



2020 - 2030

# USF Master Plan Updates

Appendix D.2: Landscape Architecture Design Guidelines

UNIVERSITY OF SOUTH FLORIDA

TAMPA | ST. PETERSBURG | SARASOTA - MANATEE

## Appendix D.2 Landscape Architecture Design Guidelines

The landscape guidelines in the plan update remain essentially as described in the 2000-2004 Master Plan Update. The guidelines for open spaces, campus entries and pedestrian corridors reinforce the urban design and open space elements discussed previously. The guidelines recommend the use of appropriate Florida native plants that achieve the proper aesthetic effect, as well as being appropriate to the climate and urban context of the campus. Avoidance of invasive and/or high maintenance plant materials is emphasized. Site furnishings, lighting and signage are recommended in accordance with functional standards and clarity of the campus environment. The recent introduction of sustainable design principles into this element is due to this popular movement's intent to improve the built environment.

### Plan Framework for Landscape Architectural Design Guidelines

The campus plan prescribes an overall campus order based upon the continued grid organization of streets, walks, and buildings; and the establishment of an open space framework that reinforces this order and enriches the sensory and aesthetic environment for USFSP and City of St. Petersburg communities. Landscape guidelines provide a framework to guide the implementation of landscape improvements and development of the campus landscape in a way that encourages a forward thinking approach to each site, one which views local development within its larger campus-wide context and assures that each improvement contributes in a cumulative way to the realization of the envisioned long term campus plan.

### Landscape Guidelines for Design Intent

The campus plan embodies several basic ideas with respect to the campus landscape and functional open space, street furnishings, building orientation, stormwater low-impact development, sustainability, and compatibility with historic natural resources. (Refer to the Urban Design, Recreation and Open Space, and Transportation Elements for a discussion of the overall urban design/open space framework.)

Proper landscape design for USFSP is an essential component of the educational experience on this environmentally sensitive campus and therefore it is the intent of the landscape guidelines to reinforce sustainable landscape design principles. The benefits of this practice will challenge the collaboration of the design process and deliver an accountable landscape program. Sustainable landscape design will not only save water and energy but will also administer a higher standard for landscape conservation and ecological integrity through best management practices for vegetative management. USFSP shall set a good example in the community by providing healthy outdoor environments for its students, faculty and visitors.

Per 2008 Florida Statute 255.2575 all state universities shall be constructed to meet the United States Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) Rating System, the Green Building Initiative's Green Globe Rating System, the Florida Green Building Coalition Standards, or a nationally recognized, high performance green building rating system as approved by the Department of Management Services. At a minimum USFSP will require a silver certification per USGBC benchmark.

### Streets and Parking Lots

Perimeter street edges should be defined by rows of evenly spaced shade trees planted within a broad lawn panel, lighting, and pedestrian walks. Surface parking lot court, located within the interior of the blocks, are to be planted in grid fashion averaging one shade tree per three parking spaces. The use of semi-pervious parking surface alternatives such as turf block, geotextiles, rain gardens, etc. should be explored.

Center medians have been added to Sixth Avenue South between First and Third Streets South. Smaller and shallow root specimen trees will be used in the median development of Sixth Avenue South between First and Third Streets South. Second Street South between Fifth and Sixth Avenues South have been modified to single lane two way traffic and will extend the planting areas.. On-street parking will be eliminated from these blocks to accommodate the design, which includes the addition of bike lanes. Existing curbs will be kept in place and the roadways will not be narrowed as in the 2000-2004 plan update. These plans have not been finalized as there have been discussions with the City and USFSP about creating a pedestrian mall, similar to Harborwalk, along Second Street South between Fifth Avenue South and Sixth Avenue South.

