compatible with the overall color scheme for campus buildings. A high level of contrast between the background and information should be a standard, to ensure readability and legibility.

6. Letter Size

Letter size shall be determined by the optimum viewing distance for a sign. For every 35 ft. of distance, a minimum of 1" upper case height of the letter shall be used.

However, other factors affect the overall legibility of a sign, such as
environmental conditions (light, color, etc.) and sign location. All conditions should be addressed in making a final determination for letter size.

7. **Sign Face Layout**

A proper selection of information and graphic elements, in regards to their sizes and arrangement, is very important to the effectiveness of the sign. All messages should be clear and concise and all layouts for each sign type should maintain consistency throughout.

8. **Sign Size**

Sign sizes shall be determined by the information required and also the typeface size to ensure readability. Variations in plaque sizes within a sign type should be kept to a minimum for economy and consistency of design. Plaque sizes shall be standardized to modular dimensions.

9. **Materials**

Signs shall be constructed with the materials indicated for the various sign types. Other materials, where appropriate, shall be best suited for the signs' intended use and compliment the architectural quality of the campus. Consideration shall be given to weathering conditions, maintenance, economics, practicality and aesthetics. All materials used shall have a finished appearance; no unfinished surfaces shall be visible. Wood or wood by-products shall not be used as a final material in the construction of a sign.

10. **Sign Placement**

The locations for the major sign types (Types 1 thru 5) shall generally follow the Signage Plan, shown on Figure 16. Where required, supplementary signs of the types indicated shall be provided in addition to those shown on the Signage Plan. Post Signs (Types 6 and 7) will be provided as needed in accordance with traffic safety standards or functional requirements.

All signs should be placed or installed for maximum visibility and legibility for the intended use. No sign shall be placed as to obstruct
or create a hazardous condition due to its size, shape or color. Roadway signs should be set back from the curb edge a minimum of 24", which may vary due to site conditions. Uniform mounting heights established for each sign type shall be maintained.
Figure 14. Traffic Symbols (for Sign Type 6)

Figure 15. Standard Typestyle
LEGEND

1  Type 1-Entry Sign
2  Type 2-Building Sign
3  Type 3-Directory
4  Type 4-Large Directional Sign
5  Type 5-Small Directional Sign

SIGNAGE PLAN

WINDWARD COMMUNITY COLLEGE

FIGURE 16
E. LIGHTING GUIDELINES

1. General

The intent of the lighting plan is to provide a consistent night time ambiance that is compatible with the rural feel and character of the campus. The desired effect should be a subdued level of lighting throughout the campus that will also satisfy the requirements for public safety and security. The objectives of the lighting design are to:

• Provide lighting that compliment the campus' rural character.
• Provide lighting to accentuate appropriate landscaping and architectural features.
• Promote public safety and campus security.
• Consider energy efficient design and energy conservation during long term use.
• Provide consistent light fixtures styles throughout the campus that compliment the architecture of the buildings.
• Minimize glare and light spillage from exposed luminaries.

Where appropriate and required, lighting levels will be increased to illuminate areas such as roadways, parking areas and athletic facilities. Shielded light fixtures shall be used to eliminate glare into adjacent properties.

2. Site lighting

a. Site lighting types and locations shall generally follow the Site Lighting Plan. (See Figure 17)

b. The basic types of freestanding exterior light fixtures include (See Figure 18):

(1) Bollards that provide a subdued level of lighting on
LEGEND

- Street Light Standard w/ 150 Watt High Pressure Sodium Lamp
- Tennis & Volleyball Court Light Standard w/ 150 Watt High Pressure Sodium Lamp
- Parking Area Light Standard w/ 150 watt High Pressure Sodium Lamp
- Walkway Light Standard w/ 150 Watt High Pressure Sodium Lamp

LIGHTING PLAN

WINDWARD COMMUNITY COLLEGE

FIGURE 17
walkways adjacent and nearby buildings or at special activity areas;

(2) Pole-mounted fixtures about 14 feet high to illuminate the campus walkway system;

(3) Pole-mounted fixtures 25 feet high to illuminate parking areas and campus roadways;

(4) Pole-mounted fixtures 25 feet high to illuminate play courts; and

(5) Shielded fixtures for accenting landscaping and site features.

