Assessment of the Extent and Quality of the Landscape Features of the Campus.

- 1. In 2012 the University used geographic information systems to create georeferenced layers for all landscape and hardscape elements maintained by the Department of Landscape and Natural Resources (LNR), including Main Campus, the Medical Campus, and the Rosen School of Hospitality. This information is invaluable for evaluating campus landscape conditions, improvements, and labor and material needs for landscape maintenance. In the future other areas not included in this original effort, such as the Athletics sector and Greek Park, will be added to provide a comprehensive update of all landscape and hardscape features of the Main Campus.. Geographic data on campus natural areas and Conservation Easements are included in the Conservation Element.
- 2. Current landscape treatments, hardscape installations, signage, and site furnishings represent different phases of design that have occurred during campus development. These features will be catalogued during development of the Campus Landscape Master Plan and a vision established for unifying the campus features through campus design specifications. During new construction, landscape spaces must be identified and recognized as equal in importance to architecture projects, especially in terms of how they integrate each building project with other adjacent spaces- and pedestrian and vehicular traffic. A continued emphasis on strong landscape spaces and a coordinated landscape palette will reinforce a sense of unity and way-finding to the University. Integration and understanding of urban design elements such as entry features, landmarks, campus edges, roadway character, and pedestrian treatments will further enhance a sense of arrival, destination and place.

Assessment of Existing Landscape Treatments With Regard To Their Impacts on Overall Campus Components

1. Vehicular Circulation Routes

A standardized plant palette for the streetscape is not necessary to the overall landscape theme of the university. Streetscape will be designed to provide overall coherence within different sectors of campus, providing shade where possible through native plantings of live oaks, cabbage palms, cypress, magnolias, and other trees. Road medians will be maintained either as planting beds or turf depending upon location, addressing both design elements and maintenance priorities.

2. On-grade Parking Facilities

The implementation of gradual berming of parking lots adjacent to Gemini Boulevard has allowed enough visibility for location and access to parking lots and ramps. Depending on future land use designations for surface parking lots, long term faculty and student interior parking lots should integrate tree canopies through the use of designated tree islands in accordance with the landscape standards. Coordination of tree islands around future facilities and in parking areas will promote a more continuous tree canopy across campus.

3. Pedestrian Circulation Routes

The three (3) sixteen-foot wide concentric walkways are intended to be shaded with a contiguous tree canopy. Campus maps have been strategically placed along the sixteen-foot concentric rings walks to enable way finding and destination of the walk. The ring walks contribute to the University's overall sense of way-finding. Within the concept of the urban design plan, the walks serve as the essential links to the campus green areas and to Memory Mall.

Pedestrian circulation volumes and patterns for the entire campus must respond to the constantly changing physical environment of the campus, thus changing the need for and location of walks. Consideration for pedestrian behavior of students must guide design and location of walks.

4. Bicycle Facilities

Currently, the number of bicycle facilities or racks is inadequate to meet the needs of the number of users on campus. The number of bicyclists will increase as the University creates stronger connections to the future development of housing along the edges of campus and within UCF. Locations of current and future facilities need to be coordinated with proposed regional bicycle routes. Aesthetically, bicycle parking areas must be organized and located at strategic places around campus not just the entrances or facades of buildings.

5. Planted Areas

Landscape malls, plazas, and parks are designed and enhanced to accommodate pedestrian patterns, security, way finding and connectivity between existing buildings and future building projects. The creation of additional planted areas within the campus core will unify individual building architecture. Further investigation of soil types and vegetative communities will dictate the landscape palette for additional planted areas. Ornamental plantings will comprise both native Florida species- and introduced specimens adapted to our climate and soils.

6. Site Furnishings

Compliance with the university's standards for benches, light poles, and signs will continue to enhance the overall quality and way-finding of the campus. A unified family of all site furnishings shall be developed in the Campus Landscape Plan to enable individual project designers to comply with the themes and materials chosen for the campus and to avoid visual clutter. The family of furnishings will also reduce the costs for maintenance and replacements that are associated with having unique furnishings for each new building project.

7. Trash Collection Areas

In areas where building functions require- dumpsters or other specialized trash collection, containers are to be placed within screened or landscaped enclosures.

8. Maintenance Facilities

Where possible, loading docks exposed to pedestrian and vehicular circulation will be screened from view with hardscape or landscape screening, taking into consideration the loading needs of individual facilities.

9. Campus Edge

The campus edges and six roadway entrances serve as the primary visual image for vehicular traffic on campus. Maintaining or improving campus woodland edges, corners, and entrances creates a sense of arrival and makes a strong first impression on visitors.

Although the intent of the naturalistic buffer was to reduce the need for maintenance, stewardship of all Florida woodlands is a requirement for ecosystem function and health. A natural fire regime controls invasive understory and exotic species. The urban edge of our native buffer zone precludes our use of prescribed burns in management along Alafaya Trail and McCullouch Road. With a program of limited mechanical maintenance and the removal of invasive or undesirable species, the natural woodlands along McCulloch will continue to provide an attractive natural buffer. The frontage woodlands on Alafaya Trail will be improved to create open woodland of pines, oaks and palms with a mowed understory of natural vegetation. The understory of this frontage will be augmented with new indigenous plantings that have ornamental value.. Design concepts for the edges, corners, and entrances have been developed and will be included in the Campus Landscape Master Plan.

Assessment of The Maintenance Status of Existing Landscape Features

Overall, the maintenance of the landscaped portions of the UCF campus is moderately difficult. The soil is very low in organic content and does not retain moisture well. The pH of the native soil is at 7.8 to 8.0 in most areas of campus; the ideal pH range for most non-native species is 5.5 to 6.5, and native species have variable pH preference. Some species, such as azaleas, camellias, and hollies prefer more acidic soil (pH 4.5 to 5.5, and the soil conditions need to be amended to provide proper growing conditions for these plants on campus. In the majority of situations, preference is given to campus plant selection that matches site pH conditions.

Compaction of soil and general wear and tear of the turf grass areas for campus also creates problems with maintenance. Cart and other vehicular traffic stresses the turf grasses in most of the campus core. The result of this compaction prohibits healthy growth of turf, thus allowing weeds to germinate and spread. Regular manual aerating is used where required to improve aeration, and in some instances, new turf must be installed. We are converting to the use of reclaimed water instead of well or potable water for all campus irrigation.

The American Physical Plant Association (APPA) standards, modified for our local growing conditions and maintenance practices, are currently being used by LNR to calculate workforce requirements and assign levels of care for different landscape areas on campus.

Assessment of The Physical Condition of The Existing Landscape And Irrigation System

In general, the overall physical condition of the campus appears to be adequate to excellent condition. Many older landscape plantings have reached the end of their intended lifespan. As these are replaced, priority must be given to higher visibility areas with a higher level of care. Standard operating procedures have been developed recently to provide uniformity in maintenance specifications, fertilizer practices, mowing regimes, and other standard maintenance practices. We have converted irrigation for major landscaped areas to reclaimed water from potable water, contributing to sustainability and greatly reducing potable water demand on campus. All irrigation zones on the main campus were geo-referenced in 2013, and this information will be useful in routine maintenance and for future irrigation renovations. Water use can be reduced further by implementing the full capabilities of the campus irrigation control system, which can be adjusted based on needs. LNR will be implementing these features within the next few years. Many of the original shut-off valves for the campus irrigation system are nonfunctional, making it difficult to isolate areas when breaks occur or other maintenance is required, without shutting off irrigation to larger areas of campus.

These valves will be identified and replaced over the next two (2) to three (3) years to increase operational efficiency.