Owner’s Project Requirements (OPR)

17.1 **Introduction**

Along with the other sections of this Facilities Program, this Owner’s Project Requirements (OPR) document outlines functional requirements of the project and expectations of how the facility and its systems will be used and operated. The OPR is required for LEED certification of the project, but also serves three broader vital purposes:

1. Provides the design team with information necessary to develop the Basis of Design (BOD) during program verification and/or schematic design, which serves as a “road map” for development of the design and construction documents.

2. Provides the commissioning (Cx) team with tangible benchmarks to measure success & quality and confirm that the building and systems constructed align with the University’s expectations and requirements.

3. Serves, along with the BOD and contractor deliverables such as “as-built” documents, as the foundation for the Systems Manual outlined below.

The Owner will develop and update the OPR through program verification and schematic design, or until the Cx consultant is selected. The Cx consultant will then assume responsibility for refining and augmenting the OPR throughout design, construction, and the post-occupancy period of one year following Substantial Completion of construction. As decisions are made during the life of the project, this document shall be updated to reflect the current requirements of the University.

The Owner is the University of Florida Board of Trustees (UF). Primary users and stakeholders include the Career Resource Center/Division of Student Affairs. The entity responsible for project management and delivery is UF Planning Design and Construction (PDC). The organization responsible for operation and maintenance of the facility is Reitz Union and the University’s Physical Plant Division (PPD).
17.2 OWNER REQUIREMENTS COVERED ELSEWHERE

Many components of, or related to, the OPR are covered elsewhere in the Facilities Program, including:
- Detailed project history, background, and justification – Section IV
- General planning and design objectives – Section IV
- Relationship to Campus Master Plan – Section VII
- Existing site conditions & constraints – Section VIII
- Project space types, sizes, and adjacencies – Section IX
- Finishes, M/E/P, telecomm and A/V, and acoustic requirements by space or space type – Section IX
- Distributed and site underground utilities – Section X
- Applicable codes – Section XII
- Project schedule and budget – Sections XIII and XV

Additional requirements, expectations, and standards for UF projects are detailed in the following:
- UF Design & Construction Standards – www.facilities.ufl.edu
- UF Telecommunications Standards – http://net-services.ufl.edu/infrastructure/
- Design Services Guide – www.facilities.ufl.edu
- UF Environmental Health & Safety – www.ehs.ufl.edu

17.3 PROJECT-SPECIFIC DESIGN GOALS (from Program IV)

1. Flexibility and Future Expansion
   - Interior spaces shall be designed to facilitate reconfiguration as needed to meet changing needs with minimal renovation work, including mechanical, electrical and telecommunication infrastructure.

2. Quality and Context
   - The Reitz Union is prominently placed on the Reitz Lawn and will be a vista for those coming down the lawn. It is imperative that the Career Resource Center addition contextually fit within the building and as a part of the lawn.
   - The Career Resource Center seeks a design that will be inviting to students, alumni and employers.
   - The building itself will be used as a recruiting tool, and certain spaces will be marketed as naming opportunities to potential donors, so a high level of attention to the performance and aesthetics of the facility is warranted.
   - Interior spaces must provide a superior indoor environment to facilitate occupants’ comfort and productivity with high indoor air quality, proper acoustics and no moisture intrusion.

3. This building may have storm shelter requirements

17.4 OCCUPANCY & USE

This building is to be mostly used during normal business hours. A Lenel Gator 1 card access control will activate doors for after hour staff access.

Describe the occupants - number, type, transient vs. permanent, etc.
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17.5 SUSTAINABILITY and ENERGY EFFICIENCY

As part of an overall commitment to sustainability and a goal of achieving “carbon neutrality” by the year 2025, the University of Florida builds its facilities to last and promotes environmental quality and resource conservation through sustainable design and construction. See www.sustainable.ufl.edu.

As part of that commitment and to demonstrate that the facility was designed and constructed to be energy-efficient and environmentally sustainable, University projects must be certified by the U.S. Green Building Council (USGBC) through its Leadership in Energy and Environmental Design (LEED) process. See www.usgbc.org and www.facilities.ufl.edu/sustain.

This project shall achieve LEED—BD+C, V3 certification at no lower than Gold level. Specific, high-priority goals for this project include:

- Maximization of the HVAC credits under the Energy and Atmosphere section of the LEED rating system as a first priority. The facility shall operate at a minimum of 40% higher efficiency than ASHRAE Standard 90.1-2007.
- Incorporation of strategies, measures, and systems to conserve energy, such as heat/enthalpy wheels, energy recovery units, “setback” modes, LED light fixtures, etc.
- Utilization of the Building Automation System and other controls to efficiently maintain and track performance of key building systems, particularly HVAC and lighting and to establish trends. See UF Design & Construction Standard.
- Optimization of variable-flow chilled water systems for maximum building and plant efficiency or explore VRF technology
- Use of low-VOC, regionally-available, and high recycled content materials.
- Adoption of "daylight harvesting" to minimize electric lighting usage where functionally practical.
- Specify recycled content material.
- Utilization of FSC-certified wood.
- Innovative water conservation strategies
- Innovative outlet plug options (top plug active, bottom plug on motion sensor)

The Basis of Design (BOD) shall establish specific plans and strategies for achieving these goals, and the construction documents shall include requirements for LEED submittals and sustainable construction practices and techniques, including:

- Segregated collection and recycling of construction waste
- Proper erosion and sedimentation control techniques
- Procurement and use of low-VOC, regionally-available, and high recycled content materials

The BOD shall also address the USGBC document entitled “Required Treatment of District Thermal Energy in LEED-NC” (5/22/08) and its applicability to LEED certification of this project.