## Campus Entries

The plan proposes the establishment of a principal symbolic entry at the junction of the Sixth Avenue South and Second Street South. In addition, USFSP plans new entry features at the following intersections:

- Second Street South and Second Avenue South
- First Street South and Sixth Avenue South
- First Street South and Fifth Avenue South
- Third Street South and Fifth Avenue South
- Fourth Street South and Sixth Avenue South

The entry features are designed to frame the walkways and may use elements such as brick pilasters, bougainvillea and trellises.

## Pedestrian Corridors and Bicycle Ways

A framework of pedestrian corridors organized within the existing street right of ways is proposed to provide visual and functional clarity in pedestrian movement, and accommodate emergency access. Pedestrian walks within the Third Street South, and Sixth Avenue South corridors are 18 feet in width and lined with regularly spaced plantings of shade trees in lawn. Pedestrian walks parallel the proposed campus drive within the Second Street South corridor from Fifth to Sixth Avenues South.

Bicycle amenities are planned for the USFSP campus. Bike lanes along Sixth Avenue South and Second Street South will be created with the reconstruction of these streets. Planted center medians will be constructed and street parking will be eliminated, making room for the bike lanes.

## East-West Promenade

An east-west promenade is established within the Seventh Avenue South right of way between First and Second Streets South. This corridor is defined as a continuation of the curvilinear walkway system proposed for the Second Street South Harborwalk area. Future plans are to extend the east-west promenade between Second and Third Streets South and ultimately between Third and Fourth Streets South.

## Harborwalk

Harborwalk is the focal open space defined on its east and west edges by arcaded buildings. The design for Harborwalk features a curvilinear walkway system and fountain. The wide, straight north-south pedestrian path that connects to the path that arcs east towards the east-west promenade to the fountain is wide enough to accommodate emergency and service vehicles.

## Bayfront

The Plan proposes the establishment of a bayfront park landscape extending from the former Dali Museum on the southwest to the present DEP building site on the east. The bayfront edge is proposed to be defined by an esplanade composed of seawall, lighting, and a continuous line of regularly spaced palms.

## Marine Peninsula

The peninsula landscape historically is rather isolated and out of scale with the larger harbor setting. The redevelopment of this prominent open space should respond to the character and immensity of the contextual open space of the bay. Planting and details should be simple, clean, and in scale with the bayfront setting. The ground plane should be dominated by special paving and lawn and should be organized with clarity and crispness of line. Strong verticals such as palms, and flag poles which are visible from a distance should be arranged in an easily read pattern. The space should accommodate outdoor seating and provide shade via shade screen, trellis, etc. to increase habitation. Such elements could enhance opportunities for community building among students and increase the usability of this campus resource in general.

## Landscape Standards:

### Plant Materials

The landscape should be predominantly one of native shade trees and lawn and should emphasize those materials which are appropriate to the climatic conditions of the region and specific conditions of the site, including the stress of urban conditions. Plants should be low water demand.

Campus plantings should be appropriate to the scale and setting of an urban university environment. Plantings should be composed as large masses and rows rather than as fussy collections.

The compositional location of new plantings should work in combination with existing plant materials to establish an ordering of outdoor spaces that are clearly defined and perceived as a unified whole. Plantings should reinforce the physical structure of the master plan and should function to define outdoor spaces rather than to merely add decoration.

To the degree possible, landscape plans should include the use of plant species that are indigenous to the natural plant communities of the region and which promote the use of xeriscape principles. In cases where non-invasive exotic plants are used to enhance the landscape, plantings should be limited to those non-invasive species that are able to resist periods of drought and which require little fertilization and use of chemicals.

Existing non-native invasive plants may be designated for removal from the campus grounds if such exotics are listed on the Exotic Plant Council's list of "Florida's Most Invasive Species". As these species are located on the campus, USFSP staff shall coordinate with the Florida Department of Environmental Protection and other appropriate governmental entities to ensure the proper removal and disposal of these exotic species.

### Fertilizing

USFSP shall continue to mitigate campus generated stormwater and to minimize stormwater borne pollutants in new and existing facilities through implementation of Best Management Practices for fertilizing that includes, but not limited to:

- Using slow release fertilizers and/or carefully managed fertilizer applications timed to ensure maximum root uptake and minimal surface water runoff or leaching to groundwater.
- Avoiding the widespread application of broad spectrum pesticides by involving only purposeful and minimal application of pesticides, aimed at identified targeted species.
- Coordinating pesticide application with irrigation practices to reduce runoff and leaching.
- Conducting regular training for maintenance personnel about issues such as incorporating features into the design of fertilizer and pesticide storage, mixing and loading areas that are designed to prevent/minimize spillage.
- Using vegetative management (e.g., planted buffers and minimal mowing).
- Requiring commercial fertilizer applicators to hold a FDACS license. FDEP, in cooperation with the IFAS provides training and testing programs in urban landscape management practices.

### Paving

Campus walkways should be designed to emphasize pedestrian circulation as their primary use. Intersecting walks should be constructed with either a curvilinear or chamfered transition at their intersection.

Campus walkways should be of a consistent material and detail. The plan proposes adoption of a single material for general walks. For example, the existing pink toned concrete used near Davis Hall or the hexagonal pavers common to the community and existing perimeter campus walks. A specialty paving should be established for use at building entries, terraces and significant walkways such as the east-west pedestrian promenade.

### Furnishings

Currently there are a variety of furnishing types on campus. The plan recommends that a family of furnishings be established as a campus wide standard, based on the use of the best existing furnishings where this is appropriate. Site furnishings including benches, light poles and

fixtures, receptacles, kiosks, bicycle racks, and bollards, used with consistency throughout the campus help to define the campus identity and contribute to a sense of order and clarity.

## Lighting

Three types of exterior lighting currently exist on campus. Street, parking lots, and peninsula lighting are provided by cobra head fixtures mounted on wood or concrete poles. Pedestrian lighting on the core campus is provided by 24-inch globe fixtures with 150-watt high pressure sodium bulb, mounted on aluminum poles. Additional lighting is provided via wall mounted wash type lights with 30 to 70-watt high pressure sodium bulbs.

The consistent use of globe lighting along walkways and at the seawall is a positive factor in setting the nighttime campus environment. Lights are located on the edges of the space in a way that helps to identify the USFSP campus, define the space, create a rhythm and order to the landscape through repetition and consistency, and create a secure and aesthetically pleasing pedestrian environment. In contrast, the pole mounted cobra head lighting located along city streets, within parking lots, and on the peninsula, while functioning to provide light, are unattractive and do not define space, or contribute to the establishment of an identifiable campus image.

The globe fixture lighting should be established as the basis for a campus lighting standard. Pedestrian and vehicular lighting environments should be distinguished from each other by height of the pole.

Campus lighting should be organized in simple patterns that are sympathetic to the open space framework. The pattern of light fixtures and poles should reinforce the pattern of streets, walks and open space. Lighting of open spaces should be along the perimeter to emphasize the form of the space. Walkway and street lighting should be placed parallel to the pavement edge with a uniform setback. Walkway lighting generally will be required on one side only. Roadways such as the ceremonial entry, and major pedestrian ways, such as the east-west promenade, may require lighting from both sides. When placed on both sides, lights should be located opposite one another rather than in an alternating pattern. Lighting should be located in rhythm with proposed new tree plantings along walkways.

High pressure sodium vapor has been established as the University standard light source. All light sources for roadway and walks should adhere to this standard. A light level of 1/2 foot candle should be maintained on all roads and primary walks.

## Graphics

- Control access into the campus streets
  - Small sign elements will be located at access drives into the campus along Fourth Street South and Fifth Avenue South to delineate the perimeter of the campus and identify the access streets as not being thru streets.
- Visually connect peninsula with the campus core
  - Implementation of a complete sign system throughout the core campus and the peninsula will create a common vocabulary of signs that will visually create the perception of association with one another.
- Wayfinding inside the campus
  - Due to the fact that visitors are the most unfamiliar with the campuses and require the most assistance, destinations listed on directional signs will reflect primarily visitor-oriented destinations. Pedestrian directional signs will be provided to help visitors reach their destinations from parking areas. This will also encourage the use of pedestrian malls. Further development of wayfinding signage will assist visitors on the main campus as well as including the College of Marine Science's Peninsula and Children's Research Institute. Such a signage program should be developed to minimize sign clutter, provide consistent and unified communication, reduce on-campus travel, and be aesthetically pleasing.

## Drainage and Retention

Surface drainage retention will be provided to augment subsurface vault detention. Areas identified for use in retention include; promenade lawn panel, bayfront park lands, and lawn to the east of Davis Hall. Retention within the promenade should be designed with a crisp structured edge, for example, broad stone or concrete step(s). The graded form of retention basins within areas of open lawn should be quite subtle and appear unobtrusive and indistinguishable within the context of the landscaped space when dry. Stormwater improvements for future expansions should incorporate best management practices such as swales and berms. Other innovative concepts should also be explored. In general, the configuration of wet retention facilities shall be natural and curvilinear in outline. Rectilinear and pure geometric forms are discouraged. Wherever possible, side slopes shall vary and provide smooth transitions to existing grades. Gentle landforms around the lake shall reinforce the "natural" context. Additionally, landscape treatment for retention and other drainage elements shall appear naturalistic

and “non-engineered”.

Landscape treatment for retention facilities shall respect maintenance and access setbacks but otherwise be set into a natural, existing vegetative context or planted with native material.

### Timing and Phasing

Highest priority should be placed on developing the core open space framework on two axes: Second Street South and Seventh Avenue South. The plan seeks to establish the design focus of the campus as early as possible by locating the program elements in the 10-year plan adjacent to Harborwalk and the promenade, and to designate the site improvements in those areas as early action projects so that a complete and coherent framework is permanently in place.

Replacement of non-standard furnishings and lighting within the core area with established campus standards should also be a high priority, again with the goal of establishing campus areas that appear complete. All new development should contribute to the overall framework and visual coherence of the campus and should include the phasing out of existing furnishings and lighting that do not comply with established campus standards.

### Goal

The Landscape Architectural Design Guidelines goal of the USFSP campus plan is to create a unified, interconnected spatial environment that blends with and complements the surrounding urban fabric.

### Summary of Objectives

**Objective D.2.1.** Establish the overall conceptual framework as described in this plan element under Framework for Landscape Architectural Guidelines and Landscape Guidelines for Design Intent.

**Policy D.2.1:** USFSP shall direct project architects to be guided by established Landscape Guidelines for Design Intent as outlined in this plan element.

**Policy D.2.2:** USFSP shall continue to prepare and implement a campus wide pedestrian and bicycle circulation system in accordance with guidelines outlined in this plan element under Landscape Standards: Pedestrian Corridors and Bicycle Ways.

**Policy D.2.3:** USFSP shall coordinate with the City of St. Petersburg and the Bayfront Medical complex in establishing standards for the extension of the East-West Pedestrian Promenade from the campus west to the Medical Center in accordance with procedures identified in the Intergovernmental Coordination Element.

**Objective D.2.2:** Establish the standards for selection of appropriate Florida native plant materials for use on the campus as described in this element under Landscape Standards – Plant Materials.

**Policy D.2.1:** USFSP shall require site design to be in accordance with established standards for selection of plant materials and shall encourage design response to follow criteria outlined in this plan element under Landscape Standards: Plantings.