c. Recommended forms of landscape lighting include: well lights, tree-mounted lights (both uplights and downlights) and pathway lighting.

d. Areas used extensively at night for access, walks, interior courtyard, and parking areas shall be illuminated sufficiently for safety.

e. Light fixtures that are visible, whether mounted on a building, pole, or used in the landscape as pathway lights, shall compliment the architectural character of the campus. Consistent fixture types or styles shall be used throughout the campus for design continuity and maintenance consideration.

f. All exterior lighting shall be shielded in a manner which eliminates glare into surrounding properties. Cut-off type fixtures shall be used to achieve the proper shielding when lighting areas near residential properties.

g. Energy-efficient light sources with good color rendition such as high pressure sodium or low-wattage incandescent type lamps shall be used for exterior fixtures. Wattage, spread of illumination and spacing of fixtures shall be designed to achieve a subdued level of lighting consistent with the rural setting of the campus.

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3. Building Lighting

a. Where appropriate, fixtures integrated with the design of buildings, such as recessed step lights, wall lights and soffit lights, may be used for functional or aesthetic reasons.

b. Lamps shall be high pressure sodium or low wattage incandescent types for exterior fixtures.

c. For building or landscape accent lighting, use a shielded light fixture to conceal light source from public view. Illumination shall be directed only at the desired feature.

d. Shield exterior light sources to prevent direct glare to adjacent properties. Use fixtures that direct illumination downward to the ground, walkway and driveway surfaces.

Figure 18. Site Light Fixture Types
V. IMPLEMENTATION
V. IMPLEMENTATION

The following subsections describe the provisions for implementing and reviewing proposed improvements for the campus, as well as provisions for revising and updating the PRU for a Five-Year Master Plan, Urban Design Plan and the Parking Implementation Plan.

A. PHASING

Implementation of the Five-Year Master Plan is anticipated to be completed in five phases in accordance with the revised Implementation Plan (Table 1). The plan and phases are based on the studies and information in the PRU for a Five-Year Master Plan, Volumes 1 and 2. However, the phasing of the Implementation Plan included herein has been adjusted to insure that adequate parking is provided during all phases of campus development.

**Building Facilities.** The renovation of existing buildings and construction of new facilities will be phased to meet projected enrollment, program and curricula needs. Although the scheduled implementation dates may vary from the actual dates, the construction of improvements intends to generally follow the sequence indicated pending available funding of improvements.

**Parking and Loading.** The revised phases of the Implementation Plan provides parking and loading to support new building facilities. Parking spaces that will be removed for new buildings and improvements shall be replaced with an equal or greater number of spaces at another location prior to demolition of existing spaces.

Detailed provisions for the phasing of parking and loading facilities are found in the accompanying document entitled "Windward Community College Parking Implementation Plan".

**Roadways and Infrastructure.** For budgetary and practical reasons, the improvement of existing roadways and infrastructure systems will be phased with the construction of adjacent or related building projects. Campus roads and utilities may also be improved separately from building projects when funding for maintenance and infrastructure improvements becomes available to the College.
Windward Community College  Urban Design Plan and Design Guidelines

Table 1. IMPLEMENTATION PLAN

<table>
<thead>
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<th>Phase</th>
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<tr>
<td>1</td>
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<tr>
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<td>Building K (Science)</td>
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<td>2</td>
<td>Building J (Humanities)</td>
<td>1994</td>
</tr>
<tr>
<td>2</td>
<td>Building D (Student Center)</td>
<td>1994</td>
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<td>Building C (Childcare)</td>
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<td>3</td>
<td>Construct Parking fronting Building B</td>
<td>1995</td>
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<tr>
<td>3</td>
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<tr>
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<tr>
<td>3</td>
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<td>1995</td>
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<td>Demolish Lono</td>
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</tr>
<tr>
<td>5</td>
<td>Building G (Business Education)</td>
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</tr>
<tr>
<td>5</td>
<td>Renovate Building I (Math)</td>
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</tr>
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Notes:

1. The Implementation Plan is adopted from Table A5.1, “Plan Review Use for a Five-Year Master Plan”, Volume I, Jan. 1993 (revised May 1993). The phases have been adjusted here to permit construction of adequate parking facilities prior to the construction of new buildings.

