

PDC PROJECT MANAGEMENT GUIDE**PMG-E13: LEED AND SUSTAINABILITY**

PURPOSE: To outline high performance building procedures for the delivery and management of minor and major projects.

A. Introduction

The University of Florida began the process of “greening” its design & construction in 2001 using LEED v2.0 as the means of verifying that new construction and major renovations / expansions incorporated sustainable and energy efficient materials, systems, equipment, and practices. Over time, many aspects of green design & construction have been incorporated into the UF Design & Construction Standards and the FL Building Code, but thoughtful and project-specific attention must still be devoted throughout the project delivery process to ensure a “best value” solution that balances energy efficiency, overall building performance, cost, and ease of operation & maintenance.

B. UF LEED Program Director

Act as an administrator of the implementation of high performance building and LEED process, provides support and resources to the project team internal and external members from project inception to post occupancy including:

- Manage the extended commissioning phase with PMs and CxA to assure compliance with post occupancy survey and review quarterly commissioning reports and generate reports on building O&M and performance and take action.
- Develop the initial assessment of project goal for LEED certification during programming.
- Document most credits based on the LEED rating system. This is reflected in the initial checklist assessment.

C. Process

Except where noted, each task listed here is assumed to be preceded by UF PM. He/she shall follow the process from project inception to completion including design meeting’s agenda, construction monthly meetings, and Cx meetings and follow up.

Planning/Programming

1. LEED Program Director to work with the PM and AVP to establish the project goals that are in line with university’s sustainability mission. Review project scope and recommend the best LEED rating system for the project, and develop an initial LEED checklist.
2. Integrate goals and/or implications of this analysis into the Facilities Program – particularly the Owner’s Project Requirements (OPR) document and the budget.

Consultant/Commissioning/Contractor Selection & Contracting

1. Note specific LEED/sustainability goals and requirements in the advertisement(s).
2. Include other project-specific requirements and/or questions related to sustainability and LEED as needed in the other selection process documents for design, construction, and commissioning consultants.
3. Consider the past sustainable design and construction performance of applicants as proposals and interview presentations are evaluated.
4. Revisit the initial LEED checklist and project-specific sustainability goals during negotiation of contractual terms and fees with each consultant. Incorporate additional design services related to LEED certification or other sustainability efforts, when known – for example, energy modeling at three stages and life cycle cost analyses.
5. Program Director and contractor administrator to review the fees with negotiating team associated with LEED before executing contract.

Design

1. The Program Director shall lead a sustainability/high performance building charrette in schematic design for the project to brainstorm and discuss “big picture” goals, constraints & opportunities, etc., followed by one or more high-performance building workshops in advanced schematic design and Design Development.
2. The Program Director shall update and review the LEED checklist at each design phase.
3. The design team shall develop and publish and update the Basis of Design (BOD) document at each design phase.
4. The commissioning consultant shall take ownership of the OPR once hired, updating and republishing the OPR as needed through the life of the project and reviewing the BOD to ensure compliance with the OPR.
5. The design team shall develop a project-specific Measurement & Verification (M&V) Plan using the UF template.
6. The Program Director shall register the project and ensure that each responsible team member is provided access to the project’s USGBC website.
7. The design shall account and plan for an energy performance “dashboard” – a static or interactive display for public use, information, and education.
8. The plans & specifications shall stipulate the technical and non-technical requirements for achieving the agreed-upon LEED credits and other sustainability goals & requirements, including specifics from the M&V Plan. If cost control is an issue for certain non-critical goals (for example, FSC-certified wood), consider specifying as an additive alternate to allow for achieving such goals if cost/budget allows.
9. The project team shall strive to complete LEED design credits no more than 30 days after publishing the Conformed Bid Documents except for design credits that rely on construction phase product submittals and other information.
10. The construction team shall become familiar with sustainability aspects integrated into the design and account for same in its estimates, constructability reports, and schedules.

Construction

1. Review LEED & sustainability goals, requirements, and other expectations at the pre-construction conference.
2. Ensure that the builder’s bid forms, subcontracts, special conditions, and other builder-produced procurement documents account for LEED/sustainability requirements.
3. Include the construction waste management plan, erosion sedimentation plan, and indoor air quality management plan in the sub-contractor’s contracts.
4. LEED/sustainability should be a regular topic at all O/A/C jobsite meetings with Program Director in attendance, including status updates on LEED credit documentation and energy rebate documents.
5. Likewise, the builder should regularly discuss and remind its subcontractors of the technical, non-technical, and administrative requirements related to LEED and other sustainability efforts, including the University’s no-tobacco policy.
6. Arrange for Indoor Air Quality tests to be conducted at/around Substantial Completion, prior to occupancy.
7. Coordinate with PD&C IT for content development and programming of the energy performance “dashboard” display.
8. Conduct a building turnover presentation with the project team for both the building occupants/users and the respective O&M entity (e.g., PPD) at or around Substantial Completion. The idea is to explain – both at a layman’s, big picture level and at a more detailed & technical level – the building, its key systems, assumptions and bases for decisions, critical O&M considerations, etc.
9. The team shall complete and upload all LEED credit documents at or soon after Substantial Completion, but no later than Final Completion.

Post-Occupancy

1. Work with the UF LEED Program Director to conduct a project-specific “case study” review of the LEED and sustainability efforts employed or at least considered. Capture lessons learned and best practices for dissemination by the UF LEED Program Director to other project teams.
2. Plan and arrange for quarterly Cx inspections/visits to follow up on discrepancies & problems with commissioned systems, but also to track systems performance versus the project-specific BOD, OPR, and M&V Plan.
3. Ensure the final “calibrated” energy models are produced – normally 6-8 months after occupancy to allow for the incorporation of actual use and performance data. This effort should be closely coordinated with the CxA to ensure that data from quarterly Cx checks is accounted for in the updated models.
4. Plan for and administer a project-specific post-occupancy evaluation (electronic survey) of building occupants and users. Use the UF template questionnaire, but tailor to the specifics of the building, its systems, and its occupants and use(s).
5. Review the survey results at the one year warrantee walk through with the project team. Discuss and propose solutions for issues noted by 20% or more of the survey respondents. Disseminate results of the survey to the users/occupants, O&M entity, project team, and UF Program Director.
6. For extended commissioning, submit the quarterly Cx reports to Program Director for review and reporting to the administration.