A LEED matrix will be completed at the kick-off meeting which will provide the University’s pre-design estimate of the probability of securing each credit – high, medium, or low. During program verification and/or conceptual schematic design, the project team will review and update this spreadsheet in order to firmly establish sustainability goals for the project. The matrix will be continuously maintained by the University throughout design and construction as a guideline for achieving LEED certification and tracking progress and action items.

Duke Energy – the University’s primary electric and steam provider – has established a rebate program for certain components of new construction that meet energy efficiency requirements, including:
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- energy recovery ventilation
- solar, green, or cool roofs
- demand control ventilation
- high efficient chillers
- thermal energy storage

To verify compliance and confirm which rebates apply to this project, Duke Energy will review the 100% Construction Documents and final energy model and will inspect the building at completion. Specific portions of the final MEP drawings/schedules, energy model, and other information will be used by Duke Energy to perform calculations necessary to determine the rebate for each project. The University expects all components of this project/building to be the most efficient and highest quality systems in order to qualify for these rebates.

179D Tax Deduction – UF is seeking the allocation of certain tax benefits pursuant to Section 179D of the Internal Revenue Code of 1986, as amended (the “Code”) through its energy services agreement with the design professional.

In order to qualify for the tax deduction the building has to save at least 50% of the heating and cooling energy of a building that meets ASHRAE Standard 90.1-2001 and the reduction must be accomplished solely through energy and power cost reductions for the heating, cooling, ventilation, hot water, and interior lighting systems. Certification of eligibility and negotiations of the benefits should be facilitated by UF’s 179D Coordinator.

17.6 BUILDING SITE
The site is on the Reitz Union lawn and is depicted in the UF Master Plan. There most likely will be an underground stream and clay on site which will need to be closely planned during construction and any below grade spaces.

The design and construction must take into account existing vegetation, the Reitz Lawn master plan and protection of existing building and trees to remain.

17.7 TRANSPORTATION & PARKING
This project should not impact transportation or parking.

17.8 BUILDING ENVELOPE
The exterior shall be designed to endure for at least 75 years. Selection of materials and detailing of envelope systems shall be consistent with the Florida Building Code and UF Design & Construction Standards; performance-based to allow the building to withstand weather conditions typical of North Central Florida; and esthetically consistent with the area of campus where the facility will be constructed.

Prevention of moisture intrusion is a high-priority goal applicable to all project team disciplines.

Solar transmission shall be controlled and designed in accordance with ASHRAE Standard 90.1 through high-performance, low-e glazing, overhangs and external shading, and other techniques to minimize solar heat gain and maximize light transmittance for daylighting where functionally practical.
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17.9 INDOOR ENVIRONMENTAL QUALITY

1. Indoor Lighting and Lighting Controls
   Efficient lighting must be integrated into the project with sensors. Some spaces will require
dimmers and different scene settings.

2. Thermal Comfort
   Building temperature set points should be established as 74°F – 76°F for Summer and 72°F – 74°F for
   Winter.

3. Ventilation and Filtration
   General office requirements for indoor air quality per ASHRAE 55.1.

4. Acoustics
   Noise criteria should meet the standard office requirements.
   A highly used ballroom is above the CRC and sound transfers into the space.

5. Other Owner Requirements
   ▪ Daylighting and views

Pre and post-occupancy IEQ/IAQ tests will be performed by UF Environmental Health & Safety (EH&S).

17.10 EMERGENCY, BACKUP, or ‘CLEAN’ POWER

N/A

17.11 TELECOMMUNICATIONS and AUDIO/VISUAL SYSTEMS

Wireless access shall be provided throughout the building and at any defined outdoor gathering spaces.

One of the conference rooms will be wired for video conferencing with either Telepresence or Halo

Also see section XI of this facilities program.

17.12 SECURITY

Some of the spaces will require Lenel access control.

17.13 HAZARDOUS MATERIALS

1. Existing
   The age of the existing building would indicate that there will be hazardous materials. As the scope
   of work is defined, UF will hire a consultant for testing. If it is determined that there are hazardous
   materials, UF will hire an abatement company to provide this service.