2. Site improvements will include upgrading of utilities, roadways, walkways and other infrastructure work in the vicinity of related buildings.
1. **Phase 1 Improvements**

Phase 1 improvements include the renovation of Building B (Lokai) and the construction of Building K, a new facility to house Natural Sciences classrooms, laboratories and a planetarium. Building K will be situated on a portion of the College’s main parking lot on the east end of the campus and will displace 100 parking spaces at this location.

Parking and loading improvements to support Building B and Building K will include the construction of a new parking lot with 204 stalls at the entrance to the campus and spaces adjacent to each building. New parking and loading spaces will be provided at Building B.

Infrastructure work will include utilities and roadway improvements along Banyan Drive.

2. **Phase 2 Improvements**

Phase 2 improvements include the construction of Building C (Childcare), Building D (Campus Center) and Building J (Humanities). Building J will be located at the east mauka corner of the campus on the mauka portion of the College’s main parking lot and will displace the remaining 122 parking spaces at this location. Building C will be located on the makai edge of the campus along Banyan Drive. Building D will be located at the west mauka end of the campus where the vacant Dining Hall & Kitchen building is presently situated.

Parking and loading improvements to support the new development will include the construction of a new parking lot with 118 stalls to the east of Building J with additional parking stalls fronting the building along Honeysuckle Road. Service and passenger loading spaces will also be provided near Building J. Building C will be near the existing 204-stall parking lot.

Akahi Building will be demolished for the construction of a new parking lot with 60 stalls to the west of Building D. An additional 43
parking stalls and one passenger and service loading space fronting the building along Honeysuckle Road will be provided.

Related roadway and infrastructure improvements will be done along Banyan Drive and Honeysuckle Road.

3. Phase 3 Improvements

Phase 3 facility improvements include the construction and renovation of buildings on the east end of the campus. New structures include Building H (Library), Buildings L, M, N (Auto Tech), Building P (Aquaculture) and Building Q (Physical Education). Building O, an existing warehouse and maintenance building used by the hospital, will become the College's Maintenance/Storage facility.

Infrastructure improvements include the realignment and reconstruction of Banyan Drive to the north and east of the main campus. The closure of Ilima Way, which presently bisects the campus, is also scheduled for this phase. Play fields and play courts near the Physical Education building will be constructed on the northeast campus.

To compensate for parking and loading spaces removed due to the facility and infrastructure improvements, a large parking lot with 252 spaces will be constructed at the entrance to the campus in front of Buildings A and B. Additional parking will be provided near the Auto Tech and Maintenance buildings, Aquaculture and Physical Education buildings and the playcourts. New passenger and service loading spaces will be provided along Banyan Drive and near the new Library.

4. Phase 4 Improvements

Phase 4 improvements call for the construction of Building E (Language Arts) at the site of Kanaloa Building on the mauka edge of the campus along Honeysuckle Road. Existing Building A (Eckerdt) and Building F (Waipa) will be renovated to accommodate Administration services and Social Sciences, respectively.
Parking and loading improvements for this phase will be minimal since infrastructure improvements and parking provisions are extensively scheduled in the previous phase. New parking in this phase will include parking and loading spaces fronting Building E along Honeysuckle Road.

Related infrastructure and sitework at Buildings A, E and F will be implemented.

5. **Phase 5 Improvements**

Phase 5 improvements include the construction of Building G (Business Education) at the site of Judd Building on the mauka edge of the campus along Honeysuckle Road. Building I (Math) will replace Mahi Building on the makai edge of campus along Banyan Drive.

Parking and loading improvements will include the addition of 84 parking spaces at the site of the Transient Residence (Cottage) to complete the main parking lot near the campus entrance. New parking stalls fronting Building G along Honeysuckle Road will be added. 887 parking spaces will be available upon the completion of Phase 5.

Roadway improvements include the closure of the loop road around Building A. Infrastructure and sitework related to the building improvements will be implemented.

B. **COMPLIANCE**

The provisions and requirements of the following documents shall govern the development of campus improvements.

1. Plan Review Use for a Five-Year Master Plan for the University of Hawai‘i Windward Community College, Volumes 1 and 2.


Necessary amendments, modifications and clarifications to the first three documents shall be made in accordance with subsection D.4. "Amendment Procedures" of this document.

C. DESIGN REVIEW

1. Purpose

The purpose of this design review process is to ensure that all future projects conform to the objectives, criteria, concepts and design guidelines so that the overall environmental quality of the campus will be developed as envisioned.

This section establishes provisions for the design review process of individual projects. These provisions include the establishment of review procedures and a committee to oversee compliance with the PRU/Master Plan, Urban Design Plan and the Parking Implementation Plan.

2. Design Review Committee

A Design Review Committee (DRC) will be formed to assure that the proposed design for an improvement satisfies the programmed needs of the College and design guidelines specified in the documents indicated above. The DRC will assist in the review of individual project designs as well as amendment requests. The DRC shall be comprised of the following members:

a. Project Engineer, DAGS Project Management Branch;
b. Director of Facilities Planning, University of Hawaii'i Community Colleges;
c. Provost, Windward Community College;
d. Assistant to the Provost, Windward Community College; and
e. Master Plan architect and consultants.

3. Design Review Procedures

Design reviews will include the DRC and the design consultants...
retained by the State for specific projects. Reviews will occur during the schematic, preliminary and prefinal design phases to evaluate the appropriateness of a proposed design.

At each review, the DRC will certify its approval if the design satisfies the objectives and criteria set in previous reviews and those identified in these design guidelines. DRC-approved plans and documentation will be submitted to the City and County Department of Land Utilization (DLU) for review and approval in the design phases shown below. Meetings, reviews and approvals will occur during the following design phases:

a. Pre-Design Meeting: This meeting will include the DRC and the design consultant(s). The design goals of the Windward Community College Master Plan and Urban Design Plan will be reviewed with the design consultant. Infrastructure and design elements that require interfacing will be discussed.

b. Schematic Design: This “on-board” review meeting will involve the appropriate members and consultants of the DRC and the design consultant.

The meeting will discuss comments to previously submitted schematic design documents. The documents should be submitted by the design consultant to the DRC two weeks before the review meeting. The documents should include sufficient information to show how the proposed design satisfies the parameters of the Urban Design Plan and design guidelines. Minimum submittal requirements for the Schematic Design package shall be in accordance with the scope outlined in DAGS Division of Public Works' publication “Policies and Procedures Governing Design Consultant Contracts”.

The design consultant will be provided with written comments, marked-up plans and/or approval from the DAGS representative of the DRC following the meeting. Upon approval and acceptance of the schematic design package by the DRC, the design consultant shall transmit plans and documentation of the DRC approval (with DRC comments) to
DLU for review and approval.

c. **Preliminary Design (Design Development):** This “on-board” review meeting will include the appropriate members and consultants of the DRC and the design consultant.

Preliminary Design documents (along with annotated review comments and marked-up plans from the Schematic Design phase) shall be submitted two week prior to the review meeting. DLU comments and responses shall also be included with this submittal. Minimum submittal requirements for the Preliminary Design package shall be in accordance with the scope outlined in the DAGS Division of Public Works' publication “Policies and Procedures Governing Design Consultant Contracts”.

Written approval, marked-up plans and/or comments shall be compiled by the DAGS representative of the DRC and returned to the design consultant in a timely manner following the meeting.

d. **Final Design (Construction Documents):** The appropriate members and consultants of the DRC will check the Final Design documents for compliance with the design review comments.

Final Design documents (along with annotated review comments and marked-up plans from the Preliminary Design phase) shall be submitted to the DAGS representative of the DRC. Minimum submittal requirements for the Final Design package shall be in accordance with the scope outlined in the DAGS Division of Public Works' publication “Policies and Procedures Governing Design Consultant Contracts”.

Written approval, marked-up plans and/or comments shall be compiled by the DAGS representative of the DRC and returned to the design consultant within four weeks following the submittal. The DRC may extend this review period when necessary.
When all final review comments have been addressed to the satisfaction of the DRC, a letter certifying final approval shall be provided to the design consultant. Final plans, specifications and the letter of final approval shall be submitted to DLU upon application for a building permit by the design consultant.

D. AMENDMENTS

1. Purpose

The purpose of these amendment provisions is to provide a process to consider modifications to the PRU for a Five-Year Master Plan, Urban Design Plan and Parking Implementation Plan. As the campus develops, it is expected that the College’s academic programs, curriculum, objectives and physical needs may change or may need to be refined. Additional knowledge about the relevance of certain objectives, criteria or guidelines of the documents that govern campus development will be gained. With changed conditions and a better understanding of the plan, modifications, clarifications and updates to these documents may be appropriate.

2. Appropriateness

Applications for amendments to specific design guidelines, design elements and details of the Urban Design Plan will be considered. The overall design concept and themes shall be maintained during development of the campus.

Amendments will be approved if the applicant can show that compliance with specific provisions will cause undue hardship for the College's academic agenda or cause an otherwise sound design to be impractical or unfeasible. It must also be demonstrated that the amendment will be consistent with the overall intent and goals of the PRU/Master Plan, Urban Design Plan and Parking Implementation Plan.

3. Participants

Amendment requests must be ultimately approved by DLU. The DRC
shall provide initial review and recommend preapproval or disapproval of the proposed amendments requested by individual project consultants or other affected parties. Preapproved amendment requests shall be submitted by the DRC to DLU for review and approval.

4. Amendment Procedures

In order to properly evaluate requests, the party proposing the amendments shall provide the following written and/or graphic information for review by the DRC:

- a. Existing provisions of the PRU/ Master Plan, Urban Design Plan or Parking Implementation Plan for which amendments are requested.

- b. General description of the proposed project design or proposed changes in the College’s academic programs, curricula, objectives or physical needs which make an amendment necessary. The aspects of the proposed design or changes that are inconsistent with the applicable provisions should be detailed.

- c. Proposed amendments (such as deletions, revisions or new provisions) to the applicable documents.

- d. The basis for the proposed amendments. Consistency of the amendments with the intent of the Urban Design Plan must be demonstrated.

- e. The effects, if any, of the proposed amendments on other existing provisions.

The amendment request shall be reviewed by the appropriate representatives of the DRC. Review of the request should be completed by the DRC within two weeks of the submittal. The DRC may extend the review period when necessary.

When requests are determined to be justified and preapproved by the DRC, the requests shall then be forwarded to DLU for their review.
**5. Minor Modifications and Interpretations**

When amendment requests are made, the DRC may, in consultation with DLU, determine that such requests represent minor modifications or adjustments to the PRU/Master Plan, Urban Design Plan and the Parking Implementation Plan. Minor modifications preapproved by the DRC will be subject to administrative review and approval by DLU.

Where provisions or requirements of one document are inconsistent with those of another document, the DRC will render an interpretation or clarification with concurrence from DLU. Final determinations shall be submitted to DLU in writing for their information and records. An approved interpretation shall become part of the appropriate documents.

Decisions regarding minor modifications and interpretations will be made within two weeks of the request for a amendment or clarification. The DRC or DLU may extend this period when necessary.

**DLU** will review the requests in a timely fashion and render a decision.

It shall be understood that preapproval by the DRC does not guarantee approval by DLU, which may require and additional justifications or modifications to the proposed amendments as conditions for approval. The City Council of the City and County of Honolulu shall have the ultimate authority in approving amendments to the PRU/Master Plan and the Urban Design Plan.
VI. APPENDIX
V. APPENDIX

A. CROSS REFERENCE INDEX

The following Table of Contents from Volume 1 of the Plan Review Use for a Five Year Master Plan for the University of Hawaii Windward Community College is provided as a cross reference and includes pages TOC 1 through TOC 3.
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    Prepared by Okita, Kunimitsu & Associates, Inc./Ernest Hara and Associates
    April 22, 1989

B.  TRANSPORTATION STUDY REPORT
    Prepared by Wilbur Smith Associates
    May 14, 1992

C.  ENVIRONMENTAL ASSESSMENT FOR WINDWARD COMMUNITY COLLEGE MASTER PLAN
    Prepared by Wilson Okamoto & Associates
    Negative Declaration Accepted by Office of the Governor, 28 October 1987

D.  PROJECT CORRESPONDENCE
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WINDWARD COMMUNITY COLLEGE
MASTER PLAN

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