ELEMENT 15  
ARCHITECTURAL DESIGN GUIDELINES

Introduction
The architecture of the campuses of Florida Atlantic University, in particular the Boca Raton Campus, may be categorized as "functionalism." The campuses possess an architecture whose main purpose is to solve problems. Therefore, the FAU campuses in general fall somewhat short of being enriching architectural experiences. Future architecture should build upon the Boca Raton Campus's early logical roots, but also must not forget architecture's vital role in enriching campus life. Each campus may develop its own design vocabulary, but the following concepts should guide development towards a richer architecture on all campuses.

First, FAU should extend to new buildings the ideas of the Boca Raton Campus' most architecturally successful existing buildings, those which respond directly to the environment. The original 1964 buildings' large overhangs, light-colored materials, and exterior circulation give the buildings great depth and scale along with environmental logic. These same valuable features are found in successful later buildings, such as the Library addition with its planar, concrete sunshade walls. The most recent example of the use of these features on campus is the Education Building, which utilizes arcades, setbacks, and aluminum awnings to combat the hot Florida sun.

Second, the notion of defined space (outdoor courtyards) is crucial to creating humanistic spaces which are inviting. Future buildings on all of the campuses should be sited to create and shape outdoor spaces, instead of simply occupying an area of greenspace. Together with the Griswold University Theatre, the Schmidt Center on the Boca Raton Campus is an excellent new example of an ensemble of buildings that creates an outdoor space. These buildings, by their careful placement, shape an interior courtyard that is both attractive and functional. The Physical Science Building also creates an appealing courtyard, better connecting the Science Engineering Building to the rest of the Boca Raton Campus. See Figures MP.1

The third concept is to develop covered/shaded walkways that architecturally respond to building entry, activity spaces, and landscape architecture. These linkages can be wonderfully devised to enrich campus life, by linking parking areas to the core campus, helping to shape courtyards, and connecting buildings. Planning for the connection from the walkway to a building can include several options. First, a building can connect directly along its entire length, with the covered walkway forming a porch or portico. Second, portions of the building can be pulled away from the walkway to form one or more courtyards between the building and the walkway, using both structures to provide shade. Third, the building can envelop the walkway, using it as a major part of the facility's circulation system. These options and others can be used alone or in combination to create rich architectural edges between buildings and the campus pedestrian circulation system of walkways.

The fourth concept is to build a minimum of four floors in order to create a greater density on all of the campuses. This density will conserve land, limit driving from one part of campus to
another (especially on the Boca Raton Campus), vertically define courtyard spaces, and make better opportunities for interaction between students. This will assist in producing a livelier campus life, one that fosters an excellent and beneficial University experience. On the Boca Raton Campus, the exceptions to this rule of a four-floor minimum are the Student Activities Center and the Bookstore/Health Center, which may be more profitably designed as two-to-three story structures. The other exceptions are one-story structures such as the Lifelong Learning Center and facilities in the athletic area. These buildings' users and functions dictate a one-story height.

The fifth concept is to continue using light-colored building materials which not only give a visual consistency to the campus, but also work well in reducing the heat load in the South Florida climate. For the Boca Raton Campus in particular, the sixth concept is to follow the Master Plan for placement of "monumental" (dominant) buildings and "fabric" (subordinate) buildings. A critical goal for FAU's campus is to build a campus with identifiable and harmonious outdoor spaces. This is difficult to achieve when every building is designed to dominate its context. Therefore, some new facilities should consciously be designed to be visually subordinate to others.

These large-scale concepts are not the only guidelines that FAU should follow as it develops its campuses. FAU should continue to develop its campuses by means of a coordinated design strategy at two levels of detail: at the campus scale (in terms of framing open spaces, defining courtyards, etc.) and at the individual building scale (materials, scale, proportions). Both of these levels of detail will be addressed below.

See the Goals, starting on next page.
Goal 1
To establish excellence in architectural design that will help produce an attractive and functional campus.

Objective 1A
FAU will seek to enrich the architectural envelopes of the new buildings on campus by using and enhancing the ideas of the campus's best buildings, those which respond to the South Florida environment.

Policy 1A-1
The designers of new facilities throughout the campus will use, as major aesthetic elements, the shading devices that shield a building's envelope from the hot South Florida sun. See Figure 15.1. Elements to consider using include:

- Setbacks and overhangs (see Photos 15.1 and 15.2, and Figures 15.1, 15.2, 15.3 and 15.4). Setbacks, overhangs, and arcades may occur at any floor levels.
- Elements of the original S.E. Wimberly Library's setback facade: columns, floor slabs, and balconies used as shading devices (see Photo 15.3).
- Elements of the S.E. Wimberly Library's addition: concrete screen walls (see Photos 15.3 and 15.4). Elements of the Education Building I: arcades and attached aluminum sunshades (see Photos 15.5 and 15.6).

Policy 1A-2
When developing the building's envelope, the architect and the mechanical engineer must balance the building's envelope efficiency with the indoor air quality. FAU will be cautious of making too tight a building which could cause the so-called "sick building" syndrome because of high humidity levels.

Objective 1B
When the correct programmatic and functional reasons exist, smaller identifiable outdoor courts should be created.

Policy 1B-1
In the making of these small-scale courts, the designer should take great care with the scale and also color of the paving material. The ground plane is one area where color can be used as a design feature. These courts must be developed with close collaboration between architect and landscape architect. Good existing examples of these types of courts were built with the original 1964 Boca Raton Campus (see Photo 15.7).
Figure 15.1  Shading of Building Envelopes

Correct: Sun Shading and Arcading

Incorrect: Little Shading and Arcading

Photo 15.2  Setback and Overhang
Figure 15.1 Setback Only

Figure 15.2 Setback with One-Story Arcade

Figure 15.3 Setback with Two-Story Arcade

Figure 15.4 Three-Story Arcade Only
Photos 15.3 and 15.4  Screenwall Shading Devices

Photos 15.5 and 15.6  Arcades and Sun Shading Devices
Objective 1C
Develop covered walkways which architecturally respond to building entries, activity spaces, and landscape architecture.

Policy 1C-1
The new covered walkways should follow the overall scale of the existing system, but should explore and exploit shade and shadow. The walkways should continue using a concrete framework; but, in order to lighten their expression, attachments of metal elements, i.e. handrails, trellis, shading devices, could be employed. Landscape elements such as bougainvillea could be integrated into the design. See Figures 15.5, 15.6, and 15.7.

Policy 1C-2
The "architectural lanterns" which terminate the walkway should also explore shade and shadow expression for daytime interest and then become bright beacons at night. See Figures 15.8 and 15.9.
Figure 15.5  Two-Story Walkway with Metal Elements

Figure 15.6  Covered Walkway with Landscaping and Planters

Figure 15.7  Section Through Covered Walkway
Figure 15.8 Concepts for "Lantern" at End of Covered Walkway

Figure 15.9 Concept for "Lantern" Treatment at North End of Existing Covered Walkway

Policy 1C-3
Building entry canopies should connect to the walkway system, but also should become building markers to pedestrians using the walkways, so that as one proceeds down the walkway, the experience is enriching as well as informative. See Figure 15.10.

Figure 15.10 Locations for Identifiable Building Entries
Objective 1D
FAU should continue the use of light-colored building materials, giving the campuses consistency as well as responding to the climate.

Policy 1D-1
The basic building material is concrete, either cast-in-place architectural, pre-cast architectural, concrete with a plaster finish or a ground face concrete masonry unit. The concrete mix should be developed to achieve a color range from a light cream to a bright white. When natural stones are used, they also should be limited to light-colored stones such as limestone. The FAU pallet of approved colors for building exteriors are as follows:
Primary Neutral Colors: SW6385 – Dover White, SW6139 – Netsuke, SW7690 – Townhall Tan, SW7543 – Avenue Tan, SW6136 – Harmonic Tan, SW7713 – Towny Tan.

Secondary Accent & Trim Colors: SW7655 – Stamped Concrete, SW6340 – Baked Clay, SW6144 – Dapper Tan, SW2834 – Birdseye Maple, SW6179 – Artichoke, SW7513 – Sanderling. Additional colors recommended by the architect or engineer may be considered through the Office of the University Architect and Vice President for Facilities.

Policy 1D-2
Added color should be limited to ground plane materials such as brick paving or colored concrete and to building accents such as entry canopies, handrails, graphics, and site furniture.

Policy 1D-3
Glass should be clear or tinted, but not reflective or mirrored finish, and should not be so heavily tinted that it becomes opaque. Tinted or lightly tinted glass may need additional shading by using exterior shading devices (see Policy 1A-1) and interior shades. Tinted glass on buildings should be of green tint set within clear anodized aluminum mullions. Additional colors recommended by the architect or engineer may be considered through the Office of the University Architect and Vice President for Facilities.

Objective 1E
On the Boca Raton Campus, the University will select the appropriate architectural impact for new facilities and facility improvements/additions based on a considered balance between dominant and subordinate buildings, allowing for different University needs -- aesthetic, functional, and programmatic.
Policy 1E-1
Follow the future building siting plan, Figure 15.11, which locates future dominant and subordinate building sites.

Policy 1E-2
The flexible selection of monumental or more modest fabric building typology for each new facility will be determined not only by campus placement, but also by function and potential for mission change.

Goal 2
To establish standards of quality in materials and construction for facilities constructed by entities other than the University on campus land leased from the University that will ensure compatibility with State guidelines.

Objective 2A
FAU will establish policies and procedures to protect the long-term rights of the University for all non-owned facilities constructed on University land.

Policy 2A-1
Facilities to be built by non-University entities on land leased from the University will comply with all codes and standards applicable to the University's own facilities as identified in the Appendix to this element.

Policy 2A-2
All facilities to be built by non-University entities on land leased from the University will be reviewed and approved by the University for compliance with University guidelines.