2. Functional
   Outline known hazardous materials, chemicals, or procedures to be utilized in the new facility
17.14 FURNISHINGS & EQUIPMENT

There will be some built in furnishings which will be designed by the professional and provided by the contractor.

Office furniture and moveable furniture will be provided by the owner.

17.15 COMMISSIONING, INSPECTION, and QUALITY ASSURANCE

The Commissioning (Cx) consultant will be independent of the design and construction teams, will be selected by the Schematic phase, and will be responsible for maintenance of this OPR; peer review of the design and construction documents; development of the project-specific Cx specification using the University’s template “non-technical” spec; development of the project-specific Cx Plan; construction and acceptance phase commissioning and documentation; development of the facility’s Systems Manual; and post-occupancy commissioning, testing, and documentation.

It is anticipated that the following building systems will be commissioned:

- Mechanical and HVAC systems
- Electrical and lighting systems
- Domestic hot water systems
- Building envelope systems
- Renewable energy systems

The following items of particular interest to the University shall be addressed and verified by the Cx consultant throughout the term of service:

1. Meeting or exceeding “Delta-T” minimums across cooling coils for campus chilled water
2. Accuracy of utilities metering and integration of same with the Building Automation System (BAS)
3. Measurement & Verification of energy usage, performance, and efficiency

Onsite inspection of life safety, code compliance, and ADA-related items will be conducted by the University’s Division of Environmental Health & Safety (EH&S) and the State Fire Marshal. See www.ehs.ufl.edu for more information.

Onsite inspection of systems and components governed by the UF Design & Construction Standards and the UF Telecommunications Standards will be conducted, respectively, by the University's Physical Plant Division (PPD) and Office of Information Technology (OIT). The detailed scope of Cx services shall complement these inspections to eliminate gaps or “double coverage” in field oversight.

The facility is anticipated to be a “threshold” building as defined by the FL Building Code. The University will hire a qualified "special inspector" directly or as an additional design service to perform the onsite inspection and oversight services required for such "threshold" facilities.

The distributed utilities system employed on the main UF campus may necessitate partial commissioning of the energy plant(s) serving the new facility and/or collection of energy efficiency data from PPD. See the USGBC document entitled “Required Treatment of District Thermal Energy in LEED-NC,” dated 5/22/08.
17.16 **CONSTRUCTION COMPLETION and TURNOVER**

Inspection, testing, and commissioning culminates in a declaration of Substantial Completion by UF. This date establishes both the beginning of the warranty period and commencement of operation and maintenance by UF. Details on the closeout of major projects can be found on the PDC website.

Move-in of occupants and their personal belongings will not take place until all Substantial Completion “punchlist” items are completed.

Elaborate on other project-specific closeout, move-in, and turnover goals, requirements ...

17.17 **OPERATION & MAINTENANCE**

The entity responsible for maintenance and operation of the building and its systems, beginning on the date of Substantial Completion, is the Reitz Union and Physical Plant Division (PPD).

In addition to the Cx Plan, field reports, and test reports, the Cx consultant’s primary deliverable is a Systems Manual as required for LEED E/A Credit 3 (Enhanced Commissioning). This manual provides the University with a single source of information and instructions for proper operation and maintenance of primary building systems. As opposed to equipment-oriented “O&M manuals,” the Systems Manual is to be systems-oriented to provide operators with easy access to both narrative and technically detailed reference material, descriptions, diagrams, schedules, and other information on stand-alone and, particularly, integrated systems.

Like the OPR and BOD, the Systems Manual should be a living document. Unlike the OPR and BOD, though, the Systems Manual should evolve throughout the life of the building – compiled by the Cx from documentation developed by the owner, design team, contractors, and the Cx process itself, then turned over for perpetual use and upkeep by building operators and future consultants and contractors throughout the building's life.

17.18 **OWNER TRAINING**

Onsite training for the Owner – whether operators/maintainers or users/occupants – shall include a description and overview of systems, not just the components and equipment that comprise each system.

Training – which is ideally held in conjunction with commissioning – should include general orientation and reviews of the written O&M instructions, relevant health and safety issues or concerns, operation in all possible modes, preventive maintenance, and common troubleshooting problems & solutions.

Building systems that the maintenance entity shall be trained on include:
- HVAC systems
- BAS/controls
- Electrical systems
- Lighting controls
- Security systems

Building systems that the occupants/users shall be trained on include:
- Lighting controls
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- Audio/Visual (A/V) systems

Most training shall be completed prior to Substantial Completion, and all sessions shall be videotaped and converted to DVD format for the Owner’s use.

17.19 POST-OCCUPANCY and WARRANTY

The Cx consultant, CM/GC, and all subcontractors whose systems were commissioned shall meet with the Owner’s O&M staff quarterly during the first year after Substantial Completion to offseason test, optimize, and otherwise troubleshoot all commissioned systems.

Also, an onsite meeting will be conducted 10-11 months after Substantial Completion to review performance and quality of the facility with all effected parties – UF occupants & users, O&M staff, the design team, and the contractor and its subcontractors.