

**Adopting Leadership in Energy and Environmental Design (LEED) and
“LEED”ing the way: By the University, For the University**

**Carol J. Walker, Assistant VP
Division of Facilities Planning & Construction
University of Florida
Gainesville, Florida 32611**

**Bahar Armaghani, Assistant Director
Division of Facilities Planning & Construction
University of Florida
Gainesville, Florida 32611**

Abstract

University of Florida's (UF) Leadership in Energy and Environmental Design (LEED) certification pledge for all major renovation and new construction projects was another way UF exhibited its commitment to the environment, its students, faculty, and staff's well being. UF Facilities Planning and Construction Division adopted LEED standards when it was in its infancy in 2001. Since then UF has obtained the first LEED GOLD certified building in the state of Florida, has few other projects in the way to be certified, and has about 14 project registered with the USGBC for LEED certification. UF Facilities Planning and Construction Division incorporated LEED standards into its contract language, policies, and procurement documents, works with architects, contractors, and university staff to help them through the process of the LEED certification, and opened and used on campus projects as laboratory for student of Building Construction and Architecture to give them experience of real life LEED certified project.

Many other universities turn to consultant to lead them through the LEED certification process. UF Facilities Planning and Construction Division took the lead and started to manage the LEED certification process for its projects. This saved every project thousands of dollars. Case study presented on every certified project to share lesson learned from our project certification with anyone who is interested in pursuing the LEED certification, and use these lessons learned in the next projects. We have stream lined the process of the LEED for New Construction certification and last November we added LEED for Existing Buildings to our goal to target the existing building because there are more existing building than new construction, and these buildings are in need of becoming more energy efficient and healthy places to work.

Over the last 6 years University of Florida has learned how to improve and master this process to the benefit of all projects all over the University resulting in an entirely new breed of buildings at UF, the LEED certified green buildings. This new generation of new buildings are energy efficient, healthy place to life and work, and improve productivity.

The process that UF is following for its LEED project certification can be used by any other organization that is considering using LEED certification in order to maximize their building efficiency, improve productivity and well being of their occupants.

Introduction of the Organization

University of Florida is a public, comprehensive, land-grant, and research university. It is the state's largest and oldest university. University of Florida is well known for its proactive in issues related to the environment, student, faculty, and staff well being. It was one of the first universities to adopt LEED as standards for its construction. Its early practices of environmental stewardship help to take on the position of pursuing the sustainable construction on campus a must.

History and Growth

On January 6, 1853, Florida Governor Thomas Brown signs the bill that provided public support to higher education. East Florida Seminary (EFS) in Ocala received the funding, but it soon closes due the Civil War. In 1866, EFS reopens in Gainesville, beginning a 150-year journey to become one of the largest, most prestigious schools in the world. Gainesville lobbies for the new University of Florida by offering land, money and an agreement to "furnish water to the University without charge." The Gainesville campus opens for registration on Sept. 24, 1906. Classes begin two days later for the 102 students enrolled. Florida experiences a huge population boom after World War II. The University of Florida goes from being a school of 5,000 white males to a diverse student body of more than 28,000 men and women. For 28 years, the University of Florida diversifies and expands into one of the top universities in the nation. Today's main campus is situated on 2000 acres in the heart of Gainesville, Florida. It has 900 buildings with its own Waste Water Treatment Plant, other utilities distribution, and mass transit system. It operates as a city within a city.

Statement of the Problem/Initiative

University of Florida's construction program has been active with an average annual construction cost of \$400 Million. At the same time the life expectancy of UF building is approximately 100 years. Knowing LEED standards will enhance the design and construction quality and at the same time will contribute to saving the environment, in 2001 the University of Florida adopted LEED standards for its design and construction knowing that it will have triple benefit from this, one contributing to saving the environment, provided healthy places for students, faculty, and staff, and safe energy in the age of energy crisis. This was the first step, but at this point, the construction projects were paying for the cost of the LEED administration and processing. Looking into ways to minimize the cost associated with the LEED process, the in-house LEED administration and processing was initiated. It was received favorably by the Director of University of Florida Facilities Planning and Construction. In 2003, the first LEED Accredited Professional on UF campus and in the city of Gainesville started managing the LEED certification process for all University of Florida major renovation and new construction projects. This saved every construction project thousands of dollars.

Design

Following the adoption of LEED standards in 2001, University of Florida Facilities Planning and Construction Division assigned a staff member to take on the responsibility of LEED coordination and administration for all projects. This followed by requirement from the Division for the LEED coordinator to be LEED Accredited Professional. This requirement was met fall of 2003. LEED standards incorporated into UF contract language, policies, and

procurement documents.

LEED checklist developed including all LEED criteria, their pre-requisites and credits. This tool is used for the initial assessment of LEED certification for every project. Also, UF took on the responsibility of performing some LEED credit calculation. The LEED certification process is used through out design and construction of UF project. LEED progress monitored on monthly basis through out construction. The building performance is monitored and compared with the building base line after occupancy.

Implementation

The University of Florida Facilities Planning and Construction Division notified the project manager, architects, contractors of the new process. LEED certification is considered for every project from the project inception to occupancy. LEED assessment is conducted using the LEED checklist developed. During the design phases this checklist is used to update the LEED assessment of the project. This is presented in every design phase to the project design team, updated and distributed to the design team. LEED credit calculation is completed for some credits. Credit templates completed, back up information for each attempted credits compiled and the project submitted for certification.

Benefits

From the perspective of long-term, key products of this LEED certification process were the performing the process in-house, saving significant dollars in every project, leading the

campus and surrounding communities, student population to present the LEED certification process. Saving thousands of Dollars, stream line the process internally.

Retrospect

The use of in-house resources was a strategic decision that made best use of the resources available and using construction project to benefit the university, students and surrounding communities in pursuing the LEED certification process. plan updates.