**Policy D.2.2:** Where feasible USFSP shall remove non-native invasive plants (whether grasses, shrubs or trees) which are identified on any of the following lists: The IFAS Assessment of Non-Native Plants in Florida's Natural Areas, the Department of Agriculture and Consumer Services's "Noxious Weed List" (Rule 5B-57.007, F.A.C.), the Department of Environmental Protection's "Prohibited Aquatic Plant List" (Rule 62C-52.011, F.A.C.) and the Florida Exotic Pest Plant Council's "Florida's Most Invasive Species List" from the campus grounds. As these species are located on campus, the University shall coordinate with the Florida Department of Environmental Protection and other appropriate governmental entities to ensure the proper removal and disposal of these exotic species.

**Policy D.2.3:** Because of proximity to the airport, and the urban nature of the campus, fire dependent plant communities shall not be prescribed burned at appropriate intervals.

**Policy D.2.4:** USFSP shall relocate existing plant materials in conflict with campus improvements when at all practical.

**Objective D.2.3:** Future open space improvements should adhere to the standards established for the USF-Tampa Campus for the selection of furnishings, lighting, and graphics provided that they are compatible with and enhance the unique character of the Bayboro campus and its relationship with downtown St. Petersburg.

**Policy D.2.1:** USFSP shall identify and establish campus standards for furnishings and lighting based on criteria outlined in this plan element under Landscape Standards: Furnishings and Landscape Standards: Lighting.

**Policy D.2.2:** USFSP shall review the existing graphics system plan in light of master plan analysis and criteria established in this plan element under Landscape Standards: Graphics and shall confirm or revise existing campus graphic standards.

**Policy D.2.3:** USFSP shall upon establishing specific furnishing, lighting, and graphic standards implement a systematic program targeting new projects, the campus core and the peninsula for the replacement of non-standard furnishings, lighting, and graphics in accordance with the capital improvements program as described in the Capital Improvements Element (Table -14-a).

**Policy D.2.4:** USFSP shall insist that future sculptural elements are appropriate in scale and in character for their setting.

**Objective D.2.4:** Establish the standards for campus edge treatment as described in this plan element under Landscape Guidelines for Design Intent – Campus Edges, and Streets and Parking Lots.

**Policy D.2.1:** USFSP shall coordinate with the City of St. Petersburg and adjacent institutions to establish a cross sectional standard for boulevard edge treatment including lighting, pedestrian walks, bicycle lanes, and planting of Fourth Street South and Fifth Avenue South in accordance with procedures identified in Intergovernmental Coordination Element.

**Objective D.2.5:** Establish the standards for treatment of retention and stormwater management facilities as described in this plan element under Landscape Standards: Drainage and Retention.

**Policy D.2.1:** USFSP shall provide surface drainage retention to augment subsurface vault detention as outlined this plan element under Landscape Standards: Drainage and Retention.

**Objective D.2.6:** Establish the proposed landscape framework within the 10 year planning time frame through a systematic approach to implementation which emphasizes the formation of the larger campus framework over the independent development of building specific landscape treatments. Highest priority will be placed on the implementation of the core open space framework on two axes; Second Street South and Seventh Avenue South. Establish options for funding campus site improvements independent of individual building projects.

**Policy D.2.1:** USFSP's Design Review Council shall review and act on all selected development proposals in accordance with review procedures and design criteria established in the master plan as described in the Architectural Design Guidelines, Policy 15.3.1. Responsibilities of the Council include monitoring potential impact of specific projects on proposed campus landscape structure and ensuring new project work does not interfere with or prohibit implementation of the desired campus landscape framework.

**Policy D.2.2:** USFSP shall require selection and placement of new furnishings to be in conformance with established campus standards on all future site improvement projects.

**Policy D.2.3:** USFSP shall direct the replacement of all existing non-standards furnishings and lighting found within the limit of work of campus site development or renovation projects.

**Policy D.2.4:** USFSP has established and will continue to effectuate a priority program for implementing accessibility improvements based on Florida Building Code Chapter 11 and on implementation priorities identified in the ADAAG American Disability Act Accessibility Guidelines Study previously undertaken by the University in accordance with the capital improvements program as described in the Capital Improvements